

ORIGINAL

As filed with the Securities and Exchange Commission on June 17, 2013

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 1-A
REGULATION A OFFERING STATEMENT
UNDER
THE SECURITIES ACT OF 1933

SEC
Mail Processing
Section

JUN 18 2013

Washington DC
404

VACCI NOGEN, INC.
(Exact name of registrant as specified in its charter)

Maryland
(State or other Jurisdiction of Incorporation)

5300 Westview Drive, Suite 406
Frederick, MD 21703
Tel.: (301) 668-8400
(Address, including zip code and Telephone Number,
including area code of issuer's principal executive office)

Michael G. Hanna, Jr., Ph.D.
Chief Executive Officer
Vaccinogen, Inc.
5300 Westview Drive, Suite 406
Frederick, MD 21703 Tel.: (301) 668-8400
(Name, address, including zip code and telephone number,
including area code of agent for service)

5090
(Primary Standard Classification
Code)

14-1997223
(IRS Employer Identification No.)

TOTAL NUMBER OF PAGES IN OFFERING STATEMENT (INCLUDING EXHIBITS): 697

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PART I – NOTIFICATION

ITEM 1. Significant Parties

<u>Name and Address (1)</u>	<u>Title/Relationship</u>
Michael G. Hanna, Jr., Ph.D.	Chairman and Chief Executive Officer, >5% stockholder
Andrew Tussing	President and Chief Operating Officer
John Nicolis	Director, >5% stockholder
Daniel Fitzgerald	Director
Alan Cohen	Director, >5% stockholder
Daniel Kane	Director, >5% stockholder
Intracel Holdings Corporation (2)	>5% stockholder
Indeglia & Carney (3)	Counsel to Vaccinogen

(1) Unless otherwise indicated the address is c/o Vaccinogen, Inc., 5300 Westview Drive, Suite 406, Frederick, MD 21701.

(2) The address is 550 Highland Street, Suite 417, Frederick, MD 21701.

(3) The address is 1900 Main Street, Suite 300, Irvine, CA 92614

ITEM 2. Application of Rule 262

(a, b) None of the persons identified in response to Item 1 are subject to any of the disqualification provisions set forth in Rule 262 and as a result, no such application for a waiver if disqualification has been applied for, accepted or denied.

ITEM 3. Affiliate Sales

The proposed offering does not involve the resale of securities by affiliates of Vaccinogen, Inc. (the “Company”).

ITEM 4. Jurisdiction in Which Securities Are to be Offered

- The securities to be offered in connection with this proposed offering shall not be offered by underwriters dealers or salespersons.
- The securities in this proposed offering shall be offered in Delaware, subject to qualification in such States. The securities to be offered in connection with this proposed offering shall be offered by the executive officers of the Company under [an investment agreement with Kodiak Capital]. Please refer to the section in Part II of this Offering Statement entitled “Plan of Distribution” for more detailed information on the Company’s Plan Of Offering.

ITEM 5. Unregistered Securities Issued or Sold Within One Year

Common Stock

On August 1, 2012, we issued 1,507,666 shares of common stock to the former holders of our Series AA Preferred Stock in consideration of the full conversion of the Series AA Preferred Stock to common stock. These issuances were exempt under Section 3(a)(9) of the Securities Act of 1933, as amended. Each share of Series AA Preferred Stock was converted into 1.6507 shares of our common stock. We did not receive any proceeds in connection with the conversion. The shares of common stock received upon conversion were issued as restricted securities and all certificates issued contained a legend stating the shares have not been registered under the Securities Act and setting forth or referring to the restrictions on transferability and the sale of the shares under the Securities Act

The parties receiving shares of common stock upon conversion of Series AA Preferred Stock is set forth below.

Shareholder	Common Shares Issued upon Conversion of Series AA Preferred
Alan Reed	181,799
Donna Smith	90,899
Michael & Anne-Marie Hudack Tenants by the Entirety	90,899
Peter and Vasiliki Vrettakos Tenants by Entirety	136,349
Timothy Evankovich	45,448
Stephen Robinson	181,799
Malinda Dice-Shah	1,998
Walter A. Romans, Jr.	19,146
Brett Bolt	45,448
Anita G. Miller	363
Jeremy Reed	181

Matthew Barry Jeffries	181
Michael N. Kennedy	1,817
Jonathan D. Bell	3,634
James Lee Railey Jr.	13,634
Cheshire Holdings Inc.	18,179
Daniel R. O'Madigan	181
Herbert P. Wilkins, Sr. & Sheran R. Wilkins	454,502
George J. Popham	18,157
Raymond J. and Cheryl M. Zukowski	31,813
William B. Fretz IRA	7,271
Steve Adelsberg	9,088
Dan Fitzell	9,088
Kevin Welsh	18,179
Rob Martin	9,088
IBFB2, LLC	18,179
AL' N' AL Trust	36,359
Michael G. Hanna, Jr., Ph.D.	18,179

Doug Dieringer	15,892
Sean Denny	9,088
Fairground Properties LLC	9,088
April C. Freitag	1,817
Scott Rardin	9,088
Ronald Sternberg IRA	835

On August 1, 2012, we issued 16,656,082 shares of common stock to the former holders of our Series B Preferred Stock in consideration of the full conversion of the Series B Preferred Stock to common stock. These issuances were exempt under Section 3(a)(9) of the Securities Act of 1933, as amended. Each share of Series B Preferred Stock was converted into 1 share of our common stock. We did not receive any proceeds in connection with the conversion. The shares of common stock received upon conversion were issued as restricted securities and all certificates issued contained a legend stating the shares have not been registered under the Securities Act and setting forth or referring to the restrictions on transferability and the sale of the shares under the Securities Act

The parties receiving shares of common stock upon conversion of Series B Preferred Stock is set forth below.

Shareholder	Common Shares Issued upon Conversion of Series B Preferred
Intracel Holdings Corporation	13,324,863
Dan Fitzgerald	557,980
Alan Cohen	774,509
Daniel Kane	774,509
Albert Nassi	111,597
SQ Ventures	26,651

Chris Huber	21,653
Dublind Partners	171,556
Kenneth Schmidt	98,269
Alliance Equities	78,284
Charles Lindsay	39,974
Curtis Partnership	123,256
Charles Dubroff	431,393
3v SourceOne	121,588

From September 1, 2012 through June 6, 2013, we issued 719,189 units (“Units”), of which 566,830 units were purchased for cash and 152,359 units were purchased in consideration of cancellation of outstanding indebtedness. Each Unit consists of 1 share of common stock and a warrant to purchase 0.3 shares of common stock. The purchase price for each unit was \$5.50 per unit and the exercise price for each warrant was \$6.05 per shares. We received gross proceeds of \$3,117,565 from the sale of the units for cash. The proceeds were used for working capital and general corporate purposes. These issuances were exempt under Rule 506 of the Securities Act of 1933, as amended. All investors in Unit offering were accredited investors and were solicited by officers (Michael Hanna and Andrew Tussing) of Vaccinogen and all investors had a substantial pre-existing relationship with such officers of Vaccinogen. The shares of common stock and warrants received were issued as restricted securities and all certificates issues contained a legend stating the shares have not been registered under the Securities Act and setting forth or referring to the restrictions on transferability and the sale of the shares under the Securities Act

The parties purchasing units is set forth below.

Shareholder	Purchase Date	Shares Issued	Warrants Issued	Total Consideration
William J. Alms	10/24/12	20,000	6,000	\$ 110,000.00
Charles C. Veres	11/14/12	1,000	300	\$ 5,500.00
Joseph Patanella	11/21/12	90,909	27,272	\$ 499,999.50
Darcy Brisbane Kelly	12/7/12	9,000	2,700	\$ 49,500.00

Kenneth Franks	12/19/12	9,091	2,727	\$ 50,000.50
Stephen G. Tomlinson	12/31/12	10,000	3,000	\$ 55,000.00
Erik S. Schintina	12/31/12	27,273	8,182	\$ 150,001.50
John Nicolis	12/31/12	30,860	9,258	\$ 169,730.00
Malz Trust	1/2/13	9,091	2,727	\$ 50,000.50
Florence WM Weber	1/2/13	1,818	545	\$ 9,999.00
Michael Besche	1/7/13	20,000	6,000	\$ 110,000.00
George Conniff	1/25/13	18,200	5,460	\$ 100,100.00
Mark A. Weber	1/25/13	1,000	300	\$ 5,500.00
Donald A. Segalas	2/14/13	4,545	1,364	\$ 24,997.50
Stewart F. Brownlee	2/15/13	2,728	818	\$ 15,004.00
John Proctor	2/15/2013	18,181	5,454	\$ 99,995.50
Steven Andrew Geller	2/20/2013	15,000	4,500	\$ 82,500.00
Mary Z. Johnston	2/21/2013	1,000	300	\$ 5,500.00
Florance W McElroy Weber	2/26/2013	3,636	1,091	\$ 19,998.00
Mark A. Weber	3/5/2013	1,363	408	\$ 7,496.50
Cais Skeppner	3/5/2013	9,090	2,727	\$ 49,995.00
Stewart Brownlee	3/8/2013	909	273	\$ 4,999.50
Richard McCracken	3/8/2013	13,636	4,090	\$ 74,998.00
Gordon R. Baker	3/20/13	36,500	10,950	\$ 200,750.00
James J. Jordan	3/20/13	20,000	6,000	\$ 110,000.00
Edward J. Jacobson	5/2/2013	2,000	600	\$ 11,000.00
George Iliopoulos	5/6/2013	10,000	3,000	\$ 55,000.00
Yaohui Wang	5/8/2013	2,000	600	\$ 11,000.00
David Clapp	5/13/2013	20,000	6,000	\$ 110,000.00
Beshara, Helou	5/3/2013	18,181	5,454	\$ 100,000.00*
Sterne Agee & Leach, Profit Sharing Plan FBO Harold L. Wainwright, Jr.	5/3/2013	16,000	4,800	\$ 88,000.00*
GD Conniff LLC	5/3/2013	36,363	10,908	\$ 200,000.00*
Frederick W. Kunkle, Jr.	5/3/2013	36,363	10,908	\$ 200,000.00*
Youhui Wang	5/3/2013	18,181	5,454	\$ 100,000.00*
Salim Rizk	5/3/2013	9,090	2,727	\$ 50,000.00*
Steven Alms	5/3/2013	18,181	5,454	\$ 100,000.00*
The Foundation for Adventist Education; E. Edward Zinke Trustee & Lenora Ann Zinke Trustee	5/20/2013	28,000	8,400	\$ 154,000.00
Douglas & Christy Zinke	5/21/2013	10,000	3,000	\$ 55,000.00
Magnus Algvist	5/22/2013	3,000	900	\$ 16,500.00
Ann Zinke 2004 Retained Annuity Trust	5/23/2013	20,000	6,000	\$ 110,000.00
Primus Continuation Co LLC	5/24/2013	10,910	3,273	\$ 60,005.00
Laurel Jo-Anne Hanson	5/24/2013	4,545	1,363	\$ 24,997.50
Forrest Andrew Hanson, Andrew Merz Hanson Custodian Under Connecticut Uniform Gifts to Minors Act	5/24/2013	4,545	1,363	\$ 24,997.50

(UGMA)				
Abell Foundation Money Purchase Pension Plan FBO Robert C. Embry, Jr.	5/30/2013	45,000	13,500	\$ 247,500.00
Peter Engfors	5/30/2013	3,000	900	\$ 16,500.00
Peter Rosenwald	5/30/2013	9,000	2,700	\$ 49,500.00
Edward Zinke 2004 Irrevocable Trust	6/6/2013	20,000	6,000	\$ 110,000.00

*Cancellation of existing indebtedness

On December 26, 2012, as negotiated under a Separation Agreement we allowed the retention of 110,000 shares of our common stock by our former President, Michael Kranda. The shares were valued at \$628,100 or \$5.71 per share. These issuances were exempt under Rule 506 of the Securities Act of 1933, as amended. The shares of common stock were issued as restricted securities and all certificates issues contained a legend stating the shares have not been registered under the Securities Act and setting forth or referring to the restrictions on transferability and the sale of the shares under the Securities Act

On December 31, 2012, we issued 3,636 restricted common stock shares to each of our non-employee directors (John Nicolis, Dan Fitzgerald, Daniel Kane and Alan Cohen) in consideration of their services as a director in 2012. The shares were valued at \$5.50, or \$20,000 per director. The restricted common stock issuance is contingent upon our completion of a financing round that provides us bona fide equity capital of at least \$35 million. These issuances were exempt under Rule 506 of the Securities Act of 1933, as amended. The shares of common stock were issued as restricted securities and all certificates issues contained a legend stating the shares have not been registered under the Securities Act and setting forth or referring to the restrictions on transferability and the sale of the shares under the Securities Act.

Series B Preferred Stock

During 2012, the Company issued 24,166 shares of Series B Preferred Stock to all of the holders of our Series B Preferred Stock in consideration of their anti-dilution rights. The issuances were exempt under Rule 506 of the Securities Act of 1933, as amended. We did not receive any cash proceeds in connection with the issuance. The shares of Series B Preferred were issued as restricted securities and all certificates issues contained a legend stating the shares have not been registered under the Securities Act and setting forth or referring to the restrictions on transferability and the sale of the shares under the Securities Act.

The parties receiving the Series B Preferred Stock referred to in the above paragraphs are set forth below.

Shareholder	Series B Shares (2012)
Intracel Holdings Corporation	19,331
Dan Fitzgerald	810
Alan Cohen	1,124
Daniel Kane	1,124

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Albert Nassi	162
SQ Ventures	39
Chris Huber	31
Dublind Partners	249
Kenneth Schmidt	143
Alliance Equities	114
Charles Lindsay	58
Curtis Partnership	179
Charles Dubroff	626
3v SourceOne	176

Promissory Notes

Secured Promissory Notes—The Abell Foundation

Between October 26, 2011 and February 16, 2012, we sold \$1,800,000 of principal amount of secured promissory notes to The Abell Foundation. The notes had an initial 6-month term and bear interest at eight percent (8%) per annum; payable at maturity. Upon an event of default the interest rate increases to 10% per annum. The notes were secured by all accounts, chattel paper, deposit accounts, equipment, general intangibles, instruments, inventory, investment property and letter of credit rights. The issuances were exempt under Rule 506 of the Securities Act of 1933, as amended. The proceeds were used for working capital and general corporate purposes. The notes were issued as restricted securities and all certificates issues contained a legend stating the notes have not been registered under the Securities Act and setting forth or referring to the restrictions on transferability and the sale of the shares under the Securities Act.

In April 2013, Abell agreed to extend the maturity date on these notes to May 31, 2013. In consideration of the extension, we agreed that the Notes would be paid concurrently with the closing of each issuance or sale of additional shares of capital stock, or securities directly or indirectly convertible or exchangeable for capital stock (each an “**Equity Issuance**”) occurring after March 31, 2013 in an amount equal to (a) fifty percent (50%) of the first gross proceeds of such Equity Issuance(s) until the cumulative total of such payments equals ten percent (10%) of the cumulative gross proceeds of all Equity Issuances occurring prior to March 31, 2013 (i.e. approximately \$180,000), (b) twenty percent (20%) of the next

\$4,000,000 of gross proceeds of such Equity Issuance(s), (c) twenty-five percent (25%) of the next \$6,000,000 of gross proceeds of such Equity Issuance(s), and (d) one hundred percent (100%) of the net proceeds of all Equity Issuance(s) thereafter to pay the remaining amount due under the Note, if any. In consideration of the extension, we also granted Abell a security interest in our patents related to OncoVax under a Patent Security Agreement.

In May 31, 2013, Abell agreed to extend the maturity date to July 31, 2013.

Unsecured Promissory Notes

Between April 2012 and September 2012, we issued unsecured promissory notes to several investors in the aggregate principal amount of \$1,019,000. These notes are unsecured, and the interest payable on this balance is equal to the principal amount borrowed. The notes mature after a date on which a transaction occurs involving the issuance or sale of additional equity of Vaccinogen that results in at least \$20.0 million in gross proceeds. The proceeds were used for working capital and general corporate purposes. The issuances were exempt under Rule 506 of the Securities Act of 1933, as amended. The proceeds were used for working capital and general corporate purposes. The notes were issued as restricted securities and all certificates issues contained a legend stating the notes have not been registered under the Securities Act and setting forth or referring to the restrictions on transferability and the sale of the shares under the Securities Act

The parties purchasing unsecured promissory notes are set forth below.

Lender	Lending Date	Amount
Vrettakos, Peter & Vasiliki	4/30/2012	\$ 50,000.00
Kunkle Jr., Frederick	5/9/2012	\$ 50,000.00
Sterne Agee & Leach, Profit Sharing Plan FBO Harold L. Wainwright, Jr.	5/23/2012	\$ 19,000.00
Sterne Agee & Leach, Profit Sharing Plan FBO Harold L. Wainwright, Jr.	5/23/2012	\$ 11,000.00
Conniff, George	6/14/2012	\$ 100,000.00
Vrettakos, Peter & Vasiliki	6/14/2012	\$ 100,000.00
Helou, Beshara	4/26/2012	\$ 25,000.00
Sterne Agee & Leach, Profit Sharing Plan FBO Harold L. Wainwright, Jr.	6/18/2012	\$ 11,000.00
Sterne Agee & Leach, Profit Sharing Plan FBO Harold L. Wainwright, Jr.	6/19/2012	\$ 3,000.00
Kunkle Jr., Frederick	6/26/2012	\$ 100,000.00
Helou, Beshara	7/26/2012	\$ 25,000.00
Adams, George & Deborah	7/30/2012	\$ 150,000.00
Sun, Jie	8/9/2012	\$ 50,000.00
Wang, Yahowui	8/9/2012	\$ 50,000.00
Bauer, Rick	8/9/2012	\$ 100,000.00
Rizk, Salim	8/14/2012	\$ 25,000.00
Glynn Corp	8/15/2012	\$ 100,000.00
Stephen Alms	10/22/2012	\$ 50,000.00

In May 2013, noteholders with an aggregate principal amount of \$419,000 in unsecured notes (with \$419,000 in accrued interest) cancelled their notes in consideration of their subscription for 152,356 Units.

Warrants

In connection with the secured promissory notes referenced above, we issued Abell a warrant to purchase the number of shares equal to \$800,000 divided by 85% of the purchase price per share of stock sold in our first venture capital financing resulting in proceeds of not less than \$20,000,000. In connection with the January 2013 extension of maturity date, we increased the amount of shares issuable under the warrant to \$1.1 million divided by 85% of the purchase price per share of stock sold in our first venture capital financing resulting in proceeds of not less than \$25,000,000. The exercise price equals 85% of the purchase price per share in such venture capital financing, during a 10-year term. The issuance was exempt under Rule 506 of the Securities Act of 1933, as amended.

From September 1, 2012 through June 6, 2013, we issued warrants to purchase 215,751 shares of common stock as part of a unit offering consisting of common stock and warrants as discussed above under "Common Stock".

On September 26, 2012, we issued a 5-year warrant to purchase 80,000 shares of our common stock at an exercise price of \$6.05 per share to JN Associates (Steve Alms). The warrants were issued in consideration of financial advisory services and were valued at \$3.91 per share. The issuance was exempt under Section 4(2) of the Securities Act of 1933, as amended.

Item 6. Other Present or Proposed Offerings

The Company is currently conducting a private placement of up to 2,370,546 of units (the "*Units*"). The Units being sold in the Offering consist of one share of common stock of the Company, par value \$0.0001 per shares (the "*Common Stock*") and a warrant (individually, a "*Warrant*" and collectively, the "*Warrants*"), exercisable for five years at an exercise price of \$6.05 per whole share to purchase three tenths (0.3) share of Common Stock. The Units are being offered and sold pursuant to Rule 506 of Regulation D ("*Regulation D*") of the Securities Act of 1933, as amended (the "*Securities Act*"). Therefore, to purchase Units in this Offering you must be an "accredited investor" (as defined in Regulation D). To date, the Company has sold 719,189 units, of which 566,830 units were purchased for cash and 152,359 units were purchased in consideration of cancellation of outstanding indebtedness.

On July 18, 2012, we entered into an Investment Agreement ("*Investment Agreement*") with Kodiak Capital LLC. The Investment Agreement provides the Company an equity line (the "*Financing*") whereby the Company can issue and sell to Kodiak, from time to time, shares of the Company's common stock up to an aggregate purchase price of \$25.0 million (the "*Put Shares*") during the Open Period (as defined below). Under the terms of the Investment Agreement, we have the right to deliver from time to time a Put Notice to Kodiak stating the dollar amount of Put Shares the Company intends to sell to Kodiak with the price per share based on the following formula: eighty percent (80%) of the lowest daily volume-weighted average price of the Company's common stock during the period beginning on the date of the Put Notice and ending five (5) days thereafter. Under the Investment Agreement, the Company may not deliver the Put Notice until after the resale of the Put Shares has been registered pursuant to a registration statement filed with the Securities and Exchange Commission. Additionally, provided that the Investment Agreement does not terminate earlier, the Company has an eighteen (18) month period, beginning on the trading day immediately following the effectiveness of the registration statement, during which it may deliver the Put Notice or Notices to Kodiak (the "*Open Period*"). In addition, the Company cannot submit a new Put Notice until the closing of the previous Put Notice, and in no event shall Kodiak be entitled to purchase that number of Put Shares which when added to the sum of the number of shares of common stock already beneficially owned by Kodiak would exceed 9.99% of the number of shares of common stock outstanding on the applicable closing date.

Item 7. Marketing Arrangements

- (a) Neither the Company nor anyone named in Item 1, nor any selling security holder is aware of any arrangement:
- (1) To limit or restrict the sale of other securities of the same class of those to be offered for the period of distribution;

- (2) To stabilize the market for any of the securities to be offered; or
 - (3) For withholding commissions, or other wise to hold each underwriter or dealer responsible for het distribution or participation.
- (b) There is no underwriter to confirm any accounts.

Item 8. Relationship with Company of Experts Named in Offering Statement

No experts were employed on a contingent basis or otherwise, nor or have they any material interest in the issuer or any of its subsidiaries or was connected with the issuer or any of its subsidiaries as a promoter, underwriter, voting trustee, director, officer, or employee.

Item 9. Use of a Solicitation of Interest

The Company has not used a publication, whether or not authorized by Rule 254, prior to the filing of this notification.

An offering statement pursuant to Regulation A relating to these securities has been filed with the Securities and Exchange Commission. Information contained in this Preliminary Offering Circular is subject to completion or amendment. These securities may not be sold nor may offers to buy be accepted prior to the time an offering circular which is not designated as a Preliminary Offering Circular is delivered and the offering statement filed with the Commission becomes qualified. This Preliminary Offering Circular shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sales of these securities in any state in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the laws of any such state.

PART II OFFERING CIRCULAR

VACCINOGEN, INC.
5300 Westview Drive, Suite 406
Frederick, MD 21703
Tel.: (301) 668-8400

Preliminary Offering Circular Dated: June 17, 2013

180,000 Common Shares

This Offering Circular relates to the offering (the "Offering") of up to 180,000 shares of our common stock (the "Shares") directly to selected investors pursuant to this Offering Circular. The shares will be sold at a fixed price equal to \$5.60 per Share.

For a more detailed description of the common stock, see the section entitled "Description of Securities" on page 69.

Our common stock is quoted on the OTC Link under the symbol "VGEN". On June 7, 2013, the last reported price for our common stock was \$7.00 per share.

We have agreed to bear the expenses relating to the registration of the shares for the selling security holders. However, all commissions, selling and other expenses incurred by the selling stockholders to underwriters, agents, brokers and dealers will be borne by them.

The Offering will commence promptly after the date of this Offering Circular and will close upon the earlier of (1) the sale of 180,000 shares; (2) one year from the date this Offering begins or (3) a date prior to one year from the date this Offering begins that is so determined by our board of directors.

The Offering is being conducted on a "best-efforts" basis, which means our executive officers will use their commercially reasonable best efforts in an attempt to sell the Shares. Our executive officers will not receive any commission or other remuneration for the sales. In offering the Shares on our behalf, our executive officers will rely on the safe harbor from broker-dealer registration provided by Rule 3a4-1 under the Securities Exchange Act of 1934.

Investing in our common stock involves a high degree of risk. Before buying any shares, you should carefully read the discussion of material risks of investing in our common stock in "Risk Factors" beginning on page 4 of this Offering Circular.

THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION DOES NOT PASS UPON THE MERITS OF OR GIVE ITS APPROVAL TO ANY SECURITIES OFFERED OR THE TERMS OF THE OFFERING, NOR DOES IT PASS UPON THE ACCURACY OR COMPLETENESS OF ANY OFFERING CIRCULAR OR OTHER SELLING LITERATURE. THESE SECURITIES ARE OFFERED PURSUANT TO AN EXEMPTION FROM REGISTRATION WITH THE COMMISSION; HOWEVER THE COMMISSION HAS NOT MADE AN INDEPENDENT DETERMINATION THAT THE SECURITIES OFFERED HEREUNDER ARE EXEMPT FROM REGISTRATION.

	Price to the Public	Underwriting Discounts and Commissions	Proceeds to Issuer or other persons
Per Unit	\$5.60	N/A	\$1,008,000.00
Total	\$5.60	N/A	\$1,008,000.00

(1) Before deducting expenses payable by the Company estimated at \$75,000.

The Date of This Offering Circular Is: _____, 2013

IMPORTANT NOTICE TO INVESTORS

IN MAKING AN INVESTMENT DECISION, INVESTORS MUST RELY ON THEIR OWN EXAMINATION OF THE COMPANY AND THE TERMS OF THE OFFERING, INCLUDING THE MERITS AND RISKS INVOLVED. THESE SECURITIES HAVE NOT BEEN RECOMMENDED OR APPROVED BY ANY FEDERAL OR STATE SECURITIES COMMISSION OR REGULATORY AUTHORITY. FURTHERMORE, THESE AUTHORITIES HAVE NOT PASSED UPON THE ACCURACY OR ADEQUACY OF THIS DOCUMENT. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

THE SHARES HAVE NOT BEEN QUALIFIED UNDER THE SECURITIES LAWS OF ANY STATE OR JURISDICTION. WE PLAN TO QUALIFY THE OFFERING WITH THE DELAWARE STATE SECURITIES REGULATORY BODIES.

THESE SECURITIES ARE OFFERED FOR SALE IN THE STATE OF DELAWARE PURSUANT TO REGISTRATION WITH THE DELAWARE DEPARTMENT OF JUSTICE, DIVISION OF SECURITIES, BUT REGISTRATION IS PERMISSIVE ONLY AND DOES NOT CONSTITUTE A FINDING THAT THE PROSPECTUS IS TRUE, COMPLETE AND NOT MISLEADING, NOR HAS THE DELAWARE DEPARTMENT OF JUSTICE, DIVISION OF SECURITIES PASSED IN ANY WAY UPON THE MERITS OR, RECOMMENDED OR GIVEN APPROVAL TO THESE SECURITIES. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

NO PERSON HAS BEEN AUTHORIZED TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATION OTHER THAN THOSE CONTAINED IN OR INCORPORATED BY REFERENCE IN THIS OFFERING CIRCULAR AND IF GIVEN OR MADE, SUCH INFORMATION OR REPRESENTATIONS MUST NOT BE RELIED UPON AS HAVING BEEN AUTHORIZED BY US.

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THIS OFFERING CIRCULAR CONTAINS ALL OF THE REPRESENTATIONS BY THE COMPANY CONCERNING THIS OFFERING, AND NO PERSON SHALL MAKE DIFFERENT OR BROADER STATEMENTS THAN THOSE CONTAINED HEREIN. INVESTORS ARE CAUTIONED NOT TO RELY UPON ANY INFORMATION NOT EXPRESSLY SET FORTH IN THIS OFFERING CIRCULAR.

This Offering Circular, together with Financial Statements and other Attachments, consists of 152 pages.

FORWARD-LOOKING STATEMENTS

Some of the statements contained in this Offering Circular are forward-looking statements within the meaning of the Securities Act of 1933 (the “*Securities Act*”) and the Securities Exchange Act of 1934 (the “*Exchange Act*”) and are subject to the safe harbor created by the Private Securities Litigation Reform Act of 1995. We have based these forward-looking statements largely on our expectations and projections about future events and financial trends affecting the financial condition and/or operating results of our business. Forward-looking statements involve risks and uncertainties; particularly those risks and uncertainties inherent in the process of discovering, developing and commercializing drugs that are safe and effective for use as human therapeutics. There are important factors that could cause actual results to be substantially different from the results expressed or implied by these forward-looking statements, including, among other things:

- whether we have adequate financial resources and access to capital to fund commercialization of OncoVAX, the Human Monoclonal Antibodies (HuMabs) Program and that of other potential product candidates we may develop;
- our ability to successfully manufacture OncoVAX and other product candidates in necessary quantities with required quality;
- our ability to successfully obtain regulatory approvals and commercialize our products that are under development and develop the infrastructure necessary to support commercialization if regulatory approvals are received;
- our ability to complete and achieve positive results in ongoing and new clinical trials;
- our dependence on single-source vendors for some of the components used in our product candidates;
- the extent to which the costs of any products that we are able to commercialize will be reimbursable by third-party payers;
- the extent to which any products that we are able to commercialize will be accepted by the market;
- our dependence on our intellectual property and ability to protect our proprietary rights and operate our business without conflicting with the rights of others;
- the effect that any intellectual property litigation, or product liability claims may have on our business and operating and financial performance;
- our expectations and estimates concerning our future operating and financial performance;
- the impact of competition and regulatory requirements and technological change on our business;
- our ability to recruit and retain key personnel;
- our ability to enter into future collaboration agreements;
- anticipated trends in our business and the biotechnology industry generally; and
- other factors set forth under the heading “Risk Factors” herein.

In addition, in this Offering Circular, the words “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “plan,” “expect,” “potential,” or “opportunity,” the negative of these words or similar expressions, as they relate to us, our business, future financial or operating performance or our management, are intended to identify forward-looking statements. We do not intend to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Past financial or

operating performance is not necessarily a reliable indicator of future performance and you should not use our historical performance to anticipate results or future period trends.

The terms "Vaccinogen," "our" and "we," and the "Company" as used in this prospectus, refer to Vaccinogen, Inc.

OFFERING CIRCULAR SUMMARY

This summary highlights selected information contained elsewhere in this Offering Circular. This summary does not contain all the information that you should consider before investing in the common stock. You should carefully read the entire prospectus, including "Risk Factors", "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Consolidated Financial Statements, before making an investment decision.

Vaccinogen is a biotechnology company with more than three decades of research into combating cancer by using the body's own immune system. It is the developer of OncoVAX®, the only patient specific immunotherapy for Stage II colon cancer and has the following mission:

1. Complete the pivotal Phase III clinical trial of this autologous vaccine, OncoVAX, which is a new paradigm to prevent the recurrence of stage II colon cancer. The planned trial will closely replicate a successful prior Phase IIIa study showing 50% improvement in recurrence free survival and overall survival in the Stage II target patient population.
2. Develop near term revenues by establishing licensing arrangements for distribution of OncoVAX in certain territories as well as for additional carcinoma indications.
3. Develop diagnostic and therapeutic drug products as well as near-term revenues by exploiting its distinctive Human Monoclonal Antibodies ("HuMabs") technology.

Our executive office is located at 5300 Westview Drive, Suite 406, Frederick, MD 21703. Our telephone number is 301-668-8400. Our Internet address is www.vaccinogeninc.com.

Summary of Offering

- Issuer: Vaccinogen, Inc., a Maryland corporation.
- Securities: Common Stock.
- Purchase Price: \$5.60 per Share
- Offering Size: 180,000 Shares (\$1,008,000.00)
- Investors: All investors must be “accredited investors” as defined under Rule 501 of Regulation D.
- Use of Proceeds: The proceeds of the Offering will be used to provide working capital, and to pay fees and expenses related to the Offering.
- Voting Rights: Each holder of Common Stock is entitled to one vote for each share of Common Stock held by such stockholder on all matters submitted to a vote of our stockholders. Holders of Common Stock do not have cumulative voting rights.
- Capital Structure: Assuming the sale of all Shares offered to investors in the Offering, there will be issued and outstanding 31,302,755 shares of our common stock, warrants to acquire 2,932,460 shares of our common stock and 203,817 shares of our common stock reserved for issuance pursuant to restricted stock grants.
- The amounts in the paragraph above do not include 1,433,170 shares and 429,951 warrants to purchase shares of our common stock currently being offered under a Unit offering, with each Unit consisting of 1 share of common stock and a warrant to purchase 0.3 shares of our common stock. Nor does it include any warrants issuable to placement agents in connection with such offering.
- Exchange Act Disclosure: The Company is not currently required to provide disclosure pursuant to the Exchange Act, although it intends to register its common stock with the Exchange Act after the Offering.

An investment in the Company is highly speculative and involves substantial risks. Prospective investors should carefully review and consider the factors described under the “Risk Factors” section below.

We plan to register the Offering with the securities regulators in Delaware. We will not make any general solicitation or advertisement of this Offering in any jurisdiction that is not registered. This Offering is being conducted on a best-efforts basis, which means that our executive officers Michael G. Hanna, Jr., Ph.D and Andrew Tussing, will attempt to sell the Shares to prospective investors without the use of an underwriter. We will not pay any commission or other remuneration to Messrs. Hanna and Tussing for their efforts in offering and selling the Shares.

Corporate Information

We are a Maryland corporation. Our executive office is located at 5300 Westview Drive, Suite 406, Frederick, MD 21703. Our telephone number is 301-668-8400. Our Internet address is www.vaccinogeninc.com.

RISK FACTORS

The following is a summary of the risk factors that we believe are most relevant to our business. You should understand that it is not possible to predict or identify all such factors. Consequently, you should not consider the following to be a complete discussion of all potential risks or uncertainties. We undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events, or otherwise.

RISKS RELATED TO THE OFFERING

Our units will be offered on a “best efforts” basis and there is no minimum amount being offered by us.

We are offering the Units on a straight “best efforts” basis. In a “best efforts” offering there is no minimum number of acceptable subscriptions required for us to close this Offering and for you to purchase the Units subscribed for. Tendered subscriptions will be made available to us immediately upon receipt.

Our management has broad discretion under applicable principles and provisions of corporate law to manage our business, including the allocation and use of the net proceeds of this offering.

Management will have broad discretion with respect to the expenditure of the net proceeds of the Offering, including discretion to use the proceeds in ways with which stockholders may disagree. Investors will be relying on the judgment of management regarding the application of the proceeds of the Offering.

RISKS RELATED TO OUR BUSINESS

Our success is dependent upon OncoVAX achieving regulatory approval and acceptance in the marketplace, the failure of either will have a negative effect on our business, financial condition and results of operations.

Our future growth and profitability will depend on its ability to introduce and market OncoVAX. There can be no assurance that we will be able to obtain necessary regulatory approvals for OncoVAX in a timely manner, if at all. Our failure to introduce and market OncoVAX in a timely manner would have a material adverse effect on our business, financial condition and results of operations.

Even if OncoVAX is approved for marketing by the FDA and other regulatory authorities, there can be no assurance that it will be commercially successful or that we will be successful producing OncoVAX on a commercial scale at a cost that will enable us to realize a profit. Despite the results of the clinical trials of OncoVAX, there can be no assurance that oncologists and other physicians will refer patients for treatment with OncoVAX. Market acceptance also could be affected by the availability of third-party reimbursement. Failure of OncoVAX to achieve significant market acceptance could have a material adverse effect on our business, financial condition and results of operations.

We have a history of significant losses from continuing operations and expect to continue such losses for the foreseeable future.

Since our inception, our expenses have substantially exceeded our revenues, resulting in continuing losses and an accumulated deficit. Because we presently have no product revenues and we are committed to continuing our product research, development and commercialization programs, we will continue to

experience significant operating losses unless and until we complete the development of OncoVAX and other new products and these products have been clinically tested, approved by the FDA and successfully marketed.

We have devoted our resources to developing a new generation of products but will not be able to market these products until we have completed clinical testing and obtain all necessary governmental approvals. In addition, our products are still in development and testing and cannot be marketed until we have completed clinical testing and obtained necessary governmental approval. Accordingly, our revenue sources are, and will remain, extremely limited until our products are clinically tested, approved by the FDA and successfully marketed. We cannot guarantee that our product will be successfully tested, approved by the FDA or marketed, successfully or otherwise, at any time in the foreseeable future or at all.

The report of our independent registered public accounting firm contains an explanatory paragraph as to our ability to continue as a going concern, which could prevent us from obtaining new financing on reasonable terms or at all.

Because we have recurring losses and negative cash flows from operating activities and have significant future commitments, substantial doubt exists regarding our ability to remain in operation at the same level we are currently performing. Further, the report of BDO USA, LLP, our independent registered accounting firm, with respect to our financial statements at December 31, 2012 and December 31, 2011 contains an explanatory paragraph as to our potential inability to continue as a going concern. Additionally, this may adversely affect our ability to obtain new financing on reasonable terms or at all.

We have no internal sales or marketing capability and must enter into alliances with others possessing such capabilities to commercialize our products successfully.

We intend to market our products, if and when such products are approved for commercialization by the FDA, either directly or through other strategic alliances and distribution arrangements with third parties. There can be no assurance that we will be able to enter into third-party marketing or distribution arrangements on advantageous terms or at all. To the extent that we do enter into such arrangements, we will be dependent on our marketing and distribution partners. In entering into third-party marketing or distribution arrangements, we expect to incur significant additional expense. There can be no assurance that, to the extent that we sell products directly or we enter into any commercialization arrangements with third parties, such third parties will establish adequate sales and distribution capabilities or be successful in gaining market acceptance for our products and services.

If we do not raise additional capital, we may not be able to complete the development, testing and commercialization of our treatment systems or continue as a going concern.

To complete the development and commercialization of our product, we will need to raise substantial amounts of additional capital. We do not have any committed sources of financing and we cannot offer any assurances that additional funding will be available in a timely manner, on acceptable terms or at all.

In the event we cannot raise sufficient capital, we may be required to delay, scale back or eliminate certain aspects of our operations or attempt to obtain funds through unfavorable arrangements with partners or others that may force us to relinquish rights to certain of our technologies, products or potential markets or that could impose onerous financial or other terms. Furthermore, if we cannot fund our ongoing development and other operating requirements we may no longer be able to continue as a going concern.

We rely on third parties to conduct all of our clinical trials. If these third parties do not successfully carry out their contractual duties, comply with budgets and other financial obligations or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates in a timely or cost-effective manner.

We rely, and expect to continue to rely, on third-party Clinical Research Organizations to conduct all of our clinical trials. Because we do not conduct our own clinical trials, we must rely on the efforts of others and cannot always control or accurately predict the timing of such trials, the costs associated with such trials or the procedures that are followed for such trials. We do not anticipate significantly increasing our personnel in the foreseeable future and therefore, expect to continue to rely on third parties to conduct all of our future clinical trials. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they do not carry out the trials in accordance with budgeted amounts, if the quality or accuracy of the clinical data they obtain is compromised due to their failure to adhere to our clinical protocols or for other reasons, or if they fail to maintain compliance with applicable government regulations and standards, our clinical trials may be extended, delayed or terminated or may become prohibitively expensive, and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates.

We depend on key personnel for our continued operations and future success and a loss of certain key personnel could significantly hinder our ability to move forward with our business plan.

Because of the specialized nature of our business, we are highly dependent on our ability to identify, hire, train and retain highly qualified scientific and technical personnel for the research and development activities we conduct or sponsor. The loss of one or more certain key executive officers, or scientific officers, including Michael G. Hanna, Jr, Ph.D., would be significantly detrimental to us. In addition, recruiting and retaining qualified scientific personnel to perform research and development work is critical to our success. There is intense competition for qualified personnel in the areas of our present and planned activities, and there can be no assurance that we will be able to continue to attract and retain the qualified personnel necessary for the development of our business. The failure to attract and retain such personnel or to develop such expertise would adversely affect our business.

If an event of default is declared under agreements with Organon Teknika, including the security agreement, we could lose possession of the OncoVAX intellectual property.

In connection with certain prior agreements between Intracel Holdings Corporation and Organon Teknika (now Merck), Intracel entered into a security agreement granting Organon Teknika a first priority security interest in all of intellectual property intellectual property and patents related to OncoVAX. The security agreement states that if an event of default occurs, the secured party has the right to take possession of the OncoVAX intellectual property to satisfy the obligations under these agreements. We assumed these obligations under our License and subsequent Asset Transfer Agreement. Certain required payments have not been made to Organon Teknika. Although no formal event of default has been issued and discussions and negotiations to resolve the matter is continuing, loss of our OncoVAX intellectual property would adversely affect our business.

If an event of default is declared under our security agreement with The Abell Foundation, we could lose possession of the OncoVAX intellectual property.

In connection our promissory note issued to The Abell Foundation, we granted The Abell Foundation a security interest in our patents related to OncoVAX. The security agreement states that if an event of default occurs, the secured party has the right to take possession of the OncoVAX patents to satisfy the obligations under these agreements. Although we are not currently in default under these agreements, loss of our OncoVAX patents would adversely affect our business.

Our business is subject to numerous and evolving state, federal and foreign regulations and we may not be able to secure the government approvals needed to develop and market our products.

Our research and development activities, pre-clinical tests and clinical trials, and ultimately the manufacturing, marketing and labeling of our products, all are subject to extensive regulation by the FDA and foreign regulatory agencies. Pre-clinical testing and clinical trial requirements and the regulatory approval process typically take years and require the expenditure of substantial resources. Additional government regulation may be established that could prevent or delay regulatory approval of our product candidates. Delays or rejections in obtaining regulatory approvals would adversely affect our ability to commercialize any product candidates and our ability to generate product revenues or royalties.

The FDA and foreign regulatory agencies require that the safety and efficacy of product candidates be supported through adequate and well-controlled clinical trials. If the results of pivotal clinical trials do not establish the safety and efficacy of our product candidates to the satisfaction of the FDA and other foreign regulatory agencies, we will not receive the approvals necessary to market such product candidates. Even if regulatory approval of a product candidate is granted, the approval may include significant limitations on the indicated uses for which the product may be marketed.

Many states in which we do, or in the future may do, business, or in which our products may be sold, impose licensing, labeling or certification requirements that are in addition to those imposed by the FDA. There can be no assurance that one or more states will not impose regulations or requirements that have a material adverse effect on our ability to sell our products.

In many of the foreign countries in which we may do business or in which our products may be sold, we will be subject to regulation by national governments and supranational agencies as well as by local agencies affecting, among other things, product standards, packaging requirements, labeling requirements, import restrictions, tariff regulations, duties and tax requirements. There can be no assurance that one or more countries or agencies will not impose regulations or requirements that could have a material adverse effect on our ability to sell our products.

Legislative and regulatory changes affecting the health care industry could adversely affect our business.

Political, economic and regulatory influences are subjecting the healthcare industry to potential fundamental changes that could substantially affect our results of operations. There have been a number of government and private sector initiatives during the last few years to limit the growth of healthcare costs, including price regulation, competitive pricing, coverage and payment policies, comparative effectiveness of therapies, technology assessments and managed-care arrangements. It is uncertain which legislative proposals, if any, will be adopted (or when) or what actions federal, state, or private payors for health care treatment and services may take in response to any health care reform proposals or legislation. We cannot predict the effect health care reforms may have on our business and we can offer no assurances that any of these reforms will not have a material adverse effect on our business. These actual and potential changes are causing the marketplace to put increased emphasis on the delivery of more cost-effective treatments. In addition, uncertainty remains regarding proposed significant reforms to the U.S. healthcare system.

The success of our products may be harmed if the government, private health insurers and other third-party payors do not provide sufficient coverage or reimbursement.

Our ability to commercialize our products successfully will depend in part on the extent to which reimbursement for the costs of such products and related treatments will be available from government health

administration authorities, private health insurers and other third-party payors. The reimbursement status of newly approved medical products is subject to significant uncertainty. We cannot guarantee that adequate third-party insurance coverage will be available for us to establish and maintain price levels sufficient for us to realize an appropriate return on our investment in developing new therapies. Government, private health insurers and other third-party payors are increasingly attempting to contain health care costs by limiting both coverage and the level of reimbursement for new therapeutic products approved for marketing by the FDA. Accordingly, even if coverage and reimbursement are provided by government, private health insurers and third-party payors for uses of our products, market acceptance of these products would be adversely affected if the reimbursement available proves to be unprofitable for health care providers.

We face intense competition and the failure to compete effectively could adversely affect our ability to develop and market our products.

There are many companies and other institutions engaged in research and development of various technologies for cancer treatment products. We believe that the level of interest by others in investigating the potential of possible competitive treatments and alternative technologies will continue and may increase. Potential competitors engaged in all areas of cancer treatment research in the United States and other countries include, among others, major pharmaceutical companies, specialized technology companies, and universities and other research institutions. Most of our current and potential competitors have substantially greater financial, technical, human and other resources, and may also have far greater experience than do we, both in pre-clinical testing and human clinical trials of new products and in obtaining FDA and other regulatory approvals. One or more of these companies or institutions could succeed in developing products or other technologies that are more effective than the products and technologies that we have been or are developing, or which would render our technology and products obsolete and non-competitive. Furthermore, if we are permitted to commence commercial sales of any of our products, we will also be competing, with respect to manufacturing efficiency and marketing, with companies having substantially greater resources and experience in these areas.

Oncovax is based on novel technologies, which may raise new regulatory issues that could delay or make FDA approval more difficult.

The process of obtaining required FDA and other regulatory approvals, including foreign approvals, is expensive, often takes many years and can vary substantially based upon the type, complexity and novelty of the products involved. OncoVAX and our immunotherapies are novel; therefore, regulatory agencies may lack experience with them, which may lengthen the regulatory review process, increase our development costs and delay or prevent commercialization of OncoVAX and our other active immunotherapy products under development.

Our products may not be accepted in the marketplace; therefore we may not be able to generate significant revenue, if any.

Even if OncoVAX or any of our other potential products is approved and sold, physicians and the medical community may not ultimately use them or may use them only in applications more restricted than we expect. Our products, if successfully developed, will compete with a number of traditional products and immunotherapies manufactured and marketed by major pharmaceutical and other biotechnology companies. Our products will also compete with new products currently under development by such companies and others. Physicians will only prescribe a product if they determine, based on experience, clinical data, side effect profiles and other factors, that it is beneficial and preferable to other products currently in use. Many other factors influence the adoption of new products, including marketing and distribution restrictions, course

of treatment, adverse publicity, product pricing, the views of thought leaders in the medical community, and reimbursement by government and private third party payers.

Technologies for the treatment of cancer are subject to rapid change, and the development of treatment strategies that are more effective than our technologies could render our technologies obsolete.

Various methods for treating cancer currently are, and in the future are expected to be, the subject of extensive research and development. Many possible treatments that are being researched, if successfully developed, may not require, or may supplant, the use of our technologies. The successful development and acceptance of any one or more of these alternative forms of treatment could render our technology obsolete as a cancer treatment method.

We may not be able to hire or retain key officers or employees that we need to implement our business strategy and develop our products and business.

Our success depends significantly on the continued contributions of our executive officers, scientific and technical personnel and consultants, and on our ability to attract additional personnel as we seek to implement our business strategy and develop our products and businesses. During our operating history, we have assigned many essential responsibilities to a relatively small number of individuals. However, as our business and the demands on our key employees expand, we have been, and will continue to be, required to recruit additional qualified employees. The competition for such qualified personnel is intense, and the loss of services of certain key personnel or our inability to attract additional personnel to fill critical positions could adversely affect our business. Further, we do not carry "key man" insurance on any of our personnel. Therefore, loss of the services of key personnel would not be ameliorated by the receipt of the proceeds from such insurance.

Products we may potentially commercialize and market may be subject to promotional limitations.

The FDA has the authority to impose significant restrictions on an approved product through the product label and allowed advertising, promotional and distribution activities. The FDA also may require us to undertake post-marketing clinical trials. If the results of such post-marketing studies are not satisfactory, the FDA may withdraw marketing authorization or may condition continued marketing on commitments from us that may be expensive and/or time consuming to fulfill. Even if we receive FDA and other regulatory approvals, if we or others identify adverse side effects after any of our products are on the market, or if manufacturing problems occur, regulatory approval may be suspended or withdrawn and reformulation of our products, additional clinical trials, changes in labeling of our products and additional marketing applications may be required, any of which could harm our business and cause our stock price to decline.

RISKS RELATING TO MANUFACTURING ACTIVITIES

We and our contract manufacturers are subject to significant regulation with respect to manufacturing of our products.

All of those involved in the preparation of a therapeutic drug for clinical trials or commercial sale, including our existing (and any future) supply contract manufacturers and clinical trial investigators, are subject to extensive regulation. Components of a finished therapeutic product approved for commercial sale or used in late-stage clinical trials must be manufactured in accordance with the FDA's current Good Manufacturing Practices, or equivalent cGMP regulations developed by authorities in other countries. These regulations govern manufacturing processes and procedures and the implementation and operation of quality systems to control and assure the quality of investigational products and products approved for sale. Our facilities and quality systems and the facilities and quality systems of some or all of our third-party contractors must be

inspected and audited routinely for compliance with applicable United States and other country regulations. If any such inspection or audit identifies a failure to comply with applicable regulations or if a violation of our product specifications or applicable regulation occurs independent of such an inspection or audit, we, the FDA, or governmental authorities in other countries may require remedial measures that may be costly and/or time consuming for us or a third-party to implement and that may include the temporary or permanent suspension or change of a clinical trial or commercial sales, recalls, market withdrawals, seizures or the temporary or permanent closure of a facility. Any such remedial measures imposed upon us or third parties with whom we contract could materially harm our business. In addition, we will be required to have a cGMP facility in the United States prior to receipt of FDA approval for our OncoVAX and other products. Failure to procure or construct a U.S. cGMP facility will delay our ability to secure FDA approval and would have a material adverse effect on our operations.

RISKS FROM COMPETITIVE FACTORS

Our competitors may develop and market products that are less expensive, more effective, safer or reach the market sooner, which may diminish or eliminate the commercial success of any products we may commercialize.

Competition in the cancer therapeutics field is intense and is accentuated by the rapid pace of advancements in product development. In addition, we compete with other clinical-stage companies and institutions for clinical trial participants, which could reduce our ability to recruit participants for our clinical trials. Delay in recruiting clinical trial participants could adversely affect our ability to bring a product to market prior to our competitors. Further, research and discoveries by others may result in breakthroughs that render potential products obsolete before they generate revenue.

Some of our competitors in the cancer therapeutics field have substantially greater research and development capabilities and manufacturing, marketing, financial and managerial resources than we do. Acquisitions of competing companies by large pharmaceutical and biotechnology companies could enhance our competitors' resources. In addition, our competitors may obtain patent protection or FDA approval and commercialize products more rapidly than we do, which may impact future sales of our products. We expect that competition among products approved for sale will be based, among other things, on product efficacy, price, safety, reliability, availability, patent protection, and sales, marketing and distribution capabilities. Our profitability and financial position will suffer if our products receive regulatory approval, but cannot compete effectively in the marketplace.

RISKS RELATING TO OUR CLINICAL TRIAL AND PRODUCT DEVELOPMENT INITIATIVES

Clinical trials for product candidates must satisfy stringent regulatory requirements or we may be unable to utilize the results.

The clinical trials for OncoVAX and of any product candidates that we develop must comply with regulations by numerous federal, state and local government authorities in the United States, principally the FDA, and by similar governmental authorities in other countries. Clinical trials are subject to continuing oversight by governmental regulatory authorities and institutional review boards and must meet the requirements of these authorities in the United States and other countries, including those for informed consent and good clinical practices. We may not be able to comply with these requirements, which could disqualify completed or ongoing clinical trials. We may experience numerous unforeseen events during, or as a result of, the testing process that could delay or prevent commercialization of our product candidates, including the following:

- safety and efficacy results from human clinical trials may show the product candidate to be less effective or safe than desired or earlier results may not be replicated in later clinical trials;
- the results of pre-clinical studies may be inconclusive or they may not be indicative of results that will

- be obtained in human clinical trials;
- after reviewing relevant information, including pre-clinical testing or human clinical trial results, we may abandon or substantially restructure programs that we might previously have believed to be promising;
- we, the FDA, an IRB, an EC, or similar regulatory authorities in other countries may suspend or terminate clinical trials if the participating patients are being exposed to unacceptable health risks or for other reasons; and
- the effects of our product candidates may not be the desired effects or may include undesirable side effects or other characteristics that interrupt, delay or cause us or the FDA, or equivalent governmental authorities in other countries, to halt clinical trials or cause the FDA or non-United States regulatory authorities to deny approval of the product candidate for any or all target indications.

Each phase of clinical testing is highly regulated, and during each phase there is risk that we will encounter serious obstacles or will not achieve our goals, and accordingly we may abandon a product in which we have invested substantial amounts of time and money. In addition, we must provide the FDA and foreign regulatory authorities with pre-clinical and clinical data that demonstrate that our product candidates are safe and effective for each target indication before they can be approved for commercial distribution. We cannot state with certainty when or whether any of our products now under development will be approved or launched; or whether any products, once approved and launched, will be commercially successful.

The FDA, other non-United States regulatory authorities, or an Advisory Committee may determine our clinical trials data regarding safety or efficacy are insufficient for regulatory approval.

Although we obtain guidance from regulatory authorities on certain aspects of our clinical development activities, these discussions are not binding obligations on regulatory authorities. Regulatory authorities may revise or retract previous guidance or may disqualify a clinical trial in whole or in part from consideration in support of approval of a potential product for commercial sale or otherwise deny approval of that product. Even if we obtain successful clinical safety and efficacy data, we may be required to conduct additional, expensive trials to obtain regulatory approval. FDA, or equivalent other country authorities, may elect to obtain advice from outside experts regarding scientific issues and/or marketing applications under FDA or other country authority review through the FDA's Advisory Committee process or other country procedures. Views of the Advisory Committee or other experts may differ from those of the FDA, or equivalent other country authority, and may impact our ability to commercialize a product candidate.

If we encounter difficulties enrolling patients in our clinical trials, our trials could be delayed or otherwise adversely affected.

Clinical trials for our product candidates may require that we identify and enroll a large number of patients with the disease under investigation. We may not be able to enroll a sufficient number of patients, or those with required or desired characteristics to achieve diversity in a study, to complete our clinical trials in a timely manner.

Patient enrollment is affected by factors including:

- design of the trial protocol;
- the size of the patient population;
- eligibility criteria for the study in question;
- perceived risks and benefits of the product candidate under study;
- availability of competing therapies and clinical trials;
- efforts to facilitate timely enrollment in clinical trials;

- patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment; and
- geographic proximity and availability of clinical trial sites for prospective patients.

Additionally, even if we are able to identify an appropriate patient population for a clinical trial, there can be no assurance that the patients will continue in the clinical trial through completion.

If we have difficulty enrolling or maintaining a sufficient number of patients with sufficient diversity to conduct our clinical trials as planned, we may need to delay or terminate ongoing or planned clinical trials, either of which would have a negative effect on our business.

RISKS RELATED TO REGULATION OF THE PHARMACEUTICAL INDUSTRY

OncoVAX and our other products in development cannot be sold if we do not maintain or gain required regulatory approvals.

Our business is subject to extensive regulation by numerous state and federal governmental authorities in the United States, including the FDA, and potentially by foreign regulatory authorities, with regulations differing from country to country. In the United States, the FDA regulates, among other things, the pre-clinical testing, clinical trials, manufacturing, safety, efficacy, potency, labeling, storage, record keeping, quality systems, advertising, promotion, sale and distribution of therapeutic products. Other applicable non-United States regulatory authorities have equivalent powers. Failure to comply with applicable requirements could result in, among other things, one or more of the following actions: withdrawal of product approval, notices of violation, untitled letters, warning letters, fines and other monetary penalties, unanticipated expenditures, delays in approval or refusal to approve a product candidate; product recall or seizure; interruption of manufacturing or clinical trials; operating restrictions; injunctions; and criminal prosecution. We are required in the United States and in foreign countries to obtain approval from regulatory authorities before we can manufacture, market and sell our products.

Obtaining regulatory approval for marketing of a product candidate in one country does not assure we will be able to obtain regulatory approval in other countries. However, a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in other countries. Once approved, the FDA and other United States and non-United States regulatory authorities have substantial authority to limit the uses or indications for which a product may be marketed, restrict distribution of the product, require additional testing, change product labeling or mandate withdrawal of our products. The marketing of our approved products will be subject to extensive regulatory requirements administered by the FDA and other regulatory bodies, including: the manufacturing, testing, distribution, labeling, packaging, storage, reporting and record-keeping related to the product, advertising, promotion, and adverse event reporting requirements. In addition, incidents of adverse drug reactions, unintended side effects or misuse relating to our products could result in required post-marketing studies, additional regulatory controls or restrictions, or even lead to withdrawal of a product from the market.

In general, the FDA and equivalent other country authorities require labeling, advertising and promotional materials to be truthful and not misleading, and marketed only for the approved indications and in accordance with the provisions of the approved label. If the FDA or other regulatory authorities were to challenge our promotional materials or activities, they may bring enforcement action.

Our failure to obtain approval, significant delays in the approval process, or our failure to maintain approval in any jurisdiction will prevent us from selling a product in that jurisdiction. Any product and its manufacturer will continue to be subject to strict regulations after approval, including but not limited to, manufacturing, quality control, labeling, packaging, adverse event reporting, advertising, promotion and record-keeping requirements. Any problems with an approved product, including the later exhibition of adverse effects or any violation of regulations could result in restrictions on the product, including its withdrawal from the market, which could materially harm our business. The process of obtaining approvals in foreign countries is subject to delay and failure for many of the same reasons.

Failure to comply with foreign regulatory requirements governing human clinical trials and failure to obtain marketing approval for product candidates could prevent us from selling our products in foreign markets, which may adversely affect our operating results and financial condition.

The requirements governing the conduct of clinical trials, manufacturing, testing, product approvals, pricing and reimbursement outside the United States vary greatly from country to country. In addition, the time required to obtain approvals outside the United States may differ significantly from that required to obtain FDA approval. We may not obtain foreign regulatory approvals on the timeframe we may desire, if at all. Approval by the FDA does not assure approval by regulatory authorities in other countries, and foreign regulatory authorities could require additional testing. Failure to comply with these regulatory requirements or obtain required approvals could impair our ability to develop foreign markets for our products and may have a material adverse effect on our business and future prospects.

RISKS IN PROTECTING OUR INTELLECTUAL PROPERTY

If we are unable to protect our proprietary rights or to defend against infringement claims, we may not be able to compete effectively or operate profitably.

We invent and develop technologies that are the basis for or incorporated in our potential products. We protect our technology through United States and foreign patent filings, trademarks and trade secrets. We have issued patents, and applications for United States and foreign patents in various stages of prosecution. We expect that we will continue to file and prosecute patent applications and that our success depends in part on our ability to establish and defend our proprietary rights in the technologies that are the subject of issued patents and patent applications.

The fact that we have filed a patent application or that a patent has issued, however, does not ensure that we will have meaningful protection from competition with regard to the underlying technology or product. Patents, if issued, may be challenged, invalidated, declared unenforceable or circumvented or may not cover all applications we may desire. Our pending patent applications as well as those we may file in the future may not result in issued patents. Patents may not provide us with adequate proprietary protection or advantages against competitors with, or who could develop, similar or competing technologies or who could design around our patents. Patent law relating to the scope of claims in the pharmaceutical field in which we operate is continually evolving and can be the subject of some uncertainty. The laws providing patent protection may change in a way that would limit protection.

We also rely on trade secrets and know-how that we seek to protect, in part, through confidentiality agreements. Our policy is to require our officers, employees, consultants, contractors, manufacturers, outside scientific collaborators and sponsored researchers and other advisors to execute confidentiality agreements. These agreements provide that all confidential information developed or made known to the individual during the course of the individual's relationship with us be kept confidential and not disclosed to third parties except in specific limited circumstances. We also require signed confidentiality agreements from companies that receive our confidential data. For employees, consultants and contractors, we require confidentiality agreements providing that all inventions conceived while rendering services to us shall be assigned to us as our exclusive property. It is possible, however, that these parties may breach those agreements, and we may not have adequate remedies for any breach. It is also possible that our trade secrets or know-how will otherwise become known to or be independently developed by competitors.

We are also subject to the risk of claims, whether meritorious or not, that our products or immunotherapy candidates infringe or misappropriate third-party intellectual property rights. Defending against such claims can be quite expensive even if the claims lack merit. And if we are found to have infringed or misappropriated a third-party's intellectual property, we could be required to seek a license or discontinue our products or cease using certain technologies or delay commercialization of the affected product or products, and we could be required to pay substantial damages, which could materially harm our business.

We may be subject to litigation with respect to the ownership and use of intellectual property that will be costly to defend or pursue and uncertain in its outcome.

Our business may bring us into conflict with our licensees, licensors or others with whom we have contractual or other business relationships, or with our competitors or others whose interests differ from ours. If we are unable to resolve those conflicts on terms that are satisfactory to all parties, we may become involved in litigation brought by or against us. That litigation is likely to be expensive and may require a significant amount of management's time and attention, at the expense of other aspects of our business.

Litigation relating to the ownership and use of intellectual property is expensive, and our position as a relatively small company in an industry dominated by very large companies may cause us to be at a disadvantage in defending our intellectual property rights and in defending against claims that our immunotherapy candidates infringe or misappropriate third-party intellectual property rights. Even if we are able to defend our position, the cost of doing so may adversely affect our profitability. We may in the future be subject to patent litigation and may not be able to protect our intellectual property at a reasonable cost if such litigation is initiated. The outcome of litigation is always uncertain, and in some cases could include judgments against us that require us to pay damages, enjoin us from certain activities or otherwise affect our legal or contractual rights, which could have a significant adverse effect on our business.

Our Success Will Depend In Part On Our Ability To Grow And Diversify, Which In Turn Will Require That We Manage And Control Our Growth Effectively.

Our business strategy contemplates growth and diversification. Our ability to manage growth effectively will require that we continue to expend funds to improve our operational, financial and management controls, reporting systems and procedures. In addition, we must effectively expand, train and manage our employees. We will be unable to manage our businesses effectively if we are unable to alleviate the strain on resources caused by growth in a timely and successful manner. There can be no assurance that we will be able to manage our growth and a failure to do so could have a material adverse effect on our business.

A Significant Delay In The Clinical Trial Commencement Could Affect The cGMP Status Of Our Emmen-Based Manufacturing Facility

Our Emmen-based manufacturing facility currently enjoys a cGMP rating which permits its use in the manufacturing the vaccines in the upcoming phase III trial. Certain on-going maintenance and re-qualification of the facility and its equipment are essential to maintain its cGMP rating. A delay in the funding could cause a delay in the clinical trial start up and an interruption of the cGMP status, thus further delaying the start of the study by three to six months.

RISK FACTORS RELATED TO THE KODIAK EQUITY LINE OF CREDIT

Existing stockholders may experience significant dilution from the sale of our common stock pursuant to the Kodiak Capital Investment Agreement.

The sale of our common stock to Kodiak Capital Group LLC in accordance with the Investment Agreement may have a dilutive impact on our shareholders. As a result, our net income per share could decrease in future periods and the market price of our common stock could decline. In addition, the lower our stock price is at the time we exercise our put options, the more shares of our common stock we will have to issue to Kodiak Capital Group LLC in order to drawdown on the facility. If our stock price decreases, then our existing shareholders would experience greater dilution for any given dollar amount raised through the Offering.

The perceived risk of dilution may cause our stockholders to sell their shares, which may cause a decline in the price of our common stock. Moreover, the perceived risk of dilution and the resulting downward pressure on our stock price could encourage investors to engage in short sales of our common stock. By increasing the number of shares offered for sale, material amounts of short selling could further contribute to progressive price declines in our common stock.

The issuance of shares pursuant to the Kodiak Investment Agreement may have a significant dilutive effect.

Depending on the number of shares we issue pursuant to the Kodiak Investment Agreement, it could have a significant dilutive effect upon our existing shareholders. Although the number of shares that we may issue pursuant to the equity line will vary based on our stock price (the higher our stock price, the less shares we have to issue) the information set out below indicates the potential dilutive effect to our shareholders, based on different potential future stock prices, if the full amount of the equity line is exercised.

Dilution based upon equity drawdown being accessed by Kodiak Capital and the stock price discounted to Kodiak Capital's purchase price of 80% of the lowest daily volume weighted average price (VWAP) during the pricing period. The example below illustrates dilution based upon the last sale price for our common stock of \$5.50 and other increased/decreased prices:

\$25,000,000 Drawdown

Stock Price(Kodiak Purchase Price)	Shares Issued	Percentage of Outstanding Shares (1)
\$6.875 (\$5.50) +25%	4,545,455	12.68%
\$5.50 (\$4.80)	5,681,818	15.36%
\$4.125 (\$4.40) -25%	7,575,758	19.49%
\$2.75 (\$2.20) -50%	11,363,636	26.63%
\$1.375 (\$1.10) -75%	22,272,273	42.06%

(1) Based on 31,302,755 shares outstanding on a pro-forma basis assuming the maximum number of Shares are sold in the Offering.

Kodiak Capital Group LLC will pay less than the then-prevailing market price of our common stock which could cause the price of our common stock to decline.

Our common stock to be issued under the Kodiak Investment Agreements will be purchased at a twenty percent (20%) discount or 80% of the lowest daily VWAP during the five trading days immediately following our notice to Kodiak Capital Group LLC of our election to exercise our "put" right.

Kodiak Capital Group LLC has a financial incentive to sell our shares immediately upon receiving the shares to realize the profit between the discounted price and the market price. If Kodiak Capital Group LLC sells our shares, the price of our common stock may decrease. If our stock price decreases, Kodiak may have a further incentive to sell such shares. Accordingly, the discounted sales price in the Investment Agreements may cause the price of our common stock to decline.

Kodiak Capital Group LLC has entered into similar agreements with other public companies and may not have sufficient capital to meet our drawdown requests.

Kodiak Capital Group LLC has entered into similar financing agreements with other public companies, and some of those companies have all filed registration statements with the intent of registering shares to be sold to Kodiak pursuant to drawdown arrangements. We do not know if management at any of the companies

who have or will have effective registration statements intend to raise funds now or in the future, what the size or frequency of each put request would be, if floors will be used to restrict the amount of shares sold, or if the equity line will ultimately be cancelled or expire before the entire amount of shares are put to Kodiak. Since we do not have any control over the requests of these other companies, if Kodiak Capital Group LLC receives significant requests, it may not have the financial ability to meet our requests. If so, the amount of available funds may be significantly less than we anticipate.

RISKS RELATED TO OUR COMMON STOCK

You may not be able to liquidate your investment since there is no assurance that an active public market will develop for our common stock.

There is no established public trading market for our securities. Although our common stock was recently cleared by FINRA for quotation on the OTC Link under the symbol VGEN, there has not been any public trading of our common stock and there can be no assurance that a regular trading market will develop or that if developed, will be sustained. In the absence of a trading market, an investor may be unable to liquidate its investment, which will result in the loss of your investment.

Transfers of our securities may be restricted by virtue of state securities “blue sky” laws which prohibit trading absent compliance with individual state laws. These restrictions may make it difficult or impossible to sell shares in those states.

Transfers of our securities may be restricted under the securities regulations laws promulgated by various states and foreign jurisdictions, commonly referred to as “blue sky” laws. Absent compliance with such individual state laws, our common stock may not be traded in such jurisdictions. Because the securities registered hereunder have not been registered for resale under the blue sky laws of any state, the holders of such shares and persons who desire to purchase them should be aware that there may be significant state blue sky law restrictions upon the ability of investors to sell the securities and of purchasers to purchase the securities. These restrictions may prohibit the trading of our securities. Investors should consider the secondary market for our securities to be a limited one.

We have no immediate plans to pay dividends.

We have not paid any cash dividends to date and do not expect to pay dividends for the foreseeable future. We intend to retain earnings, if any, as necessary to finance the operation and expansion of our business.

Our officers, directors and principal stockholders collectively own a substantial portion of our outstanding common stock, and as long as they do, they may be able to control the outcome of stockholder voting.

Our officers and directors are collectively the beneficial owners of approximately 43% of the outstanding shares of our common stock as of the date of this Offering Circular. In addition, our principal stockholder is the beneficial owner of approximately 43% of the outstanding shares of our common stock as of the date of this Offering Circular. Accordingly, these stockholders, individually and as a group, may be able to control us and direct our affairs and business, including any determination with respect to a change in control, future issuances of common stock or other securities, declaration of dividends on the common stock and the election of directors.

We have the ability to issue additional shares of our common stock and shares of preferred stock without asking for stockholder approval, which could cause your investment to be diluted.

Our Articles of Incorporation authorizes the Board of Directors to issue up to 200,000,000 shares of common stock and up to 50,000,000 shares of preferred stock. The power of the Board of Directors to issue shares of common stock, preferred stock or warrants or options to purchase shares of common stock or preferred stock is generally not subject to stockholder approval. Accordingly, any additional issuance of our common stock, or preferred stock that may be convertible into common stock, may have the effect of diluting your investment.

By issuing preferred stock, we may be able to delay, defer, or prevent a change of control.

Our Articles of Incorporation permits us to issue, without approval from our stockholders, a total of 50,000,000 shares of preferred stock. Our Board of Directors can determine the rights, preferences, privileges and restrictions granted to, or imposed upon, the shares of preferred stock and to fix the number of shares constituting any series and the designation of such series. It is possible that our Board of Directors, in determining the rights, preferences and privileges to be granted when the preferred stock is issued, may include provisions that have the effect of delaying, deferring or preventing a change in control, discouraging bids for our common stock at a premium over the market price, or that adversely affect the market price of and the voting and other rights of the holders of our common stock.

Once publicly trading, the application of the "penny stock" rules could adversely affect the market price of our common shares and increase your transaction costs to sell those shares.

The Securities and Exchange Commission has adopted Rule 15g-9 which establishes the definition of a "penny stock," for the purposes relevant to us, as any equity security that has a market price of less than \$5.00 per share or with an exercise price of less than \$5.00 per share, subject to certain exceptions. For any transaction involving a penny stock, unless exempt, the rules require:

- that a broker or dealer approve a person's account for transactions in penny stocks; and
- the broker or dealer receive from the investor a written agreement to the transaction, setting forth the identity and quantity of the penny stock to be purchased.

In order to approve a person's account for transactions in penny stocks, the broker or dealer must:

- obtain financial information and investment experience objectives of the person; and
- make a reasonable determination that the transactions in penny stocks are suitable for that person and the person has sufficient knowledge and experience in financial matters to be capable of evaluating the risks of transactions in penny stocks.

The broker or dealer must also deliver, prior to any transaction in a penny stock, a disclosure schedule prescribed by the Commission relating to the penny stock market, which, in highlight form:

- sets forth the basis on which the broker or dealer made the suitability determination; and
- that the broker or dealer received a signed, written agreement from the investor prior to the transaction.

Generally, brokers may be less willing to execute transactions in securities subject to the "penny stock" rules. This may make it more difficult for investors to dispose of our common stock and cause a decline in the market value of our stock.

Disclosure also has to be made about the risks of investing in penny stocks in both public offerings and in secondary trading and about the commissions payable to both the broker-dealer and the registered representative, current quotations for the securities and the rights and remedies available to an investor in cases of fraud in penny stock transactions. Finally, monthly statements have to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks

Should our stock become quoted on the OTC bulletin board, if we fail to remain current on our reporting requirements, we could be removed from the OTC bulletin board which would limit the ability of broker-dealers to sell our securities and the ability of stockholders to sell their securities in the secondary market.

Companies quoted on the Over-The-Counter Bulletin Board, such as we are seeking to become, must be reporting issuers under Section 12 of the Securities Exchange Act of 1934, as amended, and must be current in their reports under Section 13, in order to maintain price quotation privileges on the OTC Bulletin Board. If we fail to remain current on our reporting requirements, we could be removed from the OTC Bulletin Board. As a result, the market liquidity for our securities could be severely adversely affected by limiting the ability of broker-dealers to sell our securities and the ability of stockholders to sell their securities in the secondary market. In addition, we may be unable to get re-quoted on the OTC Bulletin Board, which may have an adverse material effect on our Company.

Should we become a public company, we will face risks related to compliance with corporate governance laws and financial reporting standard.

The Sarbanes-Oxley Act of 2002, as well as related new rules and regulations implemented by the SEC and the Public Company Accounting Oversight Board, require changes in the corporate governance practices and financial reporting standards for public companies. These new laws, rules and regulations, including compliance with Section 404 of the Sarbanes-Oxley Act of 2002 relating to internal control over financial reporting ("Section 404"), will materially increase the Company's legal and financial compliance costs and make some activities more time-consuming, burdensome and expensive. Any failure to comply with the requirements of the Sarbanes-Oxley Act of 2002, our ability to remediate any material weaknesses that we may identify during our compliance program, or difficulties encountered in their implementation, could harm our operating results, cause us to fail to meet our reporting obligations or result in material misstatements in our financial statements. Any such failure could also adversely affect the results of the periodic management evaluations of our internal controls and, in the case of a failure to remediate any material weaknesses that we may identify, would adversely affect the annual auditor attestation reports regarding the effectiveness of our internal control over financial reporting that are required under Section 404 of the Sarbanes-Oxley Act. Inadequate internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock.

Should we become a public company, the requirements of being a public company may strain our resources, divert management's attention and affect our ability to attract and retain qualified board members.

As a public company, we incur significant legal, accounting and other expenses that we would not incur as a private company, including costs associated with public company reporting requirements. We also incur costs associated with the Sarbanes-Oxley Act of 2002, as amended, the Dodd-Frank Wall Street Reform and Consumer Protection Act and related rules implemented or to be implemented by the SEC and the NYSE AMEX. The expenses incurred by public companies generally for reporting and corporate governance purposes have been increasing. We expect these rules and regulations to increase our legal and financial compliance costs and to make some activities more time-consuming and costly, although we are currently

unable to estimate these costs with any degree of certainty. These laws and regulations could also make it more difficult or costly for us to obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. These laws and regulations could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as our executive officers and may divert management's attention. Furthermore, if we are unable to satisfy our obligations as a public company, we could be subject to delisting of our common stock, fines, sanctions and other regulatory action and potentially civil litigation.

USE OF PROCEEDS

The net proceeds to us from the sale of the 180,000 Shares being offered hereby is estimated to be approximately \$933,000.

We anticipate that such net proceeds, together with its other available cash and cash equivalents, will be used as follows: (i) up to \$200,000 to repay existing indebtedness to The Abell Foundation bearing interest at a 8% per annum with a maturity date of July 31, 2013 with prepayments due upon on each Closing (See "*Description of Securities—The Abell Foundation Financings*"); and (ii) the balance for working capital and other general corporate purposes, including filing of a registration statement related to our common stock and general and administrative costs such as compensation of employees and officers.

The net proceeds of this Offering that are not utilized immediately, if any, may be deposited into interest bearing or non-interest bearing accounts, or invested in government obligations, certificates of deposit, commercial paper, money market accounts or other short-term interest bearing investments, which may not be insured.

The foregoing represents our best estimate of the allocation of the net proceeds from the Offering. Future events, including the problems, delays, expenses, and complications frequently encountered by development stage companies such as us, as well as changes in economic, regulatory, or competitive conditions, changes in its planned business (and its success or failure), and changes in its product and service development activities, may require that the Company reallocate funds or delay, abandon, or reduce its efforts. It is possible that that these estimates will prove inaccurate, that our efforts to introduce our products and services will require considerable additional expenditures, or that unforeseen events will cause the Company to expend more funds than it currently expects.

We will require substantial additional funds to conduct our operations in the future, and there can be no assurance that such funding will be available on acceptable terms, if at all.

DETERMINATION OF THE OFFERING PRICE

Our shares of common stock are quoted on the OTC Link. The first date on which our stock traded publicly was June 7, 2013 and the last reported sale price of our common stock on June 13, 2013 was \$7.00 per share and only 1,450 shares traded on such date. Given the current limited liquidity, we feel it appropriate to offer the Shares at a discount to market price. In addition, we are currently selling Units in a private placement in reliance on the exemption provided under Rule 506 of Regulation D of the Securities Act of 1933 at a purchase price of \$5.50 per Unit. Each Unit consists of 1 share of common stock and a warrant to purchase 0.3 shares of common stock. We feel it appropriate to sell Shares in this Offering at a price in excess of the Units as the Shares will be freely trading and the common stock issued as part of the Units is restricted. The Units also had warrants attached. Accordingly, we deemed a price of \$5.60 to be an appropriate price for the Shares. The price of the Shares may not bear any relationship to the book value of the Company. Neither the Company nor any executive officer of the Company represents that the Shares have or will have a market value equal to their offering price or could be resold at their offering price.

DILUTION

The net tangible book value of the Company as of March 31, 2013, was \$(17,057,256), or \$(0.55) per share of common stock. Net tangible book value per share represents the Company's total tangible assets less total liabilities divided by 30,778,397 shares of common stock outstanding. Without taking into account any other changes in the net tangible book value after March 31, 2013, other than to give effect to the sale of 180,000 shares of common stock by the Company in this offering (assuming an offering price of \$5.60 per share and after deducting estimated offering expenses) and the application of the estimated proceeds thereof, the pro forma net tangible book value of the Company as of March 31, 2013, would have been \$16,124,256, or \$(0.52) per share. This amount represents an immediate improvement in pro forma net tangible book value of \$0.03 per share to existing stockholders and immediate dilution of \$6.12 per share to new investors purchasing common stock in this offering. Dilution per share to new investors represents the difference between the pro forma net tangible book value per share of common stock immediately upon consummation of this offering and the amount per share paid by purchasers of common stock of the Company in this offering. The following table illustrates this per share dilution as of March 31, 2013:

Offering price per Share	\$5.60
Net tangible book value per share at March 31, 2013	\$(0.55)
Improvement per share attributable to new investors	\$0.03
Pro forma net tangible book value per share after this offering	\$(0.52)
Dilution per share to new investors	\$6.12

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS OR PLAN OF OPERATION

The following discussion should be read in conjunction with the consolidated financial statements and notes. In addition to historical information, this discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions, which could cause actual results to differ materially from Management's expectations. Our Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is provided in addition to the accompanying financial statements and notes to assist readers in understanding our results of operations, financial condition and cash flows. Our MD&A is organized as follows:

- *Overview* — Discussion of our business and overall analysis of financial and other highlights affecting the Company in order to provide context for the remainder of MD&A.
- *Trends & Outlook* — Discussion of what we view as the overall trends affecting our business and the strategy for 2013 and beyond.
- *Critical Accounting Policies*— Accounting policies that we believe are important to understanding the assumptions and judgments incorporated in our reported financial results and forecasts.
- *Results of Operations*— Analysis of our financial results comparing 2012 and 2011.
- *Liquidity and Capital Resources*— An analysis of changes in our balance sheet and cash flows and discussion of our financial condition and future liquidity needs.

The various sections of this MD&A contain a number of forward-looking statements. Words such as “expects,” “goals,” “plans,” “believes,” “continues,” “may,” and variations of such words and similar expressions are intended to identify such forward-looking statements. In addition, any statements that refer to projections of our future financial performance, our anticipated growth and trends in our businesses, and other characterizations of future events or circumstances are forward-looking statements. Such statements are based on our current expectations and could be affected by the uncertainties and risk factors described throughout this filing and particularly in the “Overview” and “Trends & Outlook” section. Our actual results may differ materially.

Overview

We are a biotechnology company with more than three decades of research into combating cancer by using the body’s own immune system. Vaccinogen is the developer of OncoVax®, which we believe is the only patient specific immunotherapy for Stage II colon cancer and our technology may also have application in other tumor types, notably melanoma and renal cell carcinoma.

Colon cancer represents the third most common form of cancer in both the US and Europe. American Cancer Society statistics suggest there will be about 102,000 new cases of colon cancer diagnosed within the US. The European Cancer Observatory estimates that there were about 245,000 new cases of colon cancer across Europe.

We have broad patents covering the OncoVax® technology in the U.S. and seven other countries, Australia, Switzerland, Germany, France, Great Britain, Ireland and Italy, with a related patent application pending in Canada. These patents and applications provide broad coverage for the production of autologous cancer vaccines. The key protection of OncoVax®, in addition to considerable expertise protected as trade secrets, is the broad, issued patent protection around the production of autologous, sterile, metabolically active cancer vaccines developed by us. This patent, entitled “Sterile Immunogenic Non-Tumorigenic Tumor Cell Composition and Methods” was issued in 2009 and expires no sooner than 2025. We believe that sterility will be required for any product to reach the US market and likely in any other market with an approved sterile vaccine like the one we have developed. This could result in a regulatory barrier to entry to competitors.

We hold 1 U.S. patent to related technologies and including the sterility patent referred to above, 2 U.S. patents total.

We also rely upon unpatented proprietary know-how and continuing technological innovation and other trade secrets to develop and maintain our competitive position. We hold considerable proprietary expertise related to the OncoVax® technology, including the production of autologous cancer vaccines. We have brand names for our OncoVax® products and related technologies, and anticipate filing 5 trademark applications for these and related marks.

All of our research efforts to date are at the pre-clinical or clinical stage of development. We are focused on leveraging our key assets, including our intellectual property, our scientific team and our facilities, to advance our technologies.

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act, or the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not

previously approved. We could be an emerging growth company for up to five years, although circumstances could cause us to lose that status earlier, including if the market value of our common stock held by non-affiliates exceeds \$700 million as of any June 30, in which case we would no longer be an emerging growth company as of the following December 31.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies.

Operating Strategy

We will continue to maintain a cGMP facility and outsource clinical activities to contract research organizations (“CRO”) in an effort to achieve the following:

1. Complete the pivotal Phase IIIb clinical trial of this autologous vaccine, OncoVax®, which is a new paradigm to prevent the recurrence of stage II colon cancer. The planned trial will closely replicate a successful prior Phase IIIa.
2. Develop near term revenues by establishing licensing arrangements for distribution of OncoVax® in certain territories as well as for additional carcinoma indications.
3. Develop diagnostic and therapeutic drug products as well as near-term revenues by exploiting its distinctive Human Monoclonal Antibodies (“HuMabs”) technology.

Trends & Outlook

Revenue

To date, the Company has not earned any revenues as the use of OncoVax® to create cancer related vaccines is still undergoing clinical trials and has not yet received regulatory approval for commercialization and sale.

We are mainly focused on: preparing for the initiation of Phase IIIb clinical trials relating to OncoVax® and our research regarding human monoclonal antibodies (HuMabs).

On a long-term basis, we anticipate that our revenue will be derived primarily from global sales of our OncoVax® product and licensing fees. Commercialization of the OncoVax® product is dependent on successful completion of a Phase IIIb clinical trial and subsequent approval by the FDA.

Research & Development Expenses

Our research and development costs consist of expenses incurred in activities connected with the development of a stage II colon cancer vaccine. These expenses consist primarily of the amortization of intangible assets, cost of conducting clinical trials, salaries and related expenses for personnel, fees paid to professional service providers and, costs of a manufacturing facility in The Netherlands. We expect that research and development expenses will increase in the near term with the onset of the Phase IIIb clinical trial.

Clinical Trials

The FDA has requested a second, confirmatory, randomized controlled Phase III trial of OncoVax® in Stage II colon cancer. The principal objective of Vaccinogen is to organize a "best of breed" team to conduct a confirmatory Phase IIIb trial in Stage II colon cancer. The protocol of this trial, including endpoints and the statistical analysis plan is the subject of an SPA agreement granted by the FDA.

This study will be carried out under a Special Protocol Assessment (SPA) that was negotiated with the FDA in 2010. An SPA granted by the FDA provides a mechanism for the sponsors and the FDA to reach agreement on size, execution and analysis of a clinical trial that is intended to form the primary basis for regulatory approval. The primary endpoint of this pivotal Phase IIIb trial is recurrence-free survival (RFS) with an interim analysis after 70 "events," and a final primary analysis three years following completed enrollment. "Events" are incidents of either recurrent disease or death. The study is powered at 90% to detect a 50% improvement in RFS versus resection only for final analysis with an adjustment for interim analysis. The power calculations in the study assume an event rate and distribution that match those observed in the 8701 Phase IIIa study. If a robust p value is achieved at the interim analysis, the Biologics License Application (BLA) can be filed with the FDA's center for Biologics Evaluation and Research (CBER) at that point. Past clinical trials using the optimal regimen with four immunizations will be accepted as supportive studies during the FDA review of the BLA.

The Phase IIIb study will enroll 550 patients, randomized 1:1 to receive surgery alone, or surgery plus OncoVax®. Patients will be followed on a regular schedule to see whether and when their cancer might reappear. The experience with OncoVax® in the 8701 study showed that in the relevant Stage II group, disease recurrence happened more quickly and more frequently in those patients who received surgery alone. If the Phase IIIb trial replicates the experience of the 8701 patients, the interim analysis after 2/3 of the expected events should give a clear and statistically significant separation between the Kaplan-Meier curves at that point, and would form the basis for a BLA seeking marketing approval from the FDA.

It is important to emphasize that the FDA has agreed that RFS is the most appropriate endpoint to evaluate a trial in Stage II colon cancer. The alternative in cancer studies is often overall survival (OS). An OS endpoint has several drawbacks in this case. The average age of patients presenting with colon cancer is 65 years, so deaths from causes other than the tumor will dilute the outcome in both arms. Patients in either arm whose disease recurs will receive chemotherapy and other treatments for their metastatic disease, and the success of these treatments will dilute the impact of earlier therapies such as OncoVax® on OS. From a patient perspective, being disease free is clearly a meaningful endpoint.

General and Administrative Expenses

Our general and administrative ("G&A") expenses consist of the general costs, expenses and salaries for the operation and maintenance of our business. We anticipate that general and administrative expenses will increase as we progress through the clinical phase of development into commercialization.

Critical Accounting Policies

Our financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Note 3 of the Notes to Financial Statements describes the significant accounting policies used in the preparation of the financial statements. Certain of these significant accounting policies are considered to be critical accounting policies, as defined below.

A critical accounting policy is defined as one that is both material to the presentation of our financial statements and requires management to make difficult, subjective or complex judgments that could have a

material effect on our financial condition and results of operations. Specifically, critical accounting estimates have the following attributes: (1) we are required to make assumptions about matters that are highly uncertain at the time of the estimate; and (2) different estimates we could reasonably have used, or changes in the estimate that are reasonably likely to occur, would have a material effect on our financial condition or results of operations.

Estimates and assumptions about future events and their effects cannot be determined with certainty. We base our estimates on historical experience and on various other assumptions believed to be applicable and reasonable under the circumstances. These estimates may change as new events occur, as additional information is obtained and as our operating environment changes. These changes have historically been minor and have been included in the financial statements as soon as they became known. Based on a critical assessment of our accounting policies and the underlying judgments and uncertainties affecting the application of those policies, management believes that our financial statements are fairly stated in accordance with accounting principles generally accepted in the United States, and present a meaningful presentation of our financial condition and results of operations. We believe the following critical accounting policies reflect our more significant estimates and assumptions used in the preparation of our financial statements:

Use of Estimates—Our financial statements have been prepared in accordance with accounting principles generally accepted in the United States and, accordingly, require management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities in the financial statements. On an ongoing basis, the Company evaluates the estimates used in recording common stock warrant related liabilities, derivative financial instruments, stock based compensation, and where applicable, the fair value of assets. The Company may base such estimates on various assumptions including information received from valuation consultants which it believes to be reasonable under the circumstances.. Actual results could differ from those estimates.

Intangible Assets— Intangible assets consist primarily of the cost of acquired patents associated with OncoVax® to be used in research and development and the commercialization cancer related vaccines. The Company has capitalized the cost of the acquired patents because the Company has identified alternative future research and development efforts for numerous forms of cancer which it intends to pursue and for which management believes will result in commercialization of related vaccines. Acquired patents are carried at cost less accumulated amortization. Amortization is calculated on a straight-line basis, over the estimated useful economic life of the patent, which is 15 years for OncoVax®.

Long-lived assets, including identifiable intangible assets with finite lives, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. The Company has determined that no impairment has occurred as of December 31, 2011 and December 31, 2012.

Fair Value of Financial Instruments - Fair value is defined as the price at which an asset could be exchanged or a liability transferred (an exit price) in an orderly transaction between knowledgeable, willing parties in the principal or most advantageous market for the asset or liability. Where available, fair value is based on observable market prices or parameters or derived from such prices or parameters. Where observable prices or inputs are not available, valuation models are applied.

Financial assets recorded at fair value in the accompanying financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels, as defined by the new guidance related to fair value measurements and disclosures, and directly related to the

amount of subjectivity associated with the inputs to fair valuation of these assets and liabilities, are as follows:

Level 1- Inputs are unadjusted, quoted prices in active markets for identical assets at the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis.

We carry no investments classified as Level 1.

Level 2 - Inputs are other than quoted prices included in Level 1, which are either directly or indirectly observable for the asset or liability through correlation with market data at the reporting date and for the duration of the instrument's anticipated life.

We carry no investments classified as Level 2.

Level 3- Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities and which reflect management's best estimate of what market participants would use in pricing the asset or liability at the reporting date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

Our warranty and Bridge Loan obligations are considered Level 3.

For a further discussion regarding fair value measurements, see Note 9 on Fair Value in the Notes to Financial Statements.

Accounting for Warrants – We have adopted FASB guidance related to determining whether an instrument or embedded feature is indexed to an entity's own stock. This guidance applies to any freestanding financial instruments or embedded features that have the characteristics of a derivative, as defined in ASC Topic 815, Derivatives and hedging, and to any freestanding financial instruments that are potentially settled in an entity's own common stock. As a result, certain of our warrants were considered to be derivatives and were valued using various assumptions as they are recorded as liabilities.

Research and Development Costs – Research and development costs that do not have alternative future use are expensed as incurred. Research and development expenses primarily include the amortization of intangible assets, cost of conducting clinical trials, compensation and related overhead for employees, consultants, facilities costs and the cost of materials purchased for research and development.

Stock Based Compensation – The Company measures the cost of employee services received in exchange for stock options or restricted stock awards based upon the fair value of the award on the date of the grant. The Company recognizes the estimated grant date fair value of the award as stock-based compensation expense on a straight-line basis over the requisite service period, which is generally the vesting period.

The Company initially measures the cost of awards granted to non-employees based on the fair value of the award on the date of grant however such cost is re-measured at the end of each reporting period until performance is fully satisfied or services are rendered by the non-employee.

The fair value of stock options granted is calculated using the Black-Scholes option-pricing model, which requires the use of subjective assumptions including volatility, expected term, risk-free rate, and the fair

value of the underlying common stock. The fair value of non-vested stock awards is determined based upon the estimated fair value of the Company's common stock.

Results of Operations

Consolidated Statement of Operations Data

	<u>Years Ended December 31,</u>		<u>Three Months Ended March 31,</u>	
	<u>2012</u>	<u>2011</u>	<u>2013</u>	<u>2012</u>
Revenues	\$ -	\$ -	\$ -	\$ -
Operating Expenses:				
Research and development	8,139,038	8,564,519	2,073,184	2,025,004
General and administrative expenses	2,960,939	2,783,460	6,929,760	653,572
Total Operating Expenses	11,099,977	11,347,979	9,002,944	2,678,576
Loss from Operations	(11,099,977)	(11,347,979)	(9,002,944)	(2,678,576)
Loss on Financial Instruments	(1,281,916)	-	(413,895)	(92,368)
Interest and Other Expenses	(312,257)	(176,489)	(65,230)	(131,938)
Net Loss	<u>\$ (12,694,150)</u>	<u>\$ (11,524,468)</u>	<u>\$ (9,482,069)</u>	<u>\$ (2,902,882)</u>

Revenue

Since inception, we have not earned any revenues as the use of OncoVax® to create cancer related vaccines is still undergoing clinical trials and has not yet received regulatory approval for commercialization and sale.

Operating Expenses – Three Months Ended March 31, 2013 and 2012

Our operating expenses totaled \$9,002,944 and \$2,678,576 in the three months ended March 31, 2013 and March 31, 2012 respectively. The operating expenses are discussed in further detail below.

Research and Development Expenses

<u>Three Months Ended March 31</u>		<u>Change in 2013 v. 2012</u>	
2013	2012	\$	%
\$ 2,073,184	\$ 2,025,004	\$ 48,180	2.38%

Research and development expenses increased to \$2,073,184 in the three months ended March 31, 2013, or approximately 2.38%, from \$2,025,004 in the three months ended March 31, 2012. These expenses include \$1,675,817 and \$1,674,839 for amortization of intangibles, related to OncoVax® intellectual property, for the three months ended March 31, 2013 and 2012 respectively. The increase was primarily attributable to increased activity in preparation of the upcoming Phase IIIb clinical trial.

General and Administrative Expenses

<u>Three Months Ended March 31</u>		<u>Change in 2013 v. 2012</u>	
2013	2012	\$	%
\$ 6,929,760	\$ 653,572	\$ 6,276,188	*

* Not meaningful

General and administrative expenses increased to \$6,929,760 in the three months ended March 31, 2013 from \$653,272 in the comparable period in 2012. The increase of \$6,276,188, from 2012 to 2013 was attributable to the estimated value of the Abell Option issued with respect to the Abell Investment Agreement in January 2013 (\$5,954,545) and increases in accounting fees (\$475,000) offset by a decrease in salaries (\$130,000). The Abell Investment agreement is discussed in Note 3 of the unaudited condensed consolidated financial statements.

Operating Expenses – Years Ended December 31, 2012 and 2011

Our operating expenses totaled \$11,099,977 in the year ended December 31, 2012 and \$11,347,979 in the year ended December 31, 2011. The operating expenses are discussed in further detail below.

Research and Development Expenses

<u>Year Ended December 31</u>		<u>Change in 2012 v. 2011</u>	
2012	2011	\$	%
\$ 8,139,038	\$ 8,564,519	\$ (425,481)	-4.97%

Research and development expenses decreased to \$8,139,038 in the year ended December 31, 2012, or approximately 4.97%, from \$8,564,519 in the year ended December 31, 2011. These expenses include \$6,703,273 and \$6,706,552 for amortization of intangibles, related to OncoVax® intellectual property, for

the years ended December 31, 2012 and 2011 respectively. The decrease of \$425,481, or 4.97% was primarily attributable to a decrease in salaries (\$201,000), Phase IIIb clinical trial expenses (\$52,000), travel and entertainment (\$27,000) and stock based compensation (\$34,000).

General and Administrative Expenses

<u>Year Ended December 31</u>		<u>Change in 2012 v. 2011</u>	
<u>2012</u>	<u>2011</u>	<u>\$</u>	<u>%</u>
\$ 2,960,939	\$ 2,783,460	177,479	6.38%

General and administrative expenses increased to \$2,960,939 in the year ended December 31, 2012, or approximately 6.38%, from \$2,783,460 in the comparable period in 2011. The increase of \$177,479, from 2011 to 2012 was primarily attributable to increases in accounting and consulting fees.

Nonoperating Expense – Three Months Ended March 31, 2013 and 2012

Nonoperating expenses were \$479,125 and \$224,306 in the three months ended March 31, 2013 and 2012 respectively. The nonoperating expenses are discussed below.

Loss on Financial Instruments

<u>Three Months Ended March 31</u>		<u>Change in 2013 v. 2012</u>	
<u>2013</u>	<u>2012</u>	<u>\$</u>	<u>%</u>
\$ 413,895	\$ 92,368	\$ 321,527	348.09%

Loss on Financial Instruments was generated due to changes in the estimated fair value at March 31, 2013 for the Bridge Loan in the amount of approximately \$306,000 and offset by gains in the estimated fair value of Abell Warrants of approximately \$123,000 and the Round C Warrants of approximately \$45,000.

Additionally, during the period ended March 31, 2013 the Company issued additional warrants associated with the January 2013 amendment as a result of the deemed extinguishment of the Abell Loan. The fair value of the warrants (\$275,813) is included in the Loss on Financial Instruments. Further discussion of this transaction can be found in Note 3 and Note 9 to the unaudited condensed consolidated financial statements.

The March 31, 2012 Loss on Financial Instruments was solely attributable to the change in the estimated fair value of the Abell Warrants.

Interest and Other Expenses

<u>Three Months Ended March 31</u>		<u>Change in 2013 v. 2012</u>	
<u>2013</u>	<u>2012</u>	<u>\$</u>	<u>%</u>
\$ 65,230	\$ 131,938	\$ (66,708)	-50.56%

Interest Expense decreased to \$65,230 in the three months ended March 31, 2013, or approximately 51% from \$131,938 in the comparable period in 2012.

Nonoperating Expense - Years Ended December 31, 2012 and 2011

Nonoperating expenses were \$1,594,173 and \$176,489 in the years ended December 31, 2012 and 2011, respectively. The nonoperating expenses are discussed below.

Loss on Financial Instruments

<u>Year Ended December 31</u>		<u>Change in 2012 v. 2011</u>	
2012	2011	\$	%
\$ 1,281,916	\$ -	1,281,916	*

* not meaningful

Loss on Financial Instruments was generated due to changes in the estimated fair value at December 31, 2012 for the Abell Warrants in the amount of approximately \$772,000 and the 2012 Bridge Loan in the amount of approximately \$510,000, both of which are discussed in Note 3 of the financial statements.

Interest and Other Expenses

<u>Year Ended December 31</u>		<u>Change in 2012 v. 2011</u>	
2012	2011	\$	%
\$ 312,257	\$ 176,489	135,768	76.93%

Interest and Other Expense increased to \$312,257 in the year ended December 31, 2012, or approximately 76.9% from \$176,489 in the comparable period in 2011. The increase of \$135,768 is attributable to primarily additional short-term financing of continuing operations. Additional funding was provided by an increase in the Note Payable to the Abell Foundation (\$300,000) as discussed in Note 8 of the financial statements and the 2012 Bridge Loan financing (\$1,019,000), a derivative financial instrument as discussed in Note 3 of the financial statements.

Liquidity and Capital Resources

Since our inception, we have financed our operations through the private placement of our securities.

	<u>Years Ended December 31,</u>		<u>Three Months Ended March 31,</u>	
	<u>2012</u>	<u>2011</u>	<u>2013</u>	<u>2012</u>
Net cash provided by (used in) operating activities	\$ (2,272,903)	\$ (3,511,589)	\$ (1,001,537)	\$ (485,684)
Net cash used in investing activities	(48,282)	(80,230)	(722)	(57,823)
Net cash provided by (used in) financing activities	2,239,002	2,602,364	971,836	300,000
Effect of foreign exchange rate changes on cash and equivalents	(40,658)	25,378	40,752	7,648
Net increase (decrease) in cash and equivalents	<u>\$ (122,841)</u>	<u>\$ (964,077)</u>	<u>\$ 10,329</u>	<u>\$ (235,859)</u>

Cash & Cash Equivalents

Total cash and cash equivalents was \$124,169 at March 31, 2013, compared with \$822 at March 31, 2012. The increase in cash and cash equivalents was primarily attributable to cash received from our private placement of stock and warrants.

Total cash and cash equivalents was \$113,840 at December 31, 2012, compared with \$236,681 at December 31, 2011. The decrease in cash and cash equivalents of \$122,841 or 51.9%, from 2011 to 2012, was primarily attributable to funding operations without adequate cash flows from financing activities in 2012.

Net Cash Used in Operating Activities

Operating activities required \$1,001,537 and \$485,684 for the three months ended March 31, 2013 and 2012 respectively. The increase of \$515,853 or 106.21%, from 2012 to 2013 was primarily attributable to an increase in our accounts payable balance of approximately \$294,000 as we experienced increased accounting, legal and consulting expenses.

Operating activities required \$2,272,903 and \$3,511,589 for the years ended December 31, 2012, and 2011 respectively. The decrease of \$1,238,686 or 35.27%, from 2011 to 2012 was primarily attributable to an increase in our accounts payable balance of \$1,000,000 as we experienced increased accounting, legal and consulting expenses.

Net Cash Used in Investing Activities

We invested \$722 and \$57,823 in the three months ended March 31, 2013 and 2012 respectively in purchases of property and equipment.

We invested \$48,282 and \$80,230 in the years ended December 31, 2012 and 2011 respectively in purchases of property and equipment.

Net Cash Provided by Financing Activities.

Listed below are key financing transactions entered into by us during 2013:

- During the three months ended March 31, 2013 we raised additional capital of approximately \$972,000 through the issuance of 176,697 Units (each Unit consisting of 1 share of common stock and a common stock purchase warrant to purchase 0.3 shares of common stock).

Listed below are key financing transactions entered into by us during 2012:

- We raised additional capital of approximately \$920,000 through the issuance of 167,273 Units (each Unit consisting of 1 share of common stock and a common stock warrant to purchase 0.3 shares of common stock).
- Between April 2012 and October 2012, we issued \$1,019,000 in unsecured notes payable to various investors.
- On February 16, 2012, we received an additional \$300,000, from The Abell Foundation, on the working capital loan originally taken in 2011 in the amount of \$1.5 million, thereby increasing the amount outstanding to \$1.8 million.

Listed below are key financing transactions entered into by us during 2011

- On October 26, 2011, we obtained a \$1.5 million working capital loan from The Abell Foundation Inc.
- From January 13, 2011 to October 24, 2011, we issued 123,015 shares of Series AA Preferred Stock resulting in net proceeds of approximately \$1.1 million.

Future Liquidity & Needs

We have incurred significant operating losses and negative cash flows since inception. We do not expect to be profitable in the next several years, but rather expect to incur additional operating losses. We have limited liquidity and capital resources and must obtain significant additional capital resources in order to sustain our product development efforts, for our Phase IIIb clinical trial, pursuit of regulatory approvals, acquisition of capital equipment, costs to maintain office and manufacturing facilities, for general and administrative expenses and other working capital requirements. We rely on cash balances and the proceeds from the offering of our securities to fund our operations.

Because we have recurring losses and negative cash flows from operating activities and have significant future commitments, substantial doubt exists regarding our ability to remain in operation at the same level we are currently performing. Further, the report of BDO USA, LLP, our independent registered accounting firm, with respect to our financial statements at December 31, 2012 and December 31, 2011 contains an explanatory paragraph as to our potential inability to continue as a going concern. Additionally, this may adversely affect our ability to obtain new financing on reasonable terms or at all.

As discussed in Note 5 of the consolidated financial statements, the Company has entered into a series of agreements with the Kodiak Capital Group, LLC ("Kodiak") to provide up to \$26 million of additional equity capital, although subsequent to the date of the financial statements we and Kodiak mutually agreed to terminate the Investment Agreement for Kodiak's investment of up to \$1 million. The proceeds from the agreements with Kodiak would primarily be used to continue the Company's research and development activities including the furtherance of clinical trials using OncoVax® to develop cancer related vaccines. However, Kodiak is not required to provide funding until certain conditions are met, including the

registration and trading of the Company's equity securities as defined in those agreements. There can be no assurance that the Company will meet the conditions under which Kodiak will be required to provide the equity capital of that the capital available under such agreements will be sufficient to allow the Company to fund its continuing research and development activities. If the Company is unable to raise the additional equity capital from Kodiak, the Company will need to seek alternative sources of debt or equity capital. There can be no assurance that such capital will be available in sufficient amounts or on terms acceptable to the Company.

In addition, we are continuing our Unit offering of common stock and warrants. The total offering is for \$13,038,000, and on March 20, 2013 the Company entered into an Investment Banking Agreement with John Thomas Financial for the purpose of introducing potential investors and to act as agent with respect to private placement of securities.

Contractual Obligations

As of March 31, 2013 and December 31, 2012, our contractual obligations for the next five years, and thereafter were as follows:

Future minimum operating lease payments:

	March 31, 2013	December 31, 2012
2013	\$ 91,388	123,247
2014	-	-
2015	-	-
2016	-	-
2017	-	-
2018 and thereafter	-	-
Total minimum payments	\$	123,247

Off-Balance Sheet Arrangements

We do not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities that would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As such, we are not exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in those types of relationships.

DESCRIPTION OF BUSINESS

Overview

Vaccinogen, Inc. (referred to as "Vaccinogen", "the Company", "we", "us", or "our"), a Maryland corporation, is a biotechnology company focused on the development and commercialization cancer vaccines and immunotherapeutic products for cancers and infectious diseases. Our primary product is OncoVAX®, a cancer vaccine for the post-surgical treatment of Stage II colon cancer. We believe that OncoVAX is the first immunotherapy for Stage II colon cancer.

We currently employ 10 persons. Our executive offices are located at 5300 Westview Drive, Suite 406, Frederick, MD 21703. Our telephone number is (301) 668-8400 and our Internet address is www.vaccinogeninc.com.

Company History

We are a Maryland corporation that was originally formed as a Delaware corporation on May 2, 2007. On November 23, 2010, the Company changed its domicile from Delaware to Maryland.

Agreements with Intracel Holdings Corporation

License Agreement

On October 10, 2007, we entered into a License Agreement with Intracel (the "License Agreement"), for exclusive rights to use the OncoVAX® technology platform. OncoVAX® is an active specific immunotherapy ("ASI") that uses the patient's own cancer cells to block the return of colon cancer following surgery. In consideration of the license, we (i) agreed to issue equity equal to 10% of the fully diluted capitalization of the Company (ii) assumed liabilities of Intracel to Organon Teknika Corporation ("Organon") under an October 30, 2007 Letter Agreement between Intracel and Organon; (iii) \$450,000 on cash for settling trade payable related to the OncoVAX intellectual property and (iv) royalty payments based on future sales of OncoVAX. The License Agreement provided Intracel with antidilution rights with respect to its 10% equity issuance. The licensing arrangement also contained a provision such that if we obtained certain levels of financing in a specified time period, all rights to OncoVAX® would transfer to us.

Asset Transfer Agreement and Stock Exchange Agreement

On June 24, 2010, we entered into an Asset Transfer Agreement with Intracel pursuant to which we acquired all of the intellectual property associated with OncoVAX®. Upon execution of the transfer agreement, all significant terms of the license agreement were terminated except the provision for royalties on future sales. In consideration of the asset transfer, we agreed to assume all of Intracel's obligations to Organon and agreed to enter into a stock exchange agreement with Intracel. Under the terms of the June 24, 2010 Stock Exchange Agreement, we issued 3,471,766 shares of its Series B Preferred Stock in exchange for the assets transferred under the Asset Transfer Agreement and all of our common stock and Series AA Preferred Stock held by Intracel. The Series B Preferred Stock issued to Intracel (and its designees) constituted 20% of the issued and outstanding stock of the Company on a fully-diluted basis. Intracel (and the other investors under the Stock Exchange Agreement) were granted anti-dilution rights with respect to its series B preferred stock. In addition, we agreed that Series B Preferred holders' ownership position (and corresponding anti-dilution rights) would increase to 50% upon failure of us to meet certain defined milestones, which included but were not limited to, us attaining certain levels of financing. We did not meet these criteria and consequently, during December 2010, was required to increase the Series B Preferred holder' total ownership interest to 50% through the issuance of additional Series B Preferred Stock to Intracel and related parties to Intracel. Currently, Intracel's ownership percentage is approximately 40% and the remaining 10% resides with related parties to Intracel.

Acquisition of Manufacturing Assets

On October 23, 2007, Vaccinogen acquired out of bankruptcy court in the Netherlands, certain other manufacturing assets that had been previously owned and operated by Intracel's wholly owned Netherlands

based subsidiary. In connection with this asset acquisition, the Company formed its wholly owned subsidiary, Vaccinogen BV, for the purposes of continuing development of OncoVAX®.

Operating Strategy

We will continue to maintain a cGMP facility and outsource clinical activities to contract research organizations ("CRO) in an effort to achieve the following:

1. Complete the pivotal Phase IIIb clinical trial of this autologous vaccine, OncoVax®, which is a new paradigm to prevent the recurrence of stage II colon cancer. The planned trial will closely replicate a successful prior Phase IIIa.
2. Develop near term revenues by establishing licensing arrangements for distribution of OncoVax® in certain territories as well as for additional carcinoma indications.
3. Develop diagnostic and therapeutic drug products as well as near-term revenues by exploiting its distinctive Human Monoclonal Antibodies ("HuMabs") technology.

Vaccines in Immunotherapy of Cancer

In 2007 a major review of active immunotherapy's, so called "Cancer Vaccines", (as distinguished from passive immunotherapy with immune stimulators or monoclonal antibodies) and the various scientific and business factors that have contributed to the disappointing results in this field was presented by Finke et al¹. Over the past decade many Phase III clinical trials with cancer vaccines have failed to achieve significant clinical results². It is interesting that one of the first general considerations of the review was "Select the most informative targets". They point out that ideally the target should be tumor-specific and that "it is important to use the intended study population to assess the proportion of tumors that express the target of choice and the proportion of cells within each tumor that express it." We believe this indicates that the review focused on antigen discovery and was emphasizing the use of common antigens and presumably based on the assumption of inter-and intra-tumor homogeneity.

Since 2007, cancer genome DNA sequencing data for several carcinomas have provided what we believe is indisputable evidence of extreme genetic diversity or heterogeneity both within tumors or among tumors. Thus, the concept of tumor homogeneity was in our opinion a mistaken assumption and as such we believe this probably was the weakest underlying biologic premise of the past active specific immunotherapy efforts of the past two decades. Cancer is a genetic disease; the genetic sequencing data of tumor cells over the last few years, based on second-generation DNA sequencing technology, clearly reveals that there has been an underestimation of the degree of tumor heterogeneity and the consequences of this in the antigen discovery process of cancer vaccine development. In erroneously treating cancer as a homogeneous disease, the industry has failed in attempts to adequately train the immune system to recognize the abundant foreign or "non-self" components of an individual tumor and defend the body against it. It is understood that you cannot treat a heterogeneous disease with a homogeneous treatment. It is well recognized that the surgical resection is the only treatment for reducing bulky tumors. In addition, by using the patients' primary tumor

¹Finke LH, Wentworth K, Blumenstein B, Rudolph NS, Levitsky H, Hoos A. Lessons from randomized phase III studies with active cancer immunotherapies—outcomes from the 2006 meeting of the Cancer Vaccine Consortium (CVC). *Vaccine* 2007;25 (Suppl 2):B97-109; PMID:17916465

²Kudrin A and Hanna MG Jr. (Guest Editors) Special Focus Cancer Commentaries Series, *Human Vaccines & Immunotherapeutics*, Vol 8 Issue 8, August 2012.

resected at surgery as the source of the antigens, embraces the heterogeneity of cancer cells. It does this by using a cancer vaccine as a preventative measure against metastasis. Thus, cancer vaccines hold tremendous promise.

To further expand on this topic of heterogeneity, Wood et al³ asked the question "how many genes are mutated in a human tumor." They analyzed this question in breast and colorectal cancer; they reported that there are ~80 DNA mutations that alter amino acids in a typical cancer. These altered proteins are all candidates for unique markers or tumor-specific antigens. The study included an analysis of the sequences of 20,857 transcripts from 18,191 human genes including the great majority that encode for proteins. Examining the overall distribution of these mutations in different cancers of the same type leads to a new view of cancer genome landscapes. Although the numbers of mutant genes in breast and colorectal cancers were similar, the particular genes that were mutated were quite different, as were the type of mutations found. The surprising discovery that has an enormous impact on cancer vaccines or active specific immunotherapy, is that of the ~80 mutations in an individual tumor only ~3 of these ~80 mutations were common and thus would be shared antigens in two different tumors. Consequently, with polyvalent cancer vaccines, a robust and therapeutic immune response cannot be provided by allogeneic cells or even a relatively minor component of "off the shelf" common antigens. We believe these results demonstrate that the antigen discovery aspect of cancer vaccines takes on a whole new level of complexity and is fraught with new hurdles. Autologous tumor cell vaccines become a much more technologically and immunologically sound approach to cancer vaccines, in our opinion. This, for active immunotherapy cancer treatment advocates, is not all bad. The findings confirm our belief that the genetic lesions that are unique to the original tumor cells, "the trunk of the evolutionary tree" are consistently expressed.

Mainstream pharma continues to advocate for more targeted therapies for smaller patient populations. The hundreds and thousands of cancer mutations identified over the past few years probably makes this approach impractical. There is one evolutionary approach that already exists to address the magnitude of cancer diversity. The immune system is designed by nature to protect against diversity of disease. The immune system constantly protects humans from an array of deadly foreign pathogens, viruses and proteins. With the exception of safe drinking water, no other modality, not even antibiotics, has, in our opinion, had such a major effect on mortality reduction and population survival and growth.

OncoVAX Overview

We believe that OncoVAX is the first colon cancer vaccine to demonstrate effectiveness in both preventing cancer recurrence after surgical resection of the primary tumor and addressing the diversity of cancer cells. Currently in a pivotal Phase III trial under the auspices of an FDA granted Special Protocol Assessment (SPA) and a Fast Track designation, OncoVAX uses the patients live, metabolically active, sterile and nontumorigenic tumor cells to mobilize the body's immune system to prevent the recurrence of colon cancer following surgery. Embracing the now widely recognized heterogeneity of cancer, OncoVAX uses a patient's own tumor to stimulate a broad and effective immune response against the diversity and uniqueness of that patient's cancer cells. The OncoVAX technology platform is being tested in Stage II colon cancer after standard of care surgical resection. The global incidence of Stage I-IV colon cancer is 900,000 patients per year of which 269,000 are Stage II. The prevalence of Stage II, an unmet medical need, has grown with the emergence of more rigorous screening practices and endoscopic examinations. Stage II colon cancer is forecasted to be about 46% of the US and EU colon cancer at diagnosis by 2020.

OncoVAX Clinical Trials in Colon Cancer Patients

³Wood LD, Parsons DW, Jones S, Lin J, Sjoblom T, Leary RJ, et al. The genomic landscapes of human breast and colorectal and colorectal cancers. Science 2007; 318:1108-13; PMID:17932254

Since 1980 investigations by Hanna and colleagues^{4, 5, 6, 7} have translated the principles and procedures of active specific immunotherapy as observed in the L10, inbred and syngeneic guinea pigs into phase I, II, and III adjuvant therapy clinical trials in patients with colon cancer. These clinical trials were designed based on the evidence in the animal models that the immune system can be educated to control a limited systemic tumor burden remaining after surgical excision of solid tumors. In the translation of the animal model studies to the clinic, the antigen discovery selection of the human vaccine was an important decision. In 1977 Fidler and Kripke published in *Science*⁸ the discovery of phenotypic heterogeneity in transplanted tumors. Clones derived in vitro from a parent culture of murine malignant melanoma cells varied greatly in their ability to produce metastatic colonies in the lungs upon intravenous inoculation into syngeneic mice. This suggested that the parent tumor is heterogeneous and that highly metastatic tumor cell variants pre-exist in the parental population. Having been present at the NCI laboratories while this work was being performed and published, Dr. M. G. Hanna Jr. recognized that if intratumoral phenotypic heterogeneity for metastasis exists it would be probable that intertumoral and intratumoral antigenic heterogeneity might also exist. Therefore, it was theorized that the use of autologous tumor cell vaccines from the primary tumor would obviate the antigenic diversity in any immunotherapeutic approach involving tumor cell vaccines. Over 30 years later, we believe this strategy has been validated. Vaccinogen's technology tailors a specific vaccine for each patient from their own tumor, remaining agnostic as to which antigens will prove to be the most functional in individual cases.

Clinical testing of OncoVAX as an adjuvant to surgical resection began in 1980 with a single center pilot study of 5 subjects with colon cancer. To date 757 subjects with colorectal cancer, of which 720 had colon cancer, have been enrolled in trials of OncoVAX (see Table 1 for summary). In addition, a bioequivalency study (2002-01) enrolled 15 patients with colon cancer. This study was conducted to compare the immunogenicity, as determined by the magnitude of delayed type hypersensitivity (DTH) responses to tumor cells alone, of vaccines manufactured by the current, sterile process with historical data from the phase III clinical study (8701). We believe that the results from this study unequivocally support the premise that the immunogenicity of vaccines produced by either process are comparable.

In these trials, excluding the bioequivalency study, 385 subjects were randomized to receive OncoVAX, of which 353 received at least one vaccination; 372 subjects were treated with surgery alone. In addition, subjects with colorectal cancer were enrolled in three separate trials that assessed the effects of ASI with OncoVAX in combination with chemotherapy as adjuvant therapy to surgical resection. Lastly, two trials have been performed using autologous tumor cells/BCG in melanoma (n=86) and renal cell carcinoma (n=14).

Table 1 OncoVAX Clinical Trials for Colon Cancer

⁴Hanna MG Jr, Peters LC. Immunotherapy of established micrometastases with Bacillus Calmette-Guerin tumor cell vaccine. *Cancer Res* 38:204, 1978.

⁵Hanna MG Jr, Peters LC. BCG immunotherapy: Efficacy of BCTG-induced tumor immunity in guinea pigs with regional tumor and/or visceral micrometastases. In *Immunotherapy of Human Cancer*. Raven Press, 1978, pp 11-129.

⁶Hanna MG Jr, Active specific immunotherapy of residual micrometastases: A comparison of postoperative treatment with BCG-tumor cell vaccine to preoperative intratumoral BCG injection. In *Immunobiology and Immunotherapy of Cancer*. WD Terry, Y Yamamura, eds, Elsevier/North Holland, 1979, pp 331-350

⁷Hanna MG Jr, Brandhorst JS, Peters LC. Active specific immunotherapy of residual micrometastasis: An evaluation of sources, doses and ratios of BCG with tumor cells. *Cancer Immunol Immunother* 7:165, 1979

⁸Fidler IJ, Kripke ML. Metastasis results from pre-existing variant cells within a malignant tumor. *Science* 197:4306-4309, August 1977.

Protocol Number	Trial Phase	Number of Patients	Number of Vaccine Doses	Disease and Stage	Manufacturing*
8101	I	5 Treated	3	Colon Cancer Stage III/IV	Decentralized, Non Validated, Non cGMP
8102	II/III	47 Control 50 Treated	3	Colorectal Cancer Stage I-IV	Decentralized, Non Validated, Non cGMP
5283	III	207 Control 205 Treated	3	Colon Cancer Stage II/III	Decentralized, Non Validated, Non cGMP
8701	III	128 Control 126 Treated	4	Colon Cancer Stage I-III	Centralized, Validated, cGMP
ASI-2002-01	I/II	15 Treated	4	Colon Cancer Stage II/III	Centralized, Validated, cGMP

*Centralized = Manufacture at a single, centralized location; Decentralized = manufacture at each investigational site.

Study 8102 used a three-vaccine regimen as did 5283. In Study 8102, manufacture was conducted at the institution of the principal investigator, Dr. Herbert Hoover⁹, although this institution changed twice during the study, while in 5283, manufacture was decentralized. Each clinical site manufactured the vaccine, without Quality Assurance or adequate Quality control. While both of these studies provided encouraging clinical results, with respect to tumor immunity as measured by delayed-type hypersensitivity (DTH) and induction of T-cell immunity, neither of these studies demonstrated statistically significant clinical benefit in an Intent to Treat analysis of recurrence free survival or overall survival. In the ECOG study 5283¹⁰, an analysis by the ECOG statisticians of the correlation of clinical benefit to the quality of the vaccine showed a significant correlation. Further, in study 8102, a subset of subjects underwent DTH testing that revealed a deterioration of the immune response to the standard vaccine at 6 months. It was concluded that a fourth booster immunization at 6 months after surgical resection would enhance the waning immune response to autologous tumor cells. Hence a four vaccine regimen was tested and manufacturing was centralized at the Free University of Amsterdam¹¹. In this study (8701), subjects with Stage II disease demonstrated what we believe were both clinically meaningful and statistically significant outcomes in both recurrence-free interval ($p=0.008$) and recurrence-free survival ($p=0.015$). The 5-year event-free rates also demonstrated a clinically and statistically meaningful outcome in overall survival.

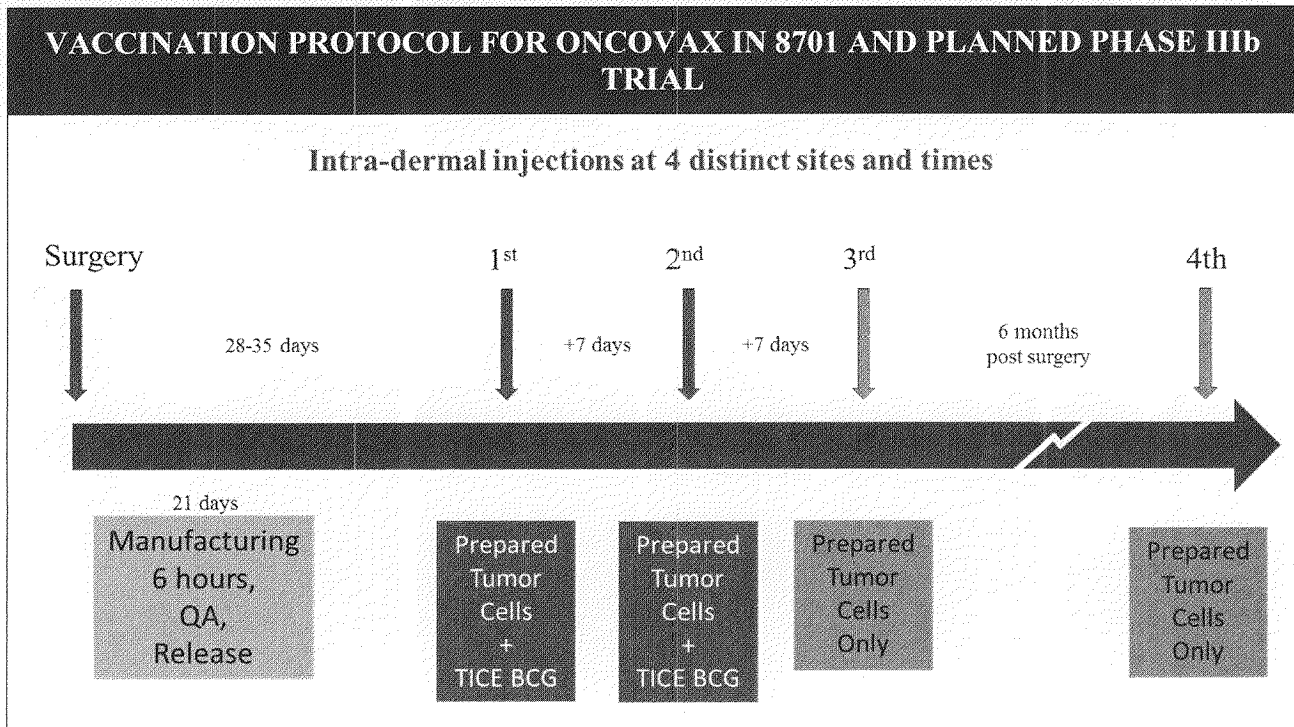
⁹Hoover HC Jr, Brandhorst J, Peters C, Surdyke MG, et al. Adjuvant active specific immunotherapy for human colorectal cancer – 6.5-year median follow-up of a phase III prospectively randomized trial. *J Clin Oncology*, 11:3 390-399, 1993

¹⁰Harris JE, Ryan L, Hoover HC Jr, Stuart RK, Oken MN, Benson AB, et al. Adjuvant active specific immunotherapy of stage II and III colon cancer with an autologous tumor cell vaccine: ECOG study E5283. *Journal of Clinical Oncology* Vol 18 148-157, January 2000

¹¹Vermorken JB, Claessen AME, van Tinteren H, Gall HE, et al. Active specific immunotherapy for stage II and III human colon cancer. A randomized Trial. *The Lancet* 353 345-350, January 1999

Phase IIIa Trial 8701

The 8701 Phase IIIa trial was conducted in 254 patients with Stage II or III colon cancer. In this study a planned, prospective stratification by tumor stage, was conducted in order to legitimately analyze the clinical benefit in each stage of tumor. Thus, this was not a retrospective subgroup analysis. Patients were randomized 1:1 to receive surgery and then observation or immunotherapy according to the protocol that Vaccinogen plans to use in the upcoming confirmatory Phase IIIb trial that will be a key use of proceeds from this offering. The treatment schedule is depicted in the figure below. After approximately one month to recover from surgery and regain their full immune function, patients receive isolated irradiated tumor cells in combination with BCG in two injections a week apart. A week later, a third injection of irradiated tumor cells alone was given. A fourth injection was given as a booster six months after the surgery. This was the first clinical trial where the manufacturing process was optimized in a central processing facility to provide for the three induction vaccinations and the boost at 6 months. This turned out to be the optimum regimen for OncoVAX.



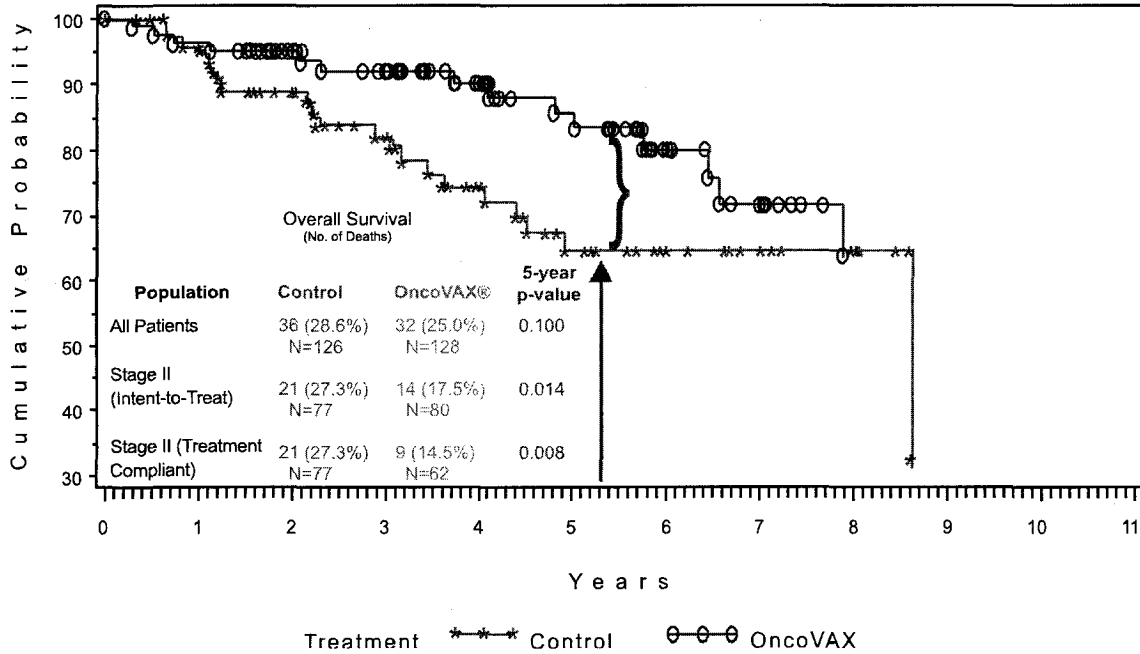
In Study 8701, all patients underwent surgery, and their resected tumors were sent to Vaccinogen’s central processing laboratory. Eight vials of isolated, irradiated tumor cells were sent back to the patient’s clinic along with two vials of BCG.

Recurrence-free survival is the most appropriate endpoint for studies of Stage II colon cancer since patients with recurrent disease will receive treatment with other modalities and their overall survival (OS) will consequently depend in part on the efficacy of other therapies. The outcome of the pre-specified analysis of the stratified Stage II patients from trial 8701 has been particularly informative in planning the upcoming confirmatory Phase IIIb trial in Stage II disease.

OVERALL SURVIVAL IN STUDY 8701

OncoVAX® - Clinical Results

8701 Study - Overall Survival in Stage II Patients

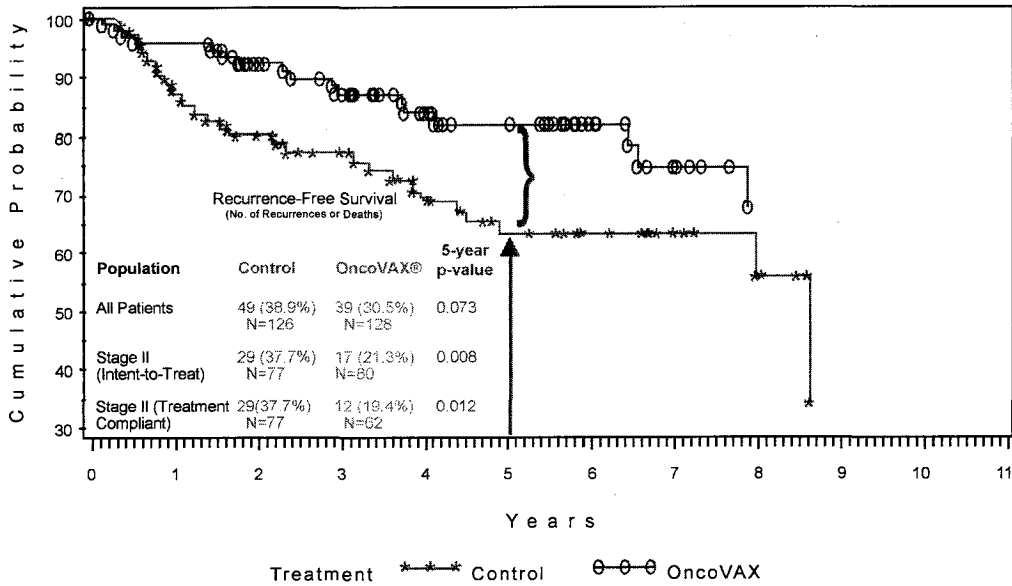


Trends towards efficacy in OS and RFS were not statistically significant in the full intent-to-treat population. A prespecified stratification of the trial to analyze by tumor stage demonstrated that Stage II patients separately reached statistical significance with a p value of 0.015 on a log rank, and 0.008 on a five year event free analysis.

RECURRENCE-FREE SURVIVAL IN STUDY 8701

OncoVAX® - Clinical Results

8701 Study - Recurrence-Free Survival in Stage II Patients



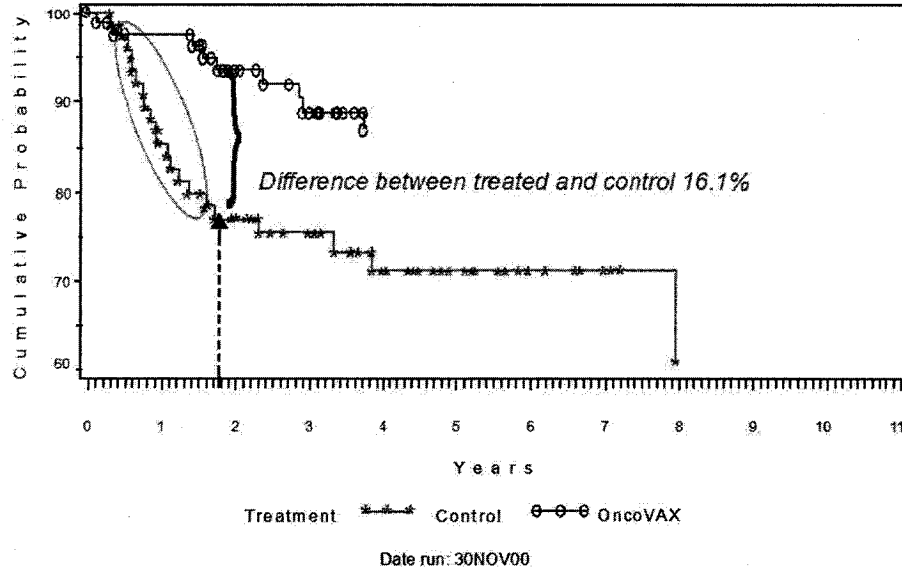
This published, randomized Phase IIIa clinical trial was stratified by tumor stage so that a legitimate analysis by tumor stage could be calculated. These results are for Stage II colon cancer. Some benefit was seen in Stage III colon cancer however the results were not statistically significant. This study was accepted by the FDA as supportive data for the next Phase IIIb clinical trial to be conducted under an FDA granted SPA with fast tract designation. The disease-free survival clinical endpoint will be used for the interim analysis, which is an accepted basis for FDA approval.

The results were published in the British Medical Journal, *The Lancet* January 30, 1999; 353: 345-350.

RECURRENCE-FREE INTERVAL IN STUDY 8701

OncoVAX® - Clinical Results

8701 Study - Recurrence-Free Interval (RFI) in Stage II Patients



Greatest difference between treated and control in RFI at 18 months post Vx

Patients with Stage II disease who received all four inoculations had superior clinical outcomes to those who received fewer than four inoculations. Relative risk of death or recurrence (recurrence-free survival) for all patients receiving four inoculations was 0.61 ($p = 0.034$) and relative risk of death or recurrence for patients with Stage II disease receiving four inoculations was 0.40 ($p = 0.007$). Relative risk of death from any cause in Stage II patients receiving four inoculations was 0.46 ($p = 0.046$). See the Kaplan-Meier curves in the figure above. Recurrence free survival is the agreed endpoint for Vaccinogen's Phase IIIb trial. In summary in the surgery only group one can estimate that approximately one out of three patients will recur with cancer, in the OncoVax treated group one can estimate that one out of ten patients will recur with cancer.

To emphasize the robustness of the clinical benefit of OncoVAX in these colon cancer patients a recent review of the patient follow-up was conducted by Vermorken and colleagues¹². The remarkable result was that the observed delta and significant benefit in recurrence-free survival measured at 5 years was reevaluated at 15 years. The results showed that OncoVAX treated patients versus control at 15 year follow-up was HR=0.62 (95% CI:0.34-0.96) log rank p-value 0.03). This type of robust benefit is what is requisite in effective therapies.

Planned Trials - Stage II Colon Cancer, Phase IIIb Trial

The FDA has requested a second, confirmatory, randomized controlled Phase III trial of OncoVAX in Stage II colon cancer. The principal objective of Vaccinogen is to organize a "best of breed" team to conduct a

¹²Weger de VA, Turksma AW, Voorham, QJM, Euler Z, et al. Clinical effects of adjuvant active specific immunotherapy differ between patients with microsatellite stable and microsatellite instable colon cancer. Clin Cancer Res Feb 1, 2012, 18:882

confirmatory Phase IIIb trial in Stage II colon cancer. The protocol of this trial, including endpoints and the statistical analysis plan is the subject of an SPA agreement granted by the FDA.

This study will be carried out under a Special Protocol Assessment (SPA) that was negotiated with the FDA in 2010. An SPA granted by the FDA provides a mechanism for the sponsors and the FDA to reach agreement on size, execution and analysis of a clinical trial that is intended to form the primary basis for regulatory approval. The primary endpoint of this pivotal Phase IIIb trial is recurrence-free survival (RFS) with an interim analysis after 70 “events,” and a final primary analysis three years following completed enrollment. “Events” are incidents of either recurrent disease or death. The study is powered at 90% to detect a 50% improvement in RFS versus resection only for final analysis with an adjustment for interim analysis. The power calculations in the study assume an event rate and distribution that match those observed in the 8701 Phase IIIa study. If a robust p value is achieved at the interim analysis, the Biologics License Application (BLA) can be filed with the FDA’s center for Biologics Evaluation and Research (CBER) at that point. Past clinical trials using the optimal regimen with four immunizations will be accepted as supportive studies during the FDA review of the BLA.

The Phase IIIb study will enroll 550 patients, randomized 1:1 to receive surgery alone, or surgery plus OncoVAX. Patients will be followed on a regular schedule to see whether and when their cancer might reappear. The experience with OncoVAX in the 8701 study showed that in the relevant Stage II group, disease recurrence happened more quickly and more frequently in those patients who received surgery alone. If the Phase IIIb trial replicates the experience of the 8701 patients, the interim analysis after 2/3 of the expected events should give a clear and statistically significant separation between the Kaplan-Meier curves at that point, and would form the basis for a BLA seeking marketing approval from the FDA.

It is important to emphasize that the FDA has agreed that RFS is the most appropriate endpoint to evaluate a trial in Stage II colon cancer. The alternative in cancer studies is often OS. An OS endpoint has several drawbacks in this case. The average age of patients presenting with colon cancer is 65 years, so deaths from causes other than the tumor will dilute the outcome in both arms. Patients in either arm whose disease recurs will receive chemotherapy and other treatments for their metastatic disease, and the success of these treatments will dilute the impact of earlier therapies such as OncoVAX on OS. From a patient perspective, being disease free is clearly a meaningful endpoint.

Planned Trial - Phase I/II Trial in Stage III Colon Cancer

When patients present for colon cancer surgery, it is not clear in advance whether they have Stage II or Stage III disease. Vaccinogen’s planned Phase IIIb trial will enroll only patients with Stage II tumors, but the clinical sites will perform surgery and capture tumors on many Stage III patients. Stage III tumors may hypothetically be more difficult to treat since micrometastases may be more common, more aggressive, or larger. Any vaccination protocol also needs to accommodate the schedule of adjuvant chemotherapy that is given to Stage III colon cancer patients in the period after their surgery. There is a risk that the immunosuppression that accompanies chemotherapy could interfere with the effect of the fourth, booster vaccination. Nonetheless, there is a considerable unmet need in Stage III colon cancer as well as a significant market opportunity.

antibody libraries. We intend to implement a strategy to leverage our planned phase III trial to participate in this burgeoning market.

We believe that our previous Phase III OncoVAX trials, demonstrated that the immunized patients, while mounting a robust and tumoricidal cytotoxic T-cell response, also produced circulating B-cells, which have the potential to differentiate and produce tumor specific, fully human monoclonal antibodies (HuMabs). B-cells are a specialized type of blood cell that retains a memory of the interaction, an immunological history of the protective response. We plan to collect this rare set of B-cells generated from the treated portion of the enrolled patient population. We plan to use the new B-cells and perpetuate them into libraries that can be screened by potential partners to create new therapeutics, vaccines, diagnostics, imaging agents and as research tools.

We believe this novel asset, the B-cell collection, and potentially materials developed during the 8701 trial and predecessor company efforts, represent a valuable asset that can generate significant upfront fees, development milestones and royalties via collaborations and licensing activities that will complement the OncoVAX investment opportunity.

History

The team of scientists led by Michael G. Hanna, Jr., Ph.D., Vaccinogen's Founder, Chairman and Chief Executive Officer discovered that the autologous colon tumor immunized patients, while mounting a robust and tumoricidal cytotoxic T-cell response, also during a restricted period of time produced circulating B-cells which were capable of being perpetuated into tumor specific, human monoclonal antibody producing cells (HuMabs). A research program was created that over the course of several years assembled a large and most unique array of fully human monoclonal antibodies. These HuMabs were products of the antibody forming B-cells in circulation in the colon tumor immunized patients. HuMabs may be effective in both, diagnosis and treatment of disease, and overcome many of the limitations of cytotoxic drugs. Biopharmaceutical companies that exploit monoclonal antibodies as the source for developing new commercial products have made great strides in new product efficacy and generally experience shorter development cycles. The powerful combination of those two factors has made monoclonal antibodies a most attractive source for the development activities in the biopharmaceutical marketplace.

Competitive Advantage

During the course of the first OncoVAX Phase III trial (8701), Dr. Hanna's team recognized that the tumor cell destruction was mediated by cytotoxic, specifically immunized T-cells, and also for evidence of a humeral (antibody) mediated immune response. It was discovered that following the second OncoVAX dose involving the patients' own tumor cells and BCG, the patients produced tumor specific antibody producing circulating B-cells.

We believe our competitive advantage is the unique access to and ownership of a valuable educated B-cell repertoire to be collected from immunized patients in the upcoming Phase III trial as well as the insight and experience from legacy efforts to build a HuMab based business unit. From this institutional knowledge, we should be able to leverage a plethora of new development and production strategies as well as technologies to efficiently and effectively exploit this opportunity. Selected contractors and collaborators will collect blood from patients over the first year of the trial and develop libraries from these unique HuMabs.

We believe that we two other competitive advantages – these Mabs are fully human and have high avidity binding potential.

The most important point to understand is that no company in our opinion (other than us) can generate antibodies in a set of patients based on a clinical response to a sterile, colon cancer vaccine.

Fully Human Monoclonal Antibodies

The industry's original Mab products were mouse or chimeric or humanized resulting in significant drug development challenges as they:

- Do not interact efficiently with the human immune system,
- Have rapid clearance, potency issues,
- Can cause allergic reactions,
- Often trigger a human anti-mouse antibody (HAMA) response, and
- Often require royalty payments to third party owners of the tools and methods to optimize the drug product.

By contrast, Vaccinogen's HuMabs are fully human (not humanized) and carcinoma tumor specific. Their properties allow them to be administered safely to humans in large quantities with potential application in chronic as well as acute disease settings. They are also expected to be of interest in the vaccine, imaging and diagnostics markets. Furthermore, they may have applications in indications beyond the cancer market.

Immune Libraries

We believe that our repertoire of educated B-cells from OncoVAX immunized patients will allow the creation of a unique library comprised solely of human "immune" responses from immunized patients. This means that the antibodies were created naturally in the human body (matured in-vivo). These antibodies are far more "potent" and vastly superior to those developed in-vitro (outside the body) in their ability to bind with and neutralized the target disease.

These two characteristics, "fully human" and "immune", provide us with what we believe is valuable competitive advantage and an asset that can complement the OncoVAX investment opportunity.

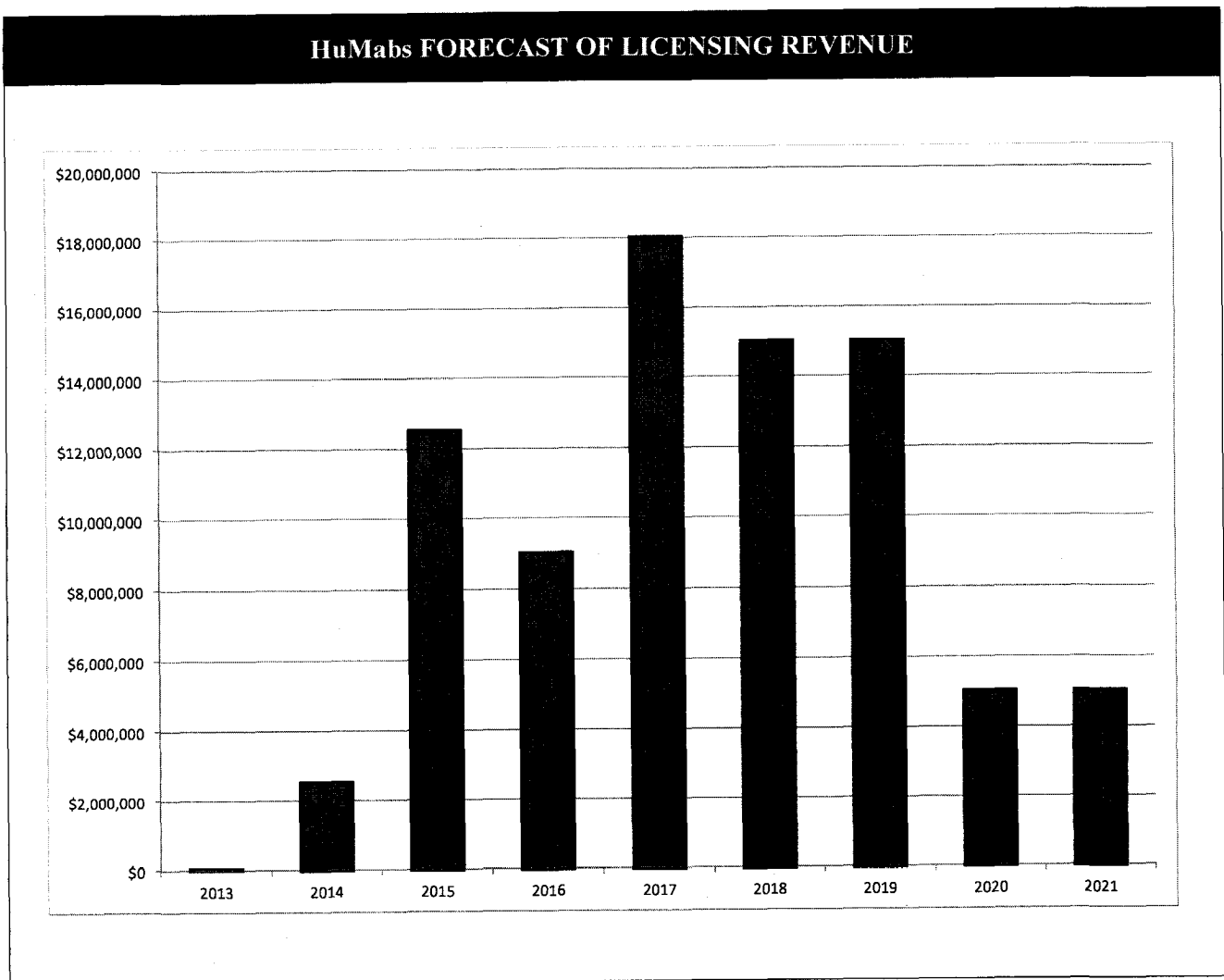
We intend to launch a pivotal Phase III trial of autologous colon tumor vaccines. The 275 treated patients will yield immune B-cells from which multiple phage expression libraries can be produced. Our intended approach to exploit this market opportunity is to execute strategic partnerships with a select group of qualified pharma and genomics companies, allowing them access to its monoclonal library. Our partners will "mine" the libraries using antigens or target molecules they own, to identify potential antibodies for further development. Ultimately, we expect these antibodies will be developed and commercialized into products for use in the detection, treatment, and prevention of malignant diseases. This is very timely since based on the explosion of genomic research into cancer cells, discoveries of the random mutational events have in 2011 alone yielded 400 new markers and possibly 1,000 in 2012. The utility of safe and effective high avidity HuMab to these new markers would be a powerful application.

The business model may provide us with multiple potential funding events as our partners explore, discover, qualify, and ultimately commercialize a product using one of our antibodies. In general terms, the potential funding events for each single antibody targeted for a specific indication will follow a pattern similar to the following.

Development Stage	Agreement Stage	Timing
Exploration	Technology Access	Lump-sum on signing, and annual renewal fees

Discovery	Technology Development	Lump-sum on identification of target antibody
Qualification	Developmental Collaboration	Payments at various stages throughout the FDA approval process
Commercialization	Royalty	Quarterly payments

Technology access and collaboration agreements can generate \$2 million to \$5 million per antibody target and provide for enrollment of more than one target per Agreement, as well as royalties ranging from 5% to 15% of sales.



The landscape of the biopharmaceutical industry is undergoing transformation. The patents for some of the most successful commercial pharmaceutical products are expiring. Pharmaceutical companies are discovering that the scientific breakthroughs in the area of human genetics can easily render a successful product obsolete at a very early stage in its product life cycle. Over 400 known cancer genes were discovered in 2011 and thousands of complete cancer genome sequences will be available by 2018. So, we

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expect that the drug makers are searching for ways to respond to the need for developing new products quickly, while reducing development costs and lowering their exposure to the risk of unplanned obsolescence.

We believe that the HuMab derived from phage libraries of our immune B-cells can be used to diagnose, treat or prevent tumor progression. The safety of the fully HuMab has been declared by the European Medicines Agency which stated that as a tumor imaging agent, the treatments could not be given sooner than once a month. One treatment program that Vaccinogen holds several patents on and has investigated with HuMab is pretargeting. This approach consisted of injecting maximum tolerable dose of HuMab conjugated to a proprietary linker. Once the tumor is saturated, inject a radioisotope, toxin or chemotherapeutic dose, which will bind to the tumor bound antibody linker and spare the normal tissue. We did several patients with a variety of late stage carcinomas and the approach showed promise in preventing progression of tumors.

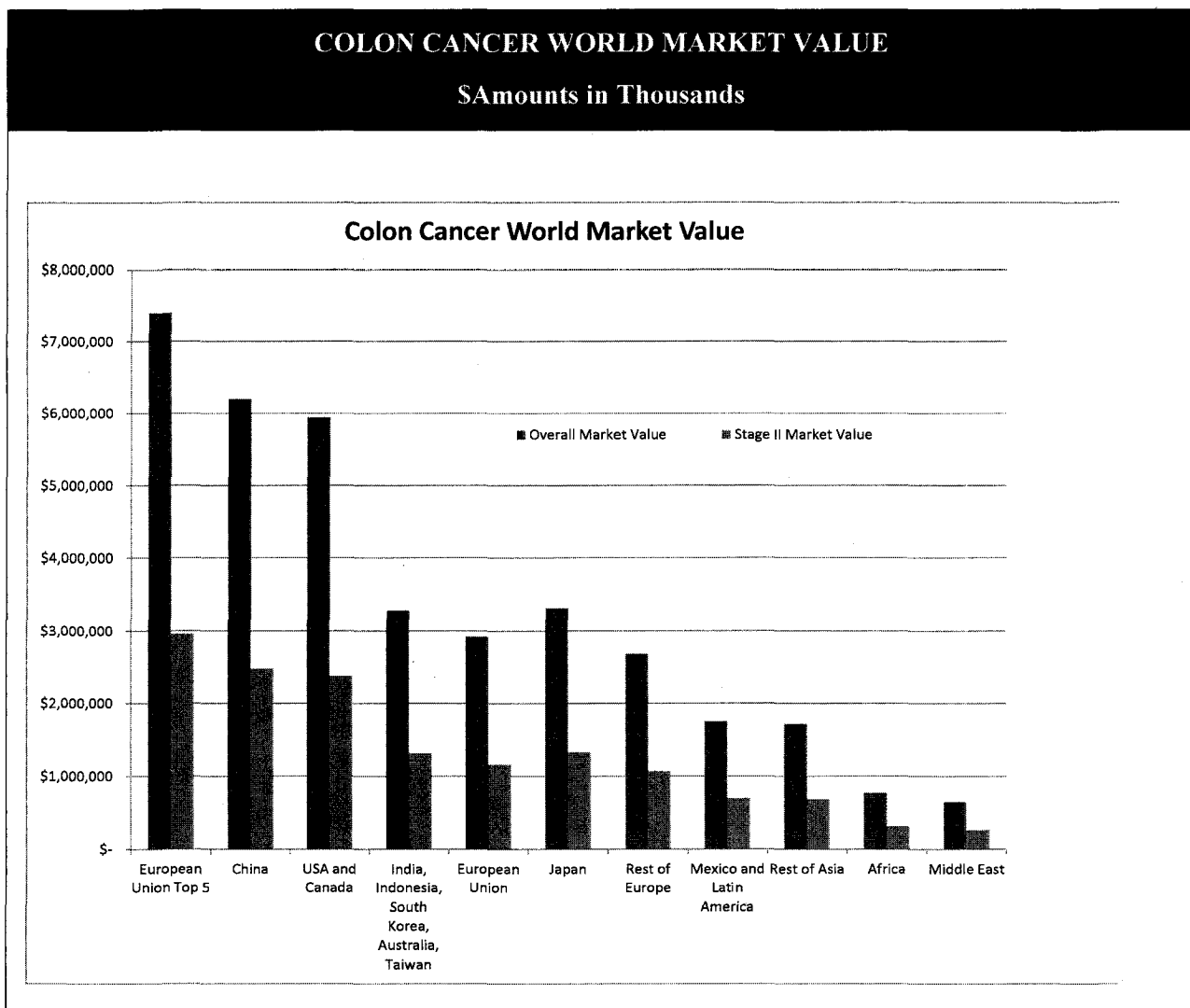
The pharmaceutical industry appears to have settled on monoclonal antibodies as one answer to these challenges. Human monoclonal antibodies offer the industry a safer and less expensive path to a more expeditious product development cycle, shortening the time to market for each new drug and allowing the pharmaceuticals to strength their product portfolios. We believe that our *fully human* immune repertoire is unique and extensive therefore attractive to strategic partners.

Prostate vs. Colon Cancer Vaccines

The global incidence of Stage I-IV colon cancer is about 900,000 cases per year, which is larger than the 780,000 cases of prostate cancer supporting market forecasts for Dendreon, Bavarian Nordic and other, less advanced, competitors. With respect to the Stage II (and potentially Stage III) colon cancer market addressed by OncoVAX, Vaccinogen estimates the collective incidence is about 269,000 cases of Stage II and about 420,000 cases of Stage III colon cancers, a collective market that is only slightly smaller than the targeted patient populations for therapeutic prostate cancer vaccines.

There are important differences between hormone refractory prostate and Stage II colon cancers. All patients with hormone refractory prostate cancer are likely to die of their disease and have an urgent need for therapy. No current therapy, including the vaccines under development, cures these patients. Months of extended life represent the best outcome to date. The majority of patients with Stage II colon cancer are cured by surgery. Unfortunately the minority that is not surgically cured is significant (circa 30%) and the patients who relapse will likely die of their disease. Post-surgical Stage II colon cancer patients typically have a very low burden of tumor cells, giving the best opportunity for an immunologic cure as well as deferral of relapse. There is no way to tell in advance which Stage II patients are at most risk of relapse and so Vaccinogen's market models assume that all Stage II patients are candidates for immunotherapy.

Colon Cancer Commercial Market Opportunity



Colon cancer represents the third most common form of cancer in both the US and Europe. American Cancer Society statistics suggest there will be about 102,000 new cases of colon cancer diagnosed within the US. The European Cancer Observatory estimates that there were about 245,000 new cases of colon cancer across Europe.

Colon cancer is segmented at diagnosis into four disease stages. In Stage I, the cancer is confined to the mucosa and sub-mucosa of the colon. Stage II tumors have penetrated farther into the muscles around the colon, but the tumor has not visibly spread to lymph nodes of more distant sites. Stage III tumors have either advanced local spread or have spread to lymph nodes. Stage IV tumors have distant metastases at diagnosis.

Statistical information on the relative staging of colon cancer is collected and analyzed by a variety of government and industry groups. One of the most comprehensive cancer tumor registries for the US market is the Surveillance, Epidemiology and End Results Data (SEER) database. The Journal of the National Cancer Institute also publishes a variety of analytical studies largely relying on the SEER database for evaluation of cancer incidence, staging and survival.

Vaccinogen’s analysis of available colon cancer data suggests that the proportion of Stage I and IV patients has remained relatively constant over the past decade. However, there has been an on-going increase in the proportion of patients being diagnosed with earlier stage localized disease (Stage II), largely resulting from more consistent screening practices in the US and improving diagnostic technologies (fecal occult blood tests, sigmoidoscopy, colonoscopy, CEA screening). Available data suggests that Stage III is still a significant, but declining, percentage of reported colon cancers.

The table below highlights some the shifts in historical and anticipated incidence of Stage I-IV colon cancer in the US.

COLON CANCER INCIDENCE BY STAGE				
	<u>1990s</u> ¹	<u>2004</u> ²	<u>2010E</u> ³	<u>2020E</u> ³
Stage I	15%	8%	10%	10%
Stage II	36%	39%	40%	46%
Stage III	28%	39%	37%	31%
Stage IV	22%	14%	13%	13%

¹ Journal of the National Cancer Institute, Vol. 96, No. 19

² SEER Data

³ Company Estimates

Epidemiology to Market Characteristics

In Stage I colon cancer, the disease is treated completely through surgical intervention. There is an unmet medical need with respect to more effective Stage II colon cancer therapies, since recommended surgical intervention does not appear to fully eradicate micrometastases and leads to recurrence rates of approximately 30%. Chemotherapy is not recommended in Stage II colon cancer, with numerous studies suggesting no benefit. More serious Stage III colon cancer is treated with a combination of surgery and chemotherapy as a standard of care. Advanced Stage IV cases involve treatment with chemotherapeutics and/or surgical intervention.

Stage II Tumor Colon Cancer Market

While the Stage II colon cancer market is considerable, Vaccinogen’s OncoVAX production methodology requires a total of about 3 grams of tumor to provide enough material for the production of a full complement of vaccine for a course of therapy. Based on prior clinical trial experience, Vaccinogen estimates that about 30% of surgically resected Stage II tumors will not meet minimum size requirements for vaccine production. Vaccinogen’s colon cancer market models and forecasts reduce the targeted Stage II total market to reflect this minimum tumor size constraint. Vaccinogen further adjusted down targeted Stage II colon cancer figures by an additional 10% to account for potential logistical problems inherent with its centralized manufacturing requirements, damages, etc.

A review of available data on estimated annual colon cancer incidence is produced by the American Cancer Society, European Cancer organizations, SEER and the Journal of the National Cancer Institute. This

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statistical work and related assumptions provides the foundation for determining the scope and magnitude of colon cancer across major global regions, and was further segmented to evaluate distinct Stage II colon cancer market opportunities for OncoVAX.

United States Trend

The overall incidence of colorectal cancer has actually been declining modestly in the US, from a total of about 112,000 cases in 2007 to 102,000 cases in 2011. The reasons for this decline are not completely understood, but may include factors such as reduced smoking, higher aspirin use, changes in diet, etc. For purposes of forecasting, the Company has assumed a modest decline in the net number of new colon cancers over the next ten years. This reduction in overall colon cancer cases in the US is largely offset by a greater proportion of disease detected at Stage II.

More rigorous screening for colon cancer has led to improvement in earlier detection, giving a significant redistribution of the TNM (tumor, node, metastases) staging of the disease. Over the past decade, there has been a gradual shift toward earlier detection and therefore more localized disease as well as relative declines in advanced disease. Vaccinogen estimates that Stage IV disease has declined significantly over the past 20 years and now account for only about 13% of cases in the US. Stage III has also been gradually declining, with a corresponding increase in earlier disease increasing the proportion of patients with Stage II disease. Vaccinogen projects that the proportion of overall cancer assigned to Stage II should gradually increase to 46% of colon cancer patients in 2020 and beyond.

European Trends

The European market for colon cancer is considerably larger than the US and still growing, owing to sheer population demographics. Vaccinogen estimates that many of the more wealthy major European markets (France, Germany, Italy, Spain, UK) have characteristics closely mirroring US colon cancer staging, but with a slightly higher proportion of Stage III and Stage IV disease. This trend is even more pronounced toward Stages III and IV in other Eastern European geographies with less comprehensive screening. For Eastern Europe (and other less developed healthcare economies), Stage II is estimated to represent about 20%-25% of total colon cancer diagnosis. Similar to the shift in the US, Vaccinogen projects that Stage II colon cancer should gradually build to a level of about 45% of all cases in major EU economies and to about 35% of all cases in emerging Europe by 2020.

Rest of World (ROW)

Rates of colon cancer are actually rising in Japan, and changes in diet and higher rates of obesity are seen as key drivers for increasing colon cancer incidence through major emerging economies such as China. While sheer population demographics suggest a significant incidence of colon cancer in the region, the lack of rigorous screening protocols suggest that disease is usually detected at even later stages than in the US or Europe. Vaccinogen forecasts assume that only about 25%-26% of colon cancer is Stage II across the collective rest of world geographies. Vaccinogen forecasts that this proportion of Stage II cases will gradually increase, but only reach about the 35%-36% level by 2020.

Global Totals

These factors point to a considerable market for OncoVAX in a growing and sizeable global market for Stage II colon cancer. In the US, Vaccinogen estimates that the overall number of Stage II colon cancer cases will range between 41,000 to 46,000 over the next decade. For the top five major European countries, Vaccinogen forecasts growth in the Stage II colon cancer market will increase from about 61,000 in 2010, to a level of 74,000 by 2020. Other rest of world geographies are collectively estimated to grow from a level of about 201,000 in 2010 to about 252,000 by 2020, albeit largely confined with less developed healthcare economies.

OncoVAX Market Penetration Assumptions

Geographies with high insurance coverage as well as comprehensive government-controlled healthcare are major market opportunities for OncoVAX. The enormous populations in numerous developing and emerging economies are also attractive, although the high price anticipated for OncoVAX will be a barrier in many poorer economies.

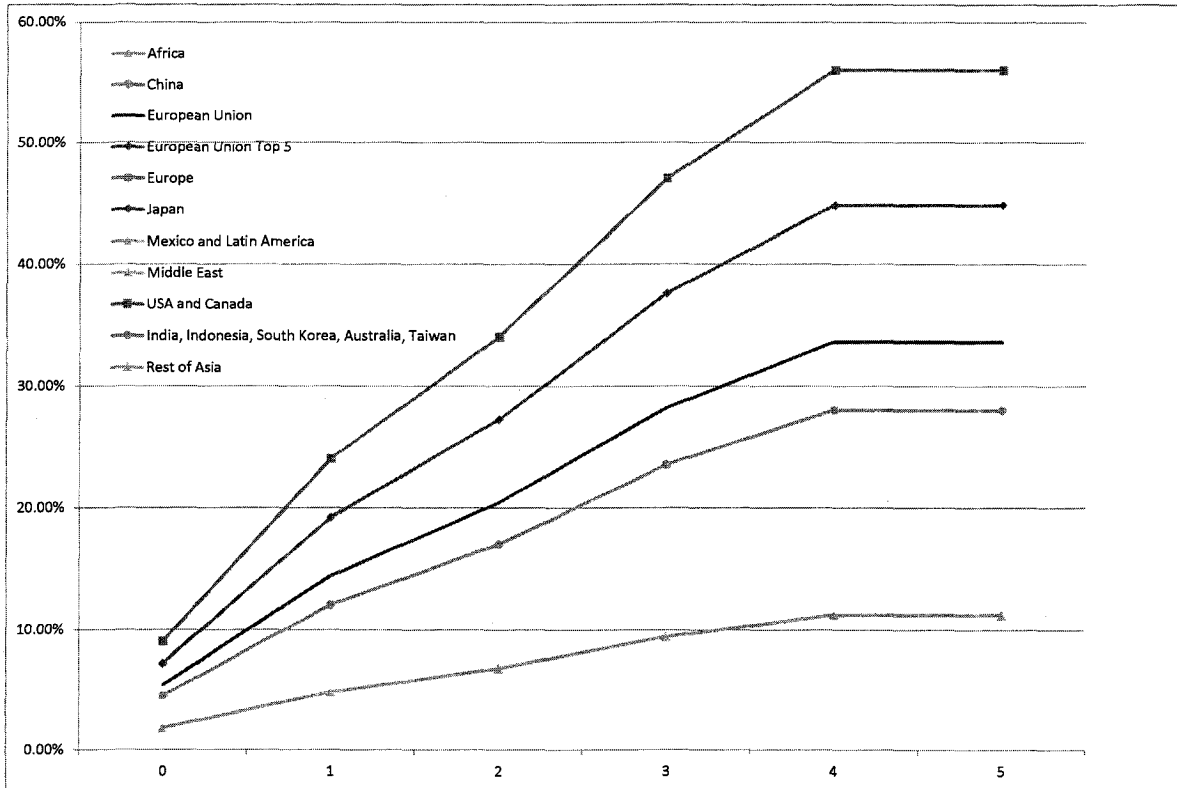
The uptake in new cancer medications is a function of relative levels of effectiveness, physician education as well as reimbursement. Since OncoVAX is expected to provide a significant improvement in survival benefit for Stage II cancer patients, Vaccinogen anticipates rapid and healthy market penetration within the colon cancer treatment community following approval. These market penetration trajectory assumptions are applied against the total addressable market forecasts for each year to derive a net OncoVAX vaccine volume forecast.

The following chart highlights our forecast for relative share uptake in addressable Stage II colon cancer populations across the US, Europe Top 5, Other Geographies. The fundamental assumption in the analysis is strong uptake in traditional US oncology markets, somewhat lower net penetration across Europe and lower relative penetration across the collective Rest of World (ROW) economies.

Our market penetration assumptions anticipate relatively solid uptake in US Stage II colon cancer markets, with utilization rising steadily to over 50% of the adjusted Stage II markets by 2020. Vaccinogen is forecasting a similarly robust uptake, but lower net share uptake, for OncoVAX in major European economies. Owing to more strict healthcare utilization pressures in Eastern Europe, the Company is anticipating that European uptake will run at a level of about one-half that of the US. This also accounts for divergent healthcare reimbursement trends across various Western and Eastern European geographies.

The analysis takes a somewhat conservative view of the opportunity for OncoVAX in major Pacific Rim and other ROW geographies. Japan and the growing China market represent significant market opportunities, although much of Asia is still too poor to afford expensive new oncology products. While the sheer size of populations within the region is large, We anticipate that the market penetrations will run at a rate lower than those seen in the major markets. Market penetration rates are decidedly lower for the rest of the world, where the year six penetration is forecast at about 11%. The richest economy in the ROW bucket is Japan, where considerable unmet medical need and ability to pay is balanced against very slow regulatory and reimbursement processes.

ONCOVAX MARKET PENETRATION ASSUMPTIONS BY GEOGRAPHY



OncoVAX Pricing

We anticipate pricing for OncoVAX in the US at about \$54,000. For benchmarking purposes, it is worth highlighting that the announced US price for Dendreon's Provenge is \$93,000. The model contemplates a \$45,000 price point for OncoVAX in the top five European geographies and \$38,000/treatment for other European as well as Pacific Rim/ROW geographies. Naturally, the efficacy demonstrated in the contemplated Phase IIIb trial will be important for OncoVAX pricing.

If successful, OncoVAX could provide significant economic benefits to the healthcare system in addition to direct benefits to individual patients. The elimination or lengthy deferral of expensive chemotherapy, surgery and radiotherapy, and general end-of-life care should provide a significant benefit to the paying systems. Of course, extra years of life and economic productivity are to be expected based on the results of OncoVAX's previous Phase III trials. If as many as half the patients who would otherwise have suffered a near-term recurrence of their cancer are spared that fate by treatment with OncoVAX, the savings to the healthcare system will be large.

A recently published January 2011 study on projections on the cost of cancer care in the US in the Journal of the National Cancer Institute suggest that the average male (>65 years old) colorectal patient has initial costs of about \$52,000 for the first 12 months of care, annual continuing costs of about \$4,500, and final year of life costs of about \$86,000. The clear need to reduce colorectal cancer recurrence is further reinforced by a June 2007 study entitled "Projecting the National Economic Burden of Colorectal Cancer for the U.S. through the Year 2020". This study estimates that by the year 2020, projected costs of colorectal cancer care

in the U.S. for initial, continuing and last year of life phases will grow by about 50% to levels of \$5.1 billion, \$3.8 billion and \$4.3 billion, respectively.

Stage III Colon Cancer Opportunity

The shift in colon cancer diagnosis to earlier Stage II disease is expected to lead to a gradual reduction in the proportion of patients diagnosed with later Stage III disease. We believe that OncoVAX has significant potential in Stage III disease, and plans to conduct an inexpensive pilot study with a surrogate endpoint to test the feasibility of giving the vaccine in conjunction with chemotherapy. We do not plan to conduct registrational studies for Stage III disease as a use of proceeds from this offering. Larger studies in Stage III disease could begin after successful data from Stage II trials. Such a timeline could introduce a label indication for Stage III disease in a 2019 timeframe. Although Stage III is modestly declining, it still represents a potentially attractive commercial target. Our modeling suggests a US market for Stage III of about 35,000 cases in 2020. Europe Top 5 Stage III colon cancer collectively should be over 57,000 cases, while ROW geographies will account for over 241,000 cases in 2020. Our current revenue forecast contains no revenues from Stage III.

2013-2015: Costs to Pivotal Data & Approval

Manufacturing Costs

We have an existing GMP manufacturing facility in Emmen, The Netherlands that will process all tumors for the planned clinical trials. The facility is expected to cost \$2.1 million to operate in 2013, rising to \$4.9 and \$7.4 million for 2014 and 2015. The Emmen facility's six employees are anticipated to increase to eighteen by year-end 2014. Each tumor has a projected variable cost to process of approximately \$3,500. The company has projected the hiring of a US based VP of Manufacturing in 2013.

Research and Development

We anticipate spending \$39 million in R&D in the period 2013 through 2015. Third party costs associated with the 550 patient pivotal trial are estimated at \$45,000 per patient, and total \$23.8 million over 2013-2015. The third party trial costs for the 30 patient, Stage III, Phase I/II trial are estimated at approximately \$31,000 per patient, and total \$1.0 million over the clinical trial period. We estimate spending \$5.0 million on the HuMabs project between 2013 and 2015.

To support the R&D effort we anticipate increasing R&D headcount from one to thirteen by year-end 2014. Additional hires are expected to include a Vice Presidents of Regulatory and Clinical Affairs, a Director of Regulatory, Director of HuMabs and additional clinical support staff. Costs for these staff and associated expenses are projected to be approximately \$2.6 million a year.

Sales & Marketing

We have a Business Development Managing Director based in The Netherlands. We plan to hire a Director of Marketing and Director of BD - HuMabs and a US Vice President of Business Development in 2014. The company projects two additional hires in 2015. The Sales and Marketing expense reflect these personnel costs.

General & Administrative

We currently have six employees allocated to G&A with plans to add eight additional employees by year end 2014 and six more employees in 2015, bringing the total to twenty by the end of 2014.

Preparatory Equipment

In 2013, we anticipate spending on average \$87,500 at each of approximately 47 clinical trial sites on preparatory equipment (including nitrogen freezers, glove boxes, centrifuges, etc.).

Manufacturing Build Out

We plan to explore the feasibility and cost of upgrading its Emmen facility to qualify as a commercial vaccine-manufacturing site. Emmen currently has the projected capacity to manufacture 3,500 vaccines, the equivalent of over \$150 million in sales at current pricing. The financial forecast also includes \$23 million in 2016 towards the cost of building an additional manufacturing facility.

2015 – 2016: Costs to Commercialize

Revenues

OncoVAX sales are projected to start in Q3 2017 in the US and Q4 2018 in Europe. In 2017, Vaccinogen anticipates selling approximately 188 vaccines in the US at approximately \$54,000 per vaccine treatment.

We anticipate a rest of world partnership in which its partner both manufactures and distributes the vaccine and pays upfront fees, milestones and a royalty modeled at 20% to Vaccinogen. The model estimates \$217 million in OncoVAX upfront milestones for one region. There is upside potential in the licensing of additional regions, indications and partners sharing in the development costs of the OncoVAX Project.

We estimate 12 HuMabs licensing deals from 2013 through 2017. The projected revenue for this period is approximately \$42.0 Million.

Royalties Owed

We have agreed to pay Organon (now part of Merck) a royalty of 10% of the net sales of OncoVAX (and all other TICE BCG related products) until payment of \$3.5 million (and accrued interest) and 3% for five years thereafter.

We are also required to pay Intracel a royalty in conjunction with the Asset Transfer Agreement tiered between 3% and 5% of sales.

Supplies

Organon Teknika produces a key product (TICE BCG) used in processing our OncoVAX vaccines. We previously acquired from Organon Teknika (now part of Merck) all TICE BCG necessary for conducting our Phase III trials. We believe we will be able to procure addition quantities of TICE BCG from Organon as necessary in the future.

We believe that we have exclusive use of TICE BCG with autologous cancer cells through our current patent portfolio.

Manufacturing Costs

Our forecast assumes spending \$10.3 and \$23.51 million on Manufacturing in 2016 and 2017. Within the 2016 budget is a \$15 million expenses in preparation of the commercialization of OncoVAX in Q3 2017.

Research and Development

Our forecast assumes spending \$8.7 and \$9.3 million on R&D in 2016 and 2017.

Sales and Marketing

We anticipate spending approximately \$10.7 and \$26.7 million on Sales and Marketing in 2016 and 2017. The increase in 2017 is to support the pre launch and launch commercialization of OncoVAX.

General & Administrative

We anticipate General and Administrative spend of \$8.2 and \$14.0 million in 2016 and 2017.

Intellectual Property

Intellectual property protection is important to our ability to successfully commercialize its innovative technology. We have broad patents covering the OncoVAX technology in the U.S. and seven other countries, Australia, Switzerland, Germany, France, Great Britain, Ireland and Italy, with a related patent application pending in Canada. These patents and applications provide broad coverage for the production of autologous cancer vaccines. The key protection of OncoVAX, in addition to considerable expertise protected as trade secrets, is the broad, issued patent protection around the production of autologous, sterile, metabolically active cancer vaccines developed by us. This patent, entitled "Sterile Immunogenic Non-Tumorigenic Tumor Cell Composition and Methods" was issued in 2009 and expires no sooner than 2025. We believe that sterility will be required for any product to reach the US market and likely in any other market with an approved sterile vaccine like the one we have developed. This could result in a regulatory barrier to entry to competitors. Our intellectual property is pledged as collateral under certain financing arrangements. See "*Description of Securities—The Abell Foundation Financings, --Agreements with Organon Teknika Corporation.*"

We hold 1 U.S. patents to related technologies and including the sterility patent referred to above, 2 U.S. patents total.

Outside of the United States, we have, in certain territories, corresponding issued patents related to OncoVAX. Patent expiration dates may be subject to patent term extension depending on certain factors. In addition, following expiration of a basic product patent or loss of patent protection resulting from a legal challenge, it may be possible to continue to obtain commercial benefits from other characteristics such as clinical trial data, product manufacturing trade secrets, uses for products, and special formulations of the product or delivery mechanisms.

We intend to continue using our scientific experience to pursue and patent new developments to enhance our position in the cancer field. Patents, if issued, may be challenged, invalidated, declared unenforceable, circumvented or may not cover all applications we desire. Thus, any patent that we own or license from third parties may not provide adequate protection against competitors. Our pending patent applications, those we may file in the future, or those we may license from third parties may not result in issued patents. Also, patents may not provide us with adequate proprietary protection or advantages against competitors with, or who could develop, similar or competing technologies, or who could design around our patents. In addition, future legislation may impact our competitive position in the event brand-name and follow-on biologics do not receive adequate patent protection. From time to time, we have received invitations to license third-party patents.

We also rely upon unpatented proprietary know-how and continuing technological innovation and other trade secrets to develop and maintain our competitive position, in part by using confidentiality agreements. Our policy is to require our officers, employees, consultants, contractors, manufacturers, outside scientific collaborators and sponsored researchers and other advisors to execute confidentiality agreements. These agreements provide that all confidential information developed or made known to the individual during the course of the individual's relationship with us be kept confidential and not disclosed to third parties except in specific limited circumstances. We also require signed confidentiality agreements from companies that receive our confidential data. For employees, consultants and contractors, we require agreements providing that all inventions conceived while rendering services to us shall be assigned to us as our exclusive property. We hold considerable proprietary expertise related to the OncoVAX technology, including the production of autologous cancer vaccines.

We have brand names for our OncoVAX products and related technologies, and anticipates filing 5 trademark applications for these and related marks.

Competition

The biotechnology and biopharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. Pharmaceutical and biotechnology companies, academic institutions and other research organizations are actively engaged in the discovery, research and development of products designed to address prostate cancer and other indications. There are products currently under development by other companies and organizations that could compete with OncoVAX or other products that we are developing.

Our competitors include major pharmaceutical companies. These companies may have significantly greater financial resources and expertise in research and development, manufacturing, pre-clinical testing, conducting clinical trials, obtaining regulatory approvals and marketing. In addition, smaller competitors may collaborate with these large established companies to obtain access to their resources.

Competition among products approved for sale will be based upon, among other things, efficacy, reliability, product safety, price-value analysis, and patent position. Our competitiveness will also depend on our ability to advance our product candidates, license additional technology, maintain a proprietary position in our technologies and products, obtain required government and other approvals on a timely basis, attract and retain key personnel and enter into corporate relationships that enable us and our collaborators to develop effective products that can be manufactured cost-effectively and marketed successfully.

Regulatory

General

Government authorities in the United States and other countries extensively regulate, among other things, the pre-clinical and clinical testing, manufacturing, labeling, storage, record-keeping, advertising, promotion, export, marketing and distribution of biologic products. In the United States, the FDA subjects pharmaceutical and biologic products to rigorous review under the Federal Food, Drug, and Cosmetic Act, the Public Health Service Act and other federal statutes and regulations.

FDA Approval Process

To obtain approval of our product candidates from the FDA, we must, among other requirements, submit data supporting safety and efficacy as well as detailed information on the manufacture and composition of the product candidate. In most cases, this entails extensive laboratory tests and pre-clinical and clinical trials. The collection of these data, as well as the preparation of applications for review by the FDA, are costly in time and effort, and may require significant capital investment. We may encounter significant difficulties or costs in our efforts to obtain FDA approvals that could delay or preclude us from marketing any products we may develop.

A company typically conducts human clinical trials in three sequential phases, but the phases may overlap. Phase 1 trials consist of testing of the product in a small number of patients or healthy volunteers, primarily for safety at one or more doses. Phase 1 trials in cancer are often conducted with patients who are not healthy and who have end-stage or metastatic cancer. Phase 2 trials, in addition to safety, evaluate the efficacy of the product in a patient population somewhat larger than Phase 1 trials. Phase 3 trials typically involve additional testing for safety and clinical efficacy in an expanded population at geographically dispersed test sites. Prior to commencement of each clinical trial, a company must submit to the FDA a clinical plan, or "protocol," which must also be approved by the Institutional Review Boards at the institutions participating in the trials. The trials must be conducted in accordance with the FDA's good clinical practices. The FDA may order the temporary or permanent discontinuation of a clinical trial at any time.

To obtain marketing authorization, a company must submit to the FDA the results of the pre-clinical and clinical testing, together with, and among other things, detailed information on the manufacture and

composition of the product, in the form of a new drug application or, in the case of a biologic such as OncoVAX, a biologics license application.

We are also subject to a variety of regulations governing clinical trials and sales of our products outside the United States. Whether or not FDA approval has been obtained, approval of conduct of a clinical trial or authorization of a product by the comparable regulatory authorities of foreign countries and regions must be obtained prior to the commencement of marketing the product in those countries. The approval process varies from one regulatory authority to another and the time may be longer or shorter than that required for FDA approval. In the E.U., Canada and Australia, regulatory requirements and approval processes are similar, in principle, to those in the United States.

Fast Track Designation/Priority Review

Congress enacted the Food and Drug Administration Modernization Act of 1997 (the "Modernization Act") in part to ensure the availability of safe and effective drugs, biologics and medical devices by expediting the development and review for certain new products. The Modernization Act establishes a statutory program for the review of Fast Track products, including biologics. A Fast Track product is defined as a new drug or biologic intended for the treatment of a serious or life-threatening condition that demonstrates the potential to address unmet medical needs for this condition. Under the Fast Track program, the sponsor of a new drug or biologic may request that the FDA designate the drug or biologic as a Fast Track product at any time during the development of the product, prior to a new drug application submission.

Post-Marketing Obligations

The Food and Drug Administration Amendments Act of 2007 expanded FDA authority over drug products after approval. All approved drug products are subject to continuing regulation by the FDA, including record-keeping requirements, reporting of adverse experiences with the product, sampling and distribution requirements, notifying the FDA and gaining its approval of certain manufacturing or labeling changes, complying with certain electronic records and signature requirements, submitting periodic reports to the FDA, maintaining and providing updated safety and efficacy information to the FDA, and complying with FDA promotion and advertising requirements. Failure to comply with the statutory and regulatory requirements can subject a manufacturer to possible legal or regulatory action, such as warning letters, suspension of manufacturing, seizure of product, injunctive action, criminal prosecution, or civil penalties.

The FDA may require post-marketing studies or clinical trials to develop additional information regarding the safety of a product. These studies or trials may involve continued testing of a product and development of data, including clinical data, about the product's effects in various populations and any side effects associated with long-term use. The FDA may require post-marketing studies or trials to investigate known serious risks or signals of serious risks or identify unexpected serious risks and may require periodic status reports if new safety information develops. Failure to conduct these studies in a timely manner may result in substantial civil fines.

Drug and biologics manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and to list their products with the FDA. The FDA periodically inspects manufacturing facilities in the United States and abroad in order to assure compliance with the applicable cGMP regulations and other requirements. Facilities also are subject to inspections by other federal, foreign, state or local agencies. In complying with the cGMP regulations, manufacturers must continue to assure that the product meets applicable specifications, regulations and other post-marketing requirements. We must ensure that any third-party manufacturers continue to ensure full compliance with all applicable regulations and requirements. Failure to comply with these requirements subjects the manufacturer to possible legal or regulatory action, such as suspension of manufacturing or recall or seizure of product.

Also, newly discovered or developed safety or efficacy data may require changes to a product's approved labeling, including the addition of new warnings and contraindications, additional pre-clinical or clinical studies, or even in some instances, revocation or withdrawal of the approval. Violations of regulatory

requirements at any stage, including after approval, may result in various adverse consequences, including the FDA's withdrawal of an approved product from the market, other voluntary or FDA-initiated action that could delay or restrict further marketing, and the imposition of civil fines and criminal penalties against the manufacturer and Biologics License Applications ("BLA") holder. In addition, later discovery of previously unknown problems may result in restrictions on the product, manufacturer or BLA holder, including withdrawal of the product from the market. Furthermore, new government requirements may be established that could delay or prevent regulatory approval of our products under development, or affect the conditions under which approved products are marketed.

Federal Anti-Kickback, False Claims Laws & The Federal Physician Payment Sunshine Act

In addition to FDA restrictions on marketing of pharmaceutical products, several other types of state and federal laws are relevant to certain marketing practices in the pharmaceutical industry. These laws include anti-kickback statutes, false claims statutes, and the federal Physician Payment Sunshine Act. The federal healthcare program anti-kickback statute prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual for, or the purchase, lease, order or recommendation of, any good or service for which payment may be made under federal health care programs such as the Medicare and Medicaid programs. For example, this statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers on the other. Violations of the federal anti-kickback statute are punishable by imprisonment, criminal fines, civil monetary penalties and exclusion from participation in federal healthcare programs. There are a number of statutory exceptions and regulatory safe harbors protecting certain common activities from prosecution or other regulatory sanctions, however, the exceptions and safe harbors are drawn narrowly, and practices that do not fit squarely within an exception or safe harbor may be subject to scrutiny.

Federal false claims laws prohibit, among other things, any person from knowingly presenting, or causing to be presented, a false or fraudulent claim for payment, or knowingly making, or causing to be made, a false record or statement material to a false or fraudulent claim. For example, several pharmaceutical and other healthcare companies have faced enforcement actions under these laws for allegedly inflating drug prices they report to pricing services, which in turn were used by the government to set Medicare and Medicaid reimbursement rates, and for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. In addition, anti-kickback statute violations and certain marketing practices, including off-label promotion, may also implicate false claims laws. Federal false claims laws violations may result in imprisonment, criminal fines, civil monetary damages and penalties and exclusion from participation in federal healthcare programs. The majority of states also have statutes or regulations similar to the federal anti-kickback law and false claims laws, which apply to items and services reimbursed under Medicaid and other state programs. A number of states have anti-kickback laws that apply regardless of the payor.

In addition, the federal Physician Payment Sunshine Act, when implemented will require the reporting by drug manufacturers of "payments or transfers of value" made or distributed to physicians and teaching hospitals, with limited exceptions. Failure to comply with the reporting obligations may result in civil monetary penalties.

State Laws

Marketing Restrictions and Disclosure Requirements. A number of states, such as Minnesota, Massachusetts and Vermont, have requirements that restrict pharmaceutical marketing activities that go beyond commitments made related to adhering to the Pharmaceutical Research and Manufacturers of America Code for Interactions with Healthcare Professionals. These state requirements limit the types of interactions we may have with healthcare providers licensed in these jurisdictions. In addition, a number of states have laws that require pharmaceutical companies to track and report payments, gifts and other benefits provided to physicians and other health care professionals and entities. Still other state laws mandate implementation of specific compliance policies to regulate interactions with health care professionals.

Healthcare Reform. Certain states, such as Massachusetts, are pursuing their own programs for health reform. These programs may include cost containment measures that could affect state healthcare benefits, particularly for higher priced drugs. Under the federal Patient Protection and Affordable Care Act, states will have authority to define packages of “essential health benefits” that health plans in the individual and small group markets must offer beginning in 2014. The definition of these packages could affect coverage of our products by those plans.

Sale of Pharmaceutical Products. In addition, in the United States, many states have enacted their own laws and statutes applicable to the sale of pharmaceutical products within the state, with which we must comply. We are also subject to certain state privacy and data protection laws and regulations.

Data Privacy

Numerous federal and state laws, including state security breach notification laws, state health information privacy laws and federal and state consumer protection laws, govern the collection, use and disclosure of personal information. Other countries also have, or are developing, laws governing the collection, use and transmission of personal information. In addition, most healthcare providers who prescribe our product and from whom we obtain patient health information are subject to privacy and security requirements under the Health Insurance Portability and Accountability Act of 1996 (“HIPAA”). We are not a HIPAA covered entity and therefore, these privacy and security requirements do not apply to us. However, we could be subject to criminal penalties if we knowingly obtain individually identifiable health information from a covered entity in a manner that is not authorized or permitted by HIPAA or for aiding and abetting the violation of HIPAA. We are unable to predict whether our actions could be subject to prosecution in the event of an impermissible disclosure of health information to us. The legislative and regulatory landscape for privacy and data protection continues to evolve, and there has been an increasing amount of focus on privacy and data protection issues with the potential to affect our business, including recently enacted laws in a majority of states requiring security breach notification. These laws could create liability for us or increase our cost of doing business.

Price Controls

In many of the markets in which we may do business in the future, the prices of pharmaceutical products are subject to direct price controls (by law) and to drug reimbursement programs with varying price control mechanisms. In the United States, the Medicare program is administered by CMS. Coverage and reimbursement for products and services under Medicare are determined in accordance with the Social Security Act and pursuant to regulations promulgated by CMS as well as the agency’s subregulatory coverage and reimbursement determinations. The methodology under which CMS makes coverage and reimbursement determinations is subject to change, particularly because of budgetary pressures facing the Medicare program. For example, the Medicare Modernization Act of 2003 made changes in reimbursement methodology that reduced the Medicare reimbursement rates for many drugs, including oncology therapeutics. In the past year, Congress has considered additional reductions in Medicare reimbursement for drugs as part of legislation to reduce the budget deficit. Similar legislation could be enacted in the future. The

Medicare regulations and interpretive determinations that determine how drugs and services are covered and reimbursed also are subject to change.

We intend to make OncoVAX available to patients that are eligible for Medicaid benefits. A condition of federal funds being made available to cover our products under Medicaid and Medicare Part B will be Vaccinogen's participation in the Medicaid drug rebate program, established by the Omnibus Budget Reconciliation Act of 1990, Pub. L. 101-508, and as amended by subsequent legislation, including the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010 and subsequent legislation (collectively, "PPACA").

The availability of federal funds under Medicaid and Medicare Part B to pay for OncoVAX and any other products that are approved for marketing also is conditioned on our participation in the Public Health Service 340B drug pricing program. The 340B drug pricing program requires participating manufacturers to agree to charge statutorily-defined covered entities no more than the 340B "ceiling price" for the manufacturer's covered outpatient drugs. These covered entities include hospitals that serve a disproportionate share of poor Medicare beneficiaries, as well as a variety of community health clinics and other recipients of health services grant funding. PPACA expanded the 340B program to include certain free standing cancer hospitals, critical access hospitals, rural referral centers and sole community hospitals, each as defined by the Act. The 340B ceiling price for a drug is calculated using a statutory formula that is based on the AMP and Medicaid rebate amount for the drug. Any revisions to previously reported Medicaid pricing data also may require revisions to the 340B ceiling prices that were based on those data and could require the issuance of refunds.

European Regulatory Authorities

In the European Union, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national healthcare systems that fund a large part of the cost of such products to consumers. The approach taken varies from member state to member state. Some jurisdictions operate positive and/or negative list systems under which products may be marketed only once a reimbursement price has been agreed. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on healthcare costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products, as exemplified by the role of the National Institute for Health and Clinical Excellence in the United Kingdom, which evaluates the data supporting new medicines and passes reimbursement recommendations to the government. In addition, in some countries cross-border imports from low-priced markets (parallel imports) exert commercial pressure on pricing within a country.

Environmental and Safety Laws

We are subject to a variety of federal, state and local regulations relating to the use, handling, storage and disposal of hazardous materials, including chemicals and radioactive and biological materials. Our operations produce such hazardous waste products. Although we believe that our safety procedures for handling and disposing of these materials comply with the standards prescribed by federal, state and local regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. We generally contract with third parties for the disposal of such substances, and store our low level radioactive waste at our facilities until the materials are no longer considered radioactive. We are also subject to various laws and regulations governing laboratory practices and the experimental use of animals.

We are also subject to regulation by the Occupational Safety and Health Administration ("OSHA"), and the Environmental Protection Agency (the "EPA"), and to regulation under the Toxic Substances Control Act, the Resource Conservation and Recovery Act and other regulatory statutes, and may in the future be subject to other federal, state or local regulations. OSHA and/or the EPA may promulgate regulations that may affect our research and development programs.

Taxes

We have not filed any U.S. tax returns since 2007. We anticipate filing all outstanding U.S. tax returns in fiscal 2013.

There is an issue with penalties regarding the U.S. information reporting Form 5471 for both the Netherlands and Switzerland. We failed to file all applicable foreign information returns for the 2007-2011 annual periods. The IRS has been imposing penalties on a regular basis for the failure of U.S. taxpayers to file Form 5471. The penalty is \$10,000 per entity for each year. A U.S. income tax return is not considered complete without the filing of the report. Accordingly, management has concluded that a \$20,000 income tax (ASC 740-10) penalty has been incurred for 2011. None has been incurred for 2012 because a corporate tax return extension has been filed. The details of these amounts are as follow: The Netherlands was formed in 2007 and Switzerland was formed in 2008 and dissolved in 2011. Therefore, \$70,000, \$90,000 and \$90,000 are the penalty liabilities as of December 31, 2010, 2011 and 2012. With a current tax expense of \$20,000 for the year ended December 31, 2011 and none for 2012.

Employees

As of December 31, 2012, we had 10 full time employees. None of our employees are subject to a collective bargaining agreement or represented by a labor or trade union, and we believe that our relations with our employees are good. In addition, we also have 8 technical and administrative consultants that we may hire as additional full time employees as our financial condition improves.

LEGAL PROCEEDINGS

We are currently in a dispute with a vendor regarding amounts owed for services performed. A demand for payment under a written agreement has been made in the amount of approximately \$150,000. Management believes the vendor did not perform under the terms of the contract and contends that no amounts are due. Settlement discussions between the parties are continuing. We have reserved \$75,000 under our financial statements for resolution of this matter.

We are party to claims and litigation that arise in the normal course of business. Management believes that the ultimate outcome of these claims and litigation will not have a material impact on our financial position or results of operations.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following tables sets forth information as of June 6, 2013 as to each person or group who is known to us to be the beneficial owner of more than 5% of our outstanding voting securities and as to the security and percentage ownership of each of our executive officers and directors and of all of our officers and directors as a group. As of June 6, 2013 we had 31,122,755 shares of common stock outstanding.

Beneficial ownership is determined under the rules of the Securities and Exchange Commission and generally includes voting or investment power over securities. Except in cases where community property laws apply or as indicated in the footnotes to this table, we believe that each stockholder identified in the table possesses sole voting and investment power over all shares of common stock shown as beneficially owned by the stockholder.

Shares of common stock subject to options or warrants that are currently exercisable or exercisable within 60 days of the date of this Offering Circular are considered outstanding and beneficially owned by the

person holding the options for the purpose of computing the percentage ownership of that person but are not treated as outstanding for the purpose of computing the percentage ownership of any other person.

Name And Address (1)	Number Of Shares Beneficially Owned	Percentage Owned
<i>5% Stockholders:</i>		
Intracel Holdings Corporation (2)	13,324,864	42.89%
<i>Executive Officers:</i>		
Michael G. Hanna, Jr. Ph.D	3,949,289(3)	12.61%
Andrew Tussing	421,002 (4)	1.35%
<i>Directors:</i>		
John Nicolis	3,947,160 (5)	12.20%
Daniel Fitzgerald	606,212 (6)	1.95 %
Alan Cohen	2,511,362(7)	8.07 %
Daniel Kane	2,511,362 (7)	8.07 %
All directors and officers as a group (6 persons)	13,946,387	42.98%

(1) Unless otherwise indicated the address is c/o Vaccinogen, Inc., 5300 Westview Drive, Suite 406, Frederick, MD 21701.

(2) The address is 550 Highland Street, Suite 417, Frederick, MD 21701.

(3) Includes 200,000 shares under presently exercisable warrants and 23,188 shares in respect of his indirect ownership interest in Intracel Holdings Corporation.

(4) Includes 20,575 shares under presently exercisable warrants.

(5) Includes 1,194,748 shares under presently exercisable warrants, 179,216 shares held under trusts under which Mr. Nicolis is the trustee and 42,336 shares under restricted stock grants.

(6) Includes 9,090 shares under restricted stock grants and 39,142 shares in respect of his indirect ownership interest in Intracel Holdings Corporation.

(7) Includes 7,272 shares under restricted stock grants and 1,729,581 shares in respect of his indirect ownership interest of Intracel Holdings Corporation.

DIRECTORS AND EXECUTIVE OFFICERS

Set forth below is certain information concerning our directors and executive officers:

Name	Age	Position
Michael G. Hanna, Jr., Ph.D.	75	Chairman and Chief Executive Officer
Andrew Tussing	48	President, Chief Operating Officer and acting Chief Financial Officer
John Nicolis	52	Director
Daniel Fitzgerald	60	Director
Alan Cohen	76	Director
Daniel Kane	55	Director

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Michael G. Hanna, Jr., Ph.D., is our Chief Executive Officer and Chairman of our Board of Directors. Dr. Hanna has been with Vaccinogen since its founding in 2007 and developer of OncoVAX, Vaccinogen's lead project. Prior to Vaccinogen, Dr. Hanna served as Chairman (Emeritus) and Chief Scientific Officer of Intracel Resources, an integrated biopharmaceutical company that developed cancer vaccines and immunotherapeutic and diagnostic products for both cancers and infectious diseases. Dr. Hanna also served as President and Chief Executive Officer of PerImmune, Inc. before it and Intracel Corp. merged in 1998. From 1985 to 1994, he was the Chief Operating Officer of Organon Teknika Biotechnology Research Institute and Senior Vice President of Organon Teknika Corporation, a subsidiary of Akzo Nobel, N.V., The Netherlands. Prior to that, he was Director of the National Cancer Institute, Frederick Cancer Research Center.

Dr. Hanna received a doctoral degree in experimental pathology and immunology from the University of Tennessee.

Andrew Tussing is our President, Chief Operating Officer and acting Chief Financial Officer. Mr. Tussing has served as an officer of Vaccinogen since its founding in 2007 (of which he is a co-founder). Previously, Mr. Tussing was active in investment banking activities at 1st BridgeHouse Securities and as Managing Director of Growth5 – a venture capital marketing strategy firm. Prior to that, Mr. Tussing was a co-founder of Milestone International Asset Management, which developed hedge-fund-related solutions for financial advisors. He also served in senior roles at Pershing, a division of the Bank of New York, and at Deutsche Bank's Alex. Brown division where he was Director of Strategic Development, Marketing & Sales for its Correspondent Services business. Mr. Tussing has a BS in Business Administration from the University of Baltimore.

John Nicolis, Co-Chairman, has served as one of our directors since inception in 2007. Mr. Nicolis is Managing Director of Optimal Fund Management, a Sydney, Australia-based investment management company with over US \$2.4 Billion in assets; he specializes in Asia Pacific equities.

Mr. Nicolis has almost 20 years' experience in equity sales with Salomon Brothers (Citigroup) and has spent a considerable portion of this time working in Tokyo. More recently, he was based in Melbourne as Head of Equities for Japan, Asia and Australia with overall responsibility for marketing of the company's brokering services as well as the company's operational activities.

Mr. Nicolis holds a Bachelor of Arts majoring in Japanese and Chinese.

Daniel Fitzgerald has served as a director since 2009. Mr. Fitzgerald worked in fixed income on Wall Street for over thirty years. He is a founding partner of Pinewood Capital Partners in Greenwich, CT, specializing in high yield debt; a market neutral fund. Prior to that, he co-created the Gleacher Nat West High Yield department, specializing in underwriting research and trading in high yield securities. Before that, Mr. Fitzgerald was Managing Director in high yield for 15 years at Donaldson, Lufkin and Jenrette. He has a BS in accounting from Manhattan College. Mr. Fitzgerald is a former member of the Pathmark Board of Directors (2000-2007) and was instrumental in the sale of Pathmark to GAP (Great Atlantic and Pacific) for US\$1.35 billion dollars. Mr. Fitzgerald currently manages a family office.

Alan Cohen has served as a director since January 2011. Mr. Cohen, Chairman of Abacus Advisors, has more than 25 years of experience working with businesses in all aspects of management and operations. He has been an active participant in seminars on turnaround management, has lectured extensively on restructuring and asset-based lending, and has served as a consultant and advisor to numerous Fortune 500 companies and many of the country's leading banks and financial institutions.

Daniel Kane has served as a director since January 2011. Mr. Kane is Managing Member of Tiger Capital Group, LLC, and The Nassi Group, LLC. He has over twenty years' experience managing appraisals, real

estate, intellectual property, various acquisitions and liquidations. Prior to joining these companies, Mr. Kane practiced for over ten years as a CPA.

Mr. Kane is currently on the board of Intracel Holdings Corp. and a former board member of Official Pillowtex, LLC (which was sold to Iconix Brand Group), and a former board member of Unwired Technology (which was sold to American Capital, Ltd.).

Mr. Kane received his MS degree from the Stern School of Business at New York University.

Significant Employees and Advisors

Debra R. Hoopes, CPA, MBA, Chief Financial Advisor.

Debra R. Hoopes is our Chief Financial Adviser, a position she has held since August, 2012. Ms. Hoopes has over 20 years of corporate finance and management experience across various industries and includes both private and public companies in the CFO role. Ms. Hoopes has held CFO and COO positions for various companies through her consulting company Hoopes Management and Advisory Services dba CFO Link, including RO12, Inc., Hatteras Networks, OpenQ and Certification Partners. In addition, Ms. Hoopes served as CFO for Catuity, Inc. and Intersections, Inc., both Nasdaq listed companies. Ms. Hoopes earned her B.S. in accounting at Virginia Tech, her MBA at George Washington University and obtained her CPA in the Commonwealth of Virginia in 1987, license 32837.

John Powers, Ph.D., Logistics and Manufacturing Expert/Advisor

Dr. Powers has thirty-two years of experience in the life sciences, and spent twenty-three years successfully starting, growing then selling three small biotech companies. Dr. Powers founded and owns KsD Scientific, a biotechnology-consulting firm and is currently helping start Baltimore BioWorks (Baltimore, MD) a minority-owned vocational biotech training company funded by The Abell Foundation. Dr. Powers was involved in Phase III clinical trial work with Hoffman LaRoche; then worked with the Centers for Disease Control (Atlanta, GA) after which he went to the National Institutes of Health (Bethesda, MD). Dr. Powers is the author of numerous papers, abstracts and manuals, holds four biotech product patents and has filed and received over a dozen FDA 510(k) approvals.

Over the past few years The Abell Foundation has engaged KsD Scientific to investigate several companies to analyze investment opportunities, perform scientific and business due diligence which include; cancer vaccines, nanoparticle fluorophores and bacteriophage applications.

John Powers, Ph.D., MBA did his undergraduate and graduate work at the University of Maryland (College Park, MD) and the Maryland Medical School (Baltimore, MD).

Sanda Milder, BSc, Site Director

Ms. Milder is the Site Director as well as the Operations Manager. At the Emmen, The Netherlands, manufacturing facility she is responsible for the overall plant and oversees and coordinates the manufacturing functions to process the vaccines as well as being responsible for all administrative functions. Ms. Milder maintains the Standard Operating Procedures for the manufacture of vaccines and interfaces with other plant management to ensure a safe, clean manufacturing environment and product.

Scientific, business and personal key elements:

- GLP and GMP compliance
- Regulatory agencies interactions
- Nontraditional manager, inventive and optimistic

- Able to work accurately and pay attention to detail
- Excellent communication skills, multilingual

Ms. Milder has a Bachelor of Science in Biochemistry, Cum Laude; and several vocational certifications in quality control and quality assurance.

Herbert C. Hoover, Jr., MD, Medical Advisor

Dr. Hoover serves as a Consulting Medical Advisor for Vaccinogen and has been the one clinician involved in all of the clinical trials of OncoVAX. Dr. Hoover initiated the original pilot trial of active specific immunotherapy in patients with colon cancer at Johns Hopkins Hospital in 1981. He served as a medical advisory role with Organon Teknika/Biotechnology Research, PerImmune and Intracel.

Dr. Hoover has had numerous honors and awards throughout his career including the Charles B. Thornton Advanced Technology Achievement Award (for the development of tumor-specific human monoclonal antibodies) as well as the Best Doctors in America recognition. He shares multiple patents for the development of monoclonal antibodies and active-specific immunotherapy and has published nearly 100 scientific articles.

Dr. Hoover received his MD from the University of Kansas School of Medicine in 1970. His surgical residency was served at the Massachusetts General Hospital and Harvard Medical School from 1970 to 1977 with a Chief Residency in 1978. He was a Clinical Associate in the Surgery Branch of the NCI, NIH in Bethesda from 1972 to 1974.

Director Independence and Qualifications

Our Board of Directors has determined that Messrs. Nicolas, Fitzgerald, Cohen and Kane are “independent” as defined under the standards set forth in Section 121A of the American Stock Exchange Company Guide. In making this determination, the Board of Directors considered all transactions set forth under “Certain Relationships and Related Transactions” below.

We considered Dr. Hanna’s prior experience in the biotechnology industry, including his development of the OncoVAX® vaccine as well as his position as a director of the National Cancer Institute were important factors in concluding that he was qualified to serve as one of our directors. Regarding Mr. Nicolis, we considered his investment and financial experience as important factors in concluding that he was qualified to serve as one of our directors.. Regarding Mr. Fitzgerald, we considered his financial experience as well as his role as a former director of Pathmark as important factors in concluding that he was qualified to serve on our board of directors. Regarding Mr. Cohen, we considered his prior experience working with portfolio companies and his role as consultant to Fortune 500 companies as important factors in concluding that he was qualified to serve on our board of directors. Regarding Mr. Kane, we considered his prior experience as a CPA as well as his prior experience serving as a director for other companies as important factors in concluding that he was qualified to serve as one of our directors.

Involvement in Certain Legal Proceedings

None of our directors or executive officers has, during the past five years:

- been convicted in a criminal proceeding or been subject to a pending criminal proceeding (excluding traffic violations and other minor offences);

- been subject to any order, judgment, or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction, permanently or temporarily enjoining, barring, suspending or otherwise limiting his involvement in any type of business, securities, futures, commodities or banking activities; or
- been found by a court of competent jurisdiction (in a civil action), the Securities and Exchange Commission or the Commodity Futures Trading Commission to have violated a federal or state securities or commodities law, and the judgment has not been reversed, suspended, or vacated.

Communications with the Board of Directors

Stockholders can send communications to the Board of Directors by sending a certified or registered letter to the Chairman of the Board, care of the Secretary, at our main business address set forth above. Communications that are threatening, illegal, or similarly inappropriate, and advertisements, solicitations for periodical or other subscriptions, and other similar communications will generally not be forwarded to the Chairman.

The Medical Advisory Board

Our Medical Advisory Board is comprised of internationally recognized individuals in the fields of oncology and cancer surgery. Our Medical Advisory Board advises and assists our management by reviewing and evaluating our research strategy and research, development and clinical programs. To accomplish this purpose, the Medical Advisory Board will review and monitor the processes and procedures, infrastructure underlying our major discovery and clinical development programs and consists of the following individuals:

Michael G. Hanna, Jr., Ph.D., our Chairman of the Board and Chief Executive Officer.

John S. Macdonald, MD, professor of medicine, New York Medical College. Previously, Dr. Macdonald has served on the medical staffs at Georgetown University Medical School, University of Kentucky, Temple University New York Medical College and Saint Vincent's Hospital's Comprehensive Cancer Center where he was chief of medical oncology. Dr. Macdonald graduated from Harvard University medical school and is board certified in internal medicine and medical oncology as well as a specialist in gastrointestinal cancer and cancer immunotherapy. Dr. Macdonald is the recipient of the distinguished American Cancer Society Junior Faculty Fellowship as well as having received numerous awards and distinctions including being named in the *Best Doctors in America* listing and the *Good Housekeeping* "Best 300 Doctors in America."

Benjamin S. Carson, MD, Director of Pediatric Neurosurgery at Johns Hopkins Hospital and professor of neurosurgery, oncology, plastic surgery and pediatrics at John Hopkins University and co-director of The Johns Hopkins Craniofacial Center. Dr. Carson's other surgical innovations have included the first intrauterine procedure to relieve pressure on the brain of a hydrocephalic fetal twin, and a hemispherectomy, in which a young girl suffering from uncontrollable seizures had one half of her brain removed. In 1987, Dr. Carson made medical history by being the first surgeon to successfully separate conjoined twins (the Binder twins) who had been joined at the back of the head (craniopagus twins). The 70-member surgical team, led by Dr. Carson, worked for 22 hours. At the end, the twins were successfully separated and can now survive independently. Dr. Carson is a member of the American Academy of Achievement, and the Horatio Alger Association of Distinguished Americans. In 2008, the White House awarded Benjamin Carson the Presidential Medal of Freedom, the nation's highest civilian honor. As an internationally renowned physician, Dr. Carson has authored over 100 neurosurgical publications, along with four best-selling books, and has been awarded 60 honorary doctorate degrees and dozens of national merit citations.

Herbert .C. Hoover, MD, Ph.D., our Medical Advisor

Jan Vermorken, MD, Ph.D., Editor-in-Chief of Annals of Oncology Dr. Vermorken served on the medical staff of oncology, at the University Hospital VrijeUniversiteit , The Netherlands and is Chairman of the Netherlands Society of Oncology, Emeritus Professor of Oncology at the University of Antwerp and past head of the Department of Oncology at University Hospital Antwerp. Dr. Vermorken was principal investigator of the OncoVAX 8701 phase IIIa clinical trial Jan Vermorken is Emeritus Professor of Oncology at the University of Antwerp and past head of the Department of Oncology at University Hospital Antwerp. Dr. Vermorken’s main field of interest is in gynecological oncology, and head & neck oncology. He coordinated large trials in breast and colon cancer including OncoVAX’s phase III trial (8701). His main research areas concern early clinical and pharmacological studies with new drugs, studies on the interaction of chemotherapy and radiation therapy, HPV in various malignancies and immunological approaches. Dr. Vermorken is a member of the European Organization for Research and Treatment of Cancer (EORTC) Gynecological Cancer Group (GCG) and the ROTC Head and Neck Cancer Group (HNCG). He chaired the EORTC-GCG from 1983 to 1989 and the EORTC-HNCG from 2006 to 2009. He is still an active member with both groups. He is an officer for ESMO, was member of the ESMO executive committee during the time that he chaired the ESMO National Representative Committee (1991 – 1996) and the ESMO Education Committee (1996 – 2002) and is a prominent member of the ESMO faculty. He is also member of the International Gynecological Cancer Society (IGCS), was founding chair of the Gynecological Cancer Intergroup (GCIG) and was Chairman of the Belgian Association of Cancer Research (BACR) from 2003 to 2011, now still being part of its board.

EXECUTIVE COMPENSATION

The following table sets forth the compensation paid to the Chief Executive Officer and our other executive officers for services rendered during the fiscal years ended December 31, 2012, and 2011.

SUMMARY COMPENSATION TABLE									
Name and principal position	Year	Salary	Bonus	Stock Awards	Option Awards	Non-equity incentive plan compensation	Change in	All other	Total
							pension value and non-qualified deferred compensation earnings		
		(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Michael G. Hanna, Jr., Ph.D. <i>Chairman and Chief Executive Officer (since July 2012)</i>	2012	350,000	--	--	--	--	--	--	350,000
	2011	350,000	--	--	--	--	--	--	350,000
Andrew Tussing <i>President (since July 2012) and Chief Operating Officer</i>	2012	250,000	--	--	--	--	--	--	250,000
	2011	250,000	--	--	--	--	--	--	250,000
Michael Kranda <i>Former President and Chief Executive Officer (from September 2010 - June 2012)</i>	2012	200,000	--	--	--	--	--	--	200,000
	2011	400,000	--	--	--	--	--	--	400,000

Outstanding Equity Awards

There were no outstanding equity awards, unexercised options, unvested stock, or equity incentive plan awards as of December 31, 2012 for any of the executive officers named in the Summary Compensation Table above.

Employment Agreements

Employment Agreement with Michael G. Hanna, Jr., Ph.D.

We entered into a written employment agreement with Michael G. Hanna, Jr., Ph.D, our Chairman of the Board and Chief Executive Officer on February 1, 2010 and amended on December 21, 2010. Pursuant to the agreement Dr. Hanna is entitled to an annual base salary of \$350,000 paid semi-monthly. In addition, the agreement provides for an Annual Bonus of up to seventy-five (75%) of Dr. Hanna's annual base salary, depending on the satisfaction of performance criteria for each calendar year. No later than March 1st of each calendar year, the Board of Directors shall approve performance goals for the calendar year (either as presented by Dr. Hanna, or with reasonable modifications desired by the Board). Such approved performance goals shall indicate the manner in which the Executive's Annual Bonus (if any) will be determined upon partial satisfaction of one or more of the goals. Any Annual Bonus due (less all amounts required to be withheld under applicable law) shall be paid to Dr. Hanna by the March 15th of the calendar year following the calendar year for which it is payable.

Dr. Hanna's employment agreement also provides for reimbursement of reasonable business expenses and entitlement to reimbursement by us for expenses incurred in a calendar year with respect to tax, financial, family office and legal planning services (including tax return preparation), up to a maximum of \$10,000 per calendar month during the Term.

The term of Dr. Hanna's employment agreement currently ends on December 31, 2014 but will be extended for additional two (2) year periods unless either party, in its or his sole discretion, provides written notice of an intention to not renew the Agreement at the end of the Term at least one hundred and twenty (120) days prior to the end of the Term.

Employment Agreement with Andrew L. Tussing

We entered into a written employment agreement with Andrew L. Tussing, our Chief Operating Officer on February 1, 2010 and President effective July, 2012 and amended on December 21, 2010. Pursuant to the agreement Mr. Tussing is entitled to an annual base salary of \$250,000 paid semi-monthly. In addition, the agreement provides for an Annual Bonus of up to seventy-five (75%) of the annual base salary, depending on the satisfaction of performance criteria for each calendar year. No later than February 1st of each calendar year, Mr. Tussing shall submit to our Chief Executive Officer performance goals for the calendar year. No later than March 1st of each calendar year, the Chief Executive Officer shall approve performance goals for the calendar year (either as presented by the Mr. Tussing, or with reasonable modifications desired by the Chief Executive Officer). Fifty percent of the bonus will be paid on personal achievements. Such approved performance goals shall indicate the manner in which the Executive's Annual Bonus (if any) will be determined upon partial satisfaction of one or more of the goals. The other fifty percent of the bonus will be a function of our performance and meeting plan for the Calendar year. Any Annual Bonus due (less all amounts required to be withheld under applicable law) shall be paid to Mr. Tussing by the March 15th of the calendar year following the calendar year for which it is payable.

Mr. Tussing's employment agreement also provides for reimbursement of reasonable business expenses and entitlement to reimbursement by us for expenses incurred in a calendar year with respect to tax, financial,

family office and legal planning services (including tax return preparation), up to a maximum of \$10,000 per calendar month during the Term.

The term of Mr. Tussing’s employment agreement currently ends on December 31, 2014 but will be extended for additional two (2) year periods unless either party, in its or his sole discretion, provides written notice of an intention to not renew the Agreement at the end of the Term at least one hundred and twenty (120) days prior to the end of the Term.

Potential Payments upon Termination

Both Michael G. Hanna, Jr. Ph.D. and Andrew L. Tussing have entered into an employment agreements. Under the terms of their respective Employment Agreement, if (i) the executive resigns with “good reason” or if the we terminates executive’s employment without cause such executive will be paid its base salary for the greater of (A) the remainder of the Term or (B) one year with payments due during the first 90 day period following separation to be paid in a lump sun on the final regularly scheduled paydate preceding the end of such 90-day period and the remaining payment to be made when due on our regular payroll schedule or (ii) such executive’s employment is terminated due to death or disability, such executive (or their estate) will be paid a lump sum cash payment equal to one year of the executive’s base salary. No payments are required to be made to executive upon a change of control (as defined in the employment agreements).

The following table sets forth quantitative information with respect to potential payments to be made to each of Dr. Hanna and Mr. Tussing upon termination in various circumstances. The potential payments are based on each of the executive officer’s Employment Agreement discussed above. For a more detailed description of the Employment Agreement, see the “Employment Agreements” section above.

Name	Payments upon Death Disability (1)	Payments upon Termination without Cause and Resignation for Good Reason (1)(2)
Michael G. Hanna, Jr., Ph.D	\$350,000	\$350,000-\$700,000
Andrew L. Tussing	\$250,000	\$250,000-\$500,000

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- (1) Based on current annual base salary of \$350,000 for Dr. Hanna and \$250,000 for Mr. Tussing.
 - (2) Each executive entitled to be paid its base salary for the greater of the remainder of its employment term or one-year.

Benefits

Continued medical and dental benefits as provided by the Company from time to time for its employees, at the Company’s expense, for the period of time equal to the shorter of the Severance Period or the maximum period of COBRA continuation coverage provided under Section 4980B(f) of the Internal Revenue Code (with such coverage to be treated as COBRA coverage); provided, however, that the Company shall not subsidize COBRA continuation coverage to the extent that the Executive is eligible for the COBRA subsidy under the American Recovery and Reinvestment Act of 2009.

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Compensation of Directors

Name	Fees Earned or Paid in Cash	Stock Awards (\$)	Option Awards (\$)	All Other Compensation	Total (\$)
Alan Cohen	--	\$20,000 (1)	--	--	--
Daniel Fitzgerald		20,000 (1)			
Dan Kane		20,000 (1)			
John Nicolis		20,000 (1)			

- (1) We granted each of our non-employee directors 3,636 shares of restricted common stock on December 31, 2012 for their services as a director for which they will become vested if, and only if, the Corporation consummates a "Public Offering" or a "Deemed Liquidation Event" (as defined in the Third Amended and Restated Certificate of Incorporation of the Corporation) within ten (10) years after the Grant Date thereof.

From time to time we may engage certain members of the Board of Directors to perform services on our behalf. In such cases, we compensate the members for their services at rates no more favorable than could be obtained from unaffiliated parties. Other than as set forth above, we did not engage any members of the Board of Directors to perform services our behalf in 2012.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Intracel Holdings Corporation

Prior to our formation, our Chief Executive Officer was an employee and minority shareholder of Intracel and currently, he holds less than 1% interest in Intracel. In addition, three of our directors (Daniel Fitzgerald, Daniel Kane and Alan Cohen) are shareholders of Intracel and both Mr. Kane and Mr. Fitzgerald are directors of Intracel. Intracel is our largest stockholder holding approximately 43% of our outstanding stock.

Pursuant to the October 2007 License Agreement, the Company agreed to pay Intracel the following royalties on the Net Sales of Colon Cancer Products (as defined): (i) 3% of net sales on the first \$350.0 million of Net Sales of Colon Cancer Products occurring in the calendar year; (ii) 4% of net sales of Net Sales of Colon Cancer Products occurring in the calendar year in excess of \$350.0 million and up to and including \$700.0 million and (iii) 5% of net sales of Net Sales of Colon Cancer Products occurring in the calendar year in excess of \$750.0 million

On April 15, 2012, Intracel loaned us \$30,000 under a promissory note. The note is unsecured, non-interest bearing, and becomes due on the date on which a minimum equity raise of \$1.0 million occurs. Currently the note is in default.

Due to Officers/Directors

As of December 31, 2011, our CEO agreed to convert \$462,500 compensation owed to him into a payable that may be satisfied with issuance of restricted Common Stock, subject to restrictions yet to be defined. The restricted Common Stock issuance is contingent upon our completion of a financing round that provides us bona fide equity capital of at least \$35.0 million.

On February 14, 2012, John Nicolis, one of our directors, paid one of our vendors an outstanding amount of \$169,729. This money was used to pay for travel expenses associated with raising additional equity. In consideration of this payment, we issued Mr. Nicolis 30,860 units from our 2012 unit offering consisting of 30,860 shares of common stock and 9,258 warrants.

In April 2012, our Chief Executive Officer, Dr. Hanna, loaned us \$10,000. The non-interest bearing note is due and payable upon the date on which we receive gross proceeds of equity or debt securities of at least \$20 million. As of the date of this registration statement, \$4,099 remains outstanding under this note.

We believe that the foregoing transactions were in our best interests. Consistent with Section 2-419 of the Maryland General Corporation Law, it is our current policy that all transactions between us and our officers, directors and their affiliates will be entered into only if such transactions are approved by a majority of the disinterested directors, are approved by vote of the stockholders, or are fair to us as a corporation as of the time it is us at is authorized, approved or ratified by the board. We will conduct an appropriate review of all related party transactions on an ongoing basis, and, where appropriate, we will utilize our audit committee for the review of potential conflicts of interest.

Director Independence

Our Board of Directors has determined that each of Messrs. Nicolas, Fitzgerald, Cohen and Kane is “independent” as defined under the standards set forth in Section 121A of the American Stock Exchange Company Guide. In making this determination, the Board of Directors considered all transactions set forth under “Certain Relationships and Related Transactions” above.

MARKET PRICE OF AND DIVIDENDS OF THE REGISTRANT’S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS.

Market information

On March 8, 2013, FINRA assigned our common stock the trading symbol “VACC.” Effective March 14, 2013, the trading symbol for our common stock was changed to “VGEN”. Our stock is been approved for quotation on the OTC Link.

We consider our stock to be “thinly traded” and any reported sale prices may not be a true market-based valuation of our stock. Some of the bid quotations from the OTC Markets set forth below may reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not represent actual transactions.

2013 (OTC Link)	High Bid	Low Bid
First quarter	\$ -	\$ -
Second quarter	\$ 7.00	\$ 7.00

As of June 6, 2013, there were 31,122,755 shares of common stock outstanding, which were held by approximately 230 record stockholders. In addition, we have reserved 2,169,513 shares of common stock for issuance upon exercise of outstanding warrants.

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Transfer Restrictions under our Charter

Pursuant to the our Articles of Amendment and Restatement filed on August 1, 2012 (the "Initial Date"), from and until the date that is one hundred eighty (180) days following the effectiveness of the first Form S-1 filed by us with the SEC, no shareholder may transfer more than 5% of the shares held by it on the Initial Date, unless approved by the board of directors. Any transfer in violation of this provision will be void. The restrictions on transfer do not apply certain limited exceptions such as dispositions by gift, will or the laws of descent and distribution and for any transfer of shares acquired from the Company after the Initial Date.

Dividend Policy

We have not paid cash dividends since our inception and we do not contemplate paying dividends in the foreseeable future.

Securities Authorized for Issuance Under Equity Compensation Plans. We did not have any equity compensation plans as of the year ended December 31, 2012.

DESCRIPTION OF SECURITIES

Common Stock

We are authorized by our Certificate of Incorporation to issue 200,000,000 shares of common stock, \$0.0001 par value.

As of June 6, 2013 we had issued and outstanding approximately 31,122,755 shares of common stock. Holders of our common stock are entitled to one vote per share on all matters subject to stockholder vote. If the Board of Directors were to declare a dividend out of funds legally available therefore, all of the outstanding shares of common stock would be entitled to receive such dividend ratably. We have never declared dividends and we do not intend to declare dividends in the foreseeable future. If our business was liquidated or dissolved, holders of shares of common stock would be entitled to share ratably in assets remaining after satisfaction of our liabilities.

Pursuant to the our Articles of Amendment and Restatement filed on August 1, 2012 (the "Initial Date"), from and until the date that is one hundred eighty (180) days following the effectiveness of the first Form S-1 filed by us with the SEC, no shareholder may transfer more than 5% of the shares held by it on the Initial Date, unless approved by the board of directors. Any transfer in violation of this provision will be void. The restrictions on transfer do not apply certain limited exceptions such as dispositions by gift, will or the laws of descent and distribution and for any transfer of shares acquired from the Company after the Initial Date.

Holders of common stock do not have cumulative voting rights.

Preferred Stock

Our Certificate of Incorporation permits us to issue up to 50,000,000 shares of preferred stock, par value \$0.0001 per share. The preferred stock may be issued in any number of series, as determined by the Board of Directors, the Board may by resolution fix the designation and number of shares of any such series of preferred stock and may determine, alter or revoke the rights, preferences, privileges and restrictions pertaining to any wholly unissued series and the Board may increase or decrease the number of shares of any such series (but not below the number of shares of that series then outstanding.)

We have no preferred stock issued or outstanding.

Description of the Warrants issued in our 2012-2013 Unit Offering

2012-2013 Unit Offering Warrants

The Warrants issued in our 2012-2013 Unit Offering (with each Unit consisting of one share of common stock and 0.3 shares of common stock) enable the holder to purchase the shares of Common Stock underlying the Warrants at \$6.05 per whole share, during a five year term commencing on the final closing of the Offering. In the event a Warrant is partially exercised, a new Warrant for the remaining number of such shares will be issued upon surrender of the Warrant at the principal office of the Company. There will be no fractional share exercise. To date, the Company has sold 719,186 units, of which 566,830 units were purchased for cash and 152,356 units were purchased in consideration of cancellation of outstanding indebtedness.

The Warrant is transferable by the registered holder thereof in person or in writing, but only in the manner and subject to the limitations provided in the Warrant. Warrant transfers will be effected upon surrender of the Warrant at the Company's principal executive offices (or such other office or agency of the Company as may be designated by notice to the holder thereof). Upon any such transfer, a new Warrant of different denominations, of like tenor and representing in the aggregate the right to purchase a like number of shares of Common Stock will be issued to the transferee in exchange for the original Warrant.

Warrant holders are not entitled to vote, receive dividends, or exercise any of the rights of a stockholder of the Company for any purpose until the Warrants have been duly exercised and payment of the purchase price has been made. The Warrants are issued in unregistered form and may be presented for transfer, exchange, or exercise at the corporate office of the Company.

The Warrants may be exercised, in whole or in part, upon surrender of the Warrant on or prior to the expiration date at the offices of the Company, together with the "Form of Exercise Notice" attached to the Warrant filled out and executed as indicated, accompanied by payment of the full exercise price for the number of Warrants being exercised. Payment must be either (i) in the form of a certified or official bank check made payable to the Company or by wire transfer for the account of the Company or (ii) delivery to the Company of a written notice of an election to effect a "Cashless Exercise" (as defined in Section 1(b) of the Warrant) for the Warrant Shares specified in the Exercise Agreement.

The Warrants contain "piggyback" registration rights for the resale of the shares issuable upon exercise of the Warrants.

The Warrants contain a standard anti-dilution provision in the event the Company sells any of its shares of common stock, or securities convertible into common stock at less than the applicable exercise price of the Warrants. In such event, the exercise price of the Warrants will be adjusted as set forth in the Warrant.

Placement Agents Warrants for 2012-2013 Unit Offering

We have agreed to issue First Liberties Financial (FLF) a warrant to acquire such number of shares of common stock as is equal to 5% of the number of Units sold through FLF in the 2012-2013 Unit Offering. These warrants will be issued on terms identical to the Investor Warrants, except that the FLF Warrants have an exercise price of \$5.50. To date no warrants have been issued to FLF.

The Abell Foundation Financings

Secured Promissory Notes

Between October 26, 2011 and February 16, 2012, we sold \$1,800,000 of principal amount of secured promissory notes to The Abell Foundation. The notes had an initial 6-month term year term and bear interest at eight percent (8%) per annum; payable at maturity. Upon an event of default the interest rate increases to 10% per annum. The notes were secured by all accounts, chattel paper, deposit accounts, equipment, general intangibles, instruments, inventory, investment property and letter of credit rights. In April 2013, the maturity date on the note was extended to May 31, 2013. In consideration of the extension, we also granted Abell a security interest in our patents related to OncoVax under a Patent Security Agreement.

On May 31, 2013, the maturity date on the note was extended to July 31, 2013. In consideration of the extension, we agreed that the Notes would be paid concurrently with the closing of each issuance or sale of additional shares of capital stock, or securities directly or indirectly convertible or exchangeable for capital stock (each an “**Equity Issuance**”) occurring after May 28, 2013 in an amount equal to (a) twenty percent (20%) of the next \$3,778,771 of gross proceeds of such Equity Issuance(s), (b) twenty-five percent (25%) of the next \$6,000,000 of gross proceeds of such Equity Issuance(s), and (c) one hundred percent (100%) of the net proceeds of all Equity Issuance(s) thereafter to pay the remaining amount due under the Note, if any.

Warrants

In connection with the secured promissory notes referenced above, we issued Abell a warrant to purchase the number of shares equal to \$800,000 divided by 85% of the purchase price per share of stock sold in our first venture capital financing resulting in proceeds of not less than \$20,000,000. In connection with the January 2013 extension of maturity date, we increased the amount of shares issuable under the warrant to \$1.1 million divided by 85% of the purchase price per share of stock sold in our first venture capital financing resulting in proceeds of not less than \$25,000,000. The exercise price equals 85% of the purchase price per share in such venture capital financing, during a 10-year term. In the event a Warrant is partially exercised, a new Warrant for the remaining number of such shares will be issued upon surrender of the Warrant at the principal office of the Company. There will be no fractional share exercise.

The warrant holders are not entitled to vote, receive dividends, or exercise any of the rights of a stockholder of the Company for any purpose until the warrants have been duly exercised and payment of the purchase price has been made. The warrants are issued in unregistered form and may be presented for transfer, exchange, or exercise at the corporate office of the Company.

The Warrants may be exercised, in whole or in part, upon surrender of the Warrant on or prior to the expiration date at the offices of the Company, together with the “Form of Exercise Notice” attached to the Warrant filled out and executed as indicated, accompanied by payment of the full exercise price for the number of Warrants being exercised. Payment must be in the form of a certified or official bank check made payable to the Company or by wire transfer for the account of the Company.

Investment Agreement

On January 16, 2013, we entered into an investment agreement with The Abell Foundation, Inc. under which at the request of the investor we will issue and sell to the investor up to \$5.0 million of common stock. The number of shares issued will be based on the lowest price paid by any purchaser of shares in the any Venture Capital Financing (as defined in the agreement). The investor will not exercise this above option unless the Company has received \$25.0 million in gross proceeds under its financing arrangements with Kodiak Capital and an additional \$10.0 million from investors other than Kodiak.

Description of Other Warrants

We have issued 5-year warrants to certain officer and other providers to purchase 2,433,165 shares of our common stock, with exercise prices beginning at \$1.00 per share. In the event a Warrant is partially exercised, a new Warrant for the remaining number of such shares will be issued upon surrender of the Warrant at the principal office of the Company. There will be no fractional share exercise.

Warrant holders are not entitled to vote, receive dividends, or exercise any of the rights of a stockholder of the Company for any purpose until the Warrants have been duly exercised and payment of the purchase price has been made. The Warrants are issued in unregistered form and may be presented for transfer, exchange, or exercise at the corporate office of the Company.

The Warrants may be exercised, in whole or in part, upon surrender of the Warrant on or prior to the expiration date at the offices of the Company, together with the "Form of Exercise Notice" attached to the Warrant filled out and executed as indicated, accompanied by payment of the full exercise price for the number of Warrants being exercised. Payment must be in the form of a certified or official bank check made payable to the Company or by wire transfer for the account of the Company. In addition, these warrants contain a "cashless exercise" provision.

Bridge Loan 2012

Between April 2012 and September 2012, we issued unsecured promissory notes to several investors in the aggregate principal amount of \$1,019,000. These notes are unsecured, and the interest payable on this balance is equal to the principal amount borrowed, or \$1,019,000 for total principal and interest of \$2,038,000 due at repayment. The notes mature after a date on which a transaction occurs involving the issuance or sale of additional equity of Vaccinogen that results in at least \$20.0 million in gross proceeds. Although management anticipates that the maturity will occur by May 2013, there is no guarantee that the maturity date will occur and if the maturity date does not occur we will have no obligation to repay principal amount to investors or make the interest payment to investors. In May 2013, noteholders with an aggregate principal amount of \$419,000 in unsecured notes (with \$419,000 in accrued interest) cancelled their notes in consideration of their subscription for 152,359 Units being offered in the 2012-2013 Unit Offering.

Kodiak Investment Agreement

Equity Line of Credit

On July 18, 2012, we entered into an Investment Agreement ("**Investment Agreement**") with Kodiak. The Investment Agreement provides the Company an equity line (the "**Financing**") whereby the Company can issue and sell to Kodiak, from time to time, shares of the Company's common stock up to an aggregate purchase price of \$25.0 million (the "**Put Shares**") during the Open Period (as defined below). Under the terms of the Investment Agreement, we have the right to deliver from time to time a Put Notice to Kodiak stating the dollar amount of Put Shares the Company intends to sell to Kodiak with the price per share based on the following formula: eighty percent (80%) of the lowest daily volume-weighted average price of the Company's common stock during the period beginning on the date of the Put Notice and ending five (5) days thereafter. Under the Investment Agreement, the Company may not deliver the Put Notice until after the resale of the Put Shares has been registered pursuant to a registration statement filed with the Securities and Exchange Commission. Additionally, provided that the Investment Agreement does not terminate earlier, the Company has an eighteen (18) month period, beginning on the trading day immediately following the effectiveness of the registration statement, during which it may deliver the Put Notice or Notices to Kodiak (the "**Open Period**"). In addition, the Company cannot submit a new Put Notice until the closing of the

previous Put Notice, and in no event shall Kodiak be entitled to purchase that number of Put Shares which when added to the sum of the number of shares of common stock already beneficially owned by Kodiak would exceed 9.99% of the number of shares of common stock outstanding on the applicable closing date.

The Investment Agreement also provides that the Company shall not be entitled to deliver a Put Notice and Kodiak shall not be obligated to purchase any Put Shares unless each of the following conditions are satisfied: (i) a registration statement has been declared effective and remains effective for the resale of the Put Shares until the closing with respect to the subject Put Notice; (ii) at all times during the period beginning on the date of the Put Notice and ending on the date of the related closing, the Company's common stock has been listed on the Principal Market as defined in the Investment Agreement (which includes, among others, the Over-the-Counter Bulletin Board and the OTC Market Group's OTC Link quotation system) and shall not have been suspended from trading thereon for a period of two (2) consecutive trading days during the Open Period; (iii) the Company has complied with its obligations and is otherwise not in breach of or in default under the Investment Agreement, the Registration Rights Agreement or any other agreement executed in connection therewith; (iv) no injunction has been issued and remains in force, and no action has been commenced by a governmental authority which has not been stayed or abandoned, prohibiting the purchase or the issuance of the Put Shares; and (v) the issuance of the Shares will not violate any shareholder approval requirements of the market or exchange on which the Company's common stock are principally listed.

The Investment Agreement will terminate when any of the following events occur: (i) Kodiak has purchased an aggregate of \$25.0 million of the Company's common stock, (ii) on the date which is eighteen months (18) months following the effectiveness of the registration statement, or (iii) upon written notice from the Company to Kodiak. Similarly, this Investment Agreement, may, at the option of the non-breaching party, terminate if Kodiak or the Company commits a material breach, or becomes insolvent or enters bankruptcy proceedings.

Depending on the number of shares we issue pursuant to the Investment Agreement, it could have a significant dilutive effect upon our existing shareholders. Although the number of shares that we may issue pursuant to the equity line will vary based on our stock price (the higher our stock price, the less shares we have to issue) the information set out below indicates the potential dilutive effect to our shareholders, based on different potential future stock prices, if the full amount of the equity line is exercised.

Dilution based upon equity drawdown being accessed by Kodiak Capital and the stock price discounted to Kodiak Capital's purchase price of 80% of the lowest daily volume weighted average price (VWAP) during the pricing period. The examples below illustrate dilution based upon the last sale price for our common stock of \$5.50 and other increased/decreased prices:

\$25,000,000 Drawdown

Stock Price(Kodiak Purchase Price)	Shares Issued	Percentage of Outstanding Shares (1)
\$6.875 (\$5.50) +25%	4,545,455	12.67%
\$5.50 (\$4.80)	5,681,818	15.36%
\$4.125 (\$4.40) -25%	7,575,758	19.49%
\$2.75 (\$2.20) -50%	11,363,636	26.63%
\$1.375 (\$1.10) -75%	22,272,273	42.06%

(1) Based on 31,302,755 shares outstanding on a pro-forma basis assuming the maximum number of Shares are sold in the Offering.

Pursuant to the Registration Rights Agreement, the Company is obligated to file a registration statement

registering the resale of the Put Shares.

We had previously entered into an additional investment agreement with Kodiak Capital for an equity line financing of up to \$1 million. This agreement was terminated on May 13, 2013.

As part of the consideration for the Financing, the Company agreed to pay Kodiak a document preparation fee of \$25,000 and the Company issued Kodiak 236,364 shares of common stock.

Agreements with Organon Teknika Corporation

On October 31, 2007, Intracel Holdings Corporation entered into a letter agreement with Organon Teknika Corporation (which is now part of Merck Corporation) to settle all liabilities owed to OTC under that certain Product Supply Agreement with OTC and related agreements (the "Letter Agreement"). Under the Letter Agreement, Intracel settled all liabilities with OTC for an amount equal to \$4,000,000, of which \$500,000 was paid concurrently with execution of the Letter Agreement and \$500,000 was to be paid within 1 year of the Letter Agreement. In connection with our License Agreement and subsequent Asset Transfer Agreement with Intracel, we assumed Intracel's obligations under the Letter Agreement. At OTC's option, the second \$500,000 installment was payable in shares of our common stock. The remaining monies are to be paid upon receipt of marketing approval of OncoVAX by the United States Food and Drug Administration. Payments of these amounts were secured by the OncoVAX intellectual property and patents. Payment of the second \$500,000 has not been made, although no formal notice or assertion of default has been issued. We are currently in discussions with the secured party to resolve this matter. If any notice of default is declared, we would have 45-days to cure prior to an actual event of default.

PLAN OF DISTRIBUTION

The Shares being offering in this Offering shall be offered by our executive officers on behalf of the Company through its personal contacts and business acquaintances. The Company is not using a selling agent or finder in connection with this Offering. No sales commissions will be paid to the officers in connection with this Offering.

On order to subscribe to purchase the Shares, a prospective investor must complete, sign and deliver the executed subscription agreement, investor questionnaire and wire funds for its subscription in accordance with the instructions included in the subscription package.

Funds received from prospective investors in connection with this Offering shall be placed in the Company's account until such time as the Company determines to hold a closing at which point such funds will be released to the Company and shares sent to the investors. At any time prior to the expiration of the Offering Period following an initial closing and after acceptance by the Company of subscriptions for the sale of additional Shares one or more closings shall take place in the aforementioned manner (the initial and each subsequent closing, a "*Closing*"). In the event a subscription is not accepted by us (whether in whole or in part), the rejected subscription amount (without interest and without deduction) will be returned to the subscriber within five business days of rejection, or as soon thereafter as practicable. Subscribers will not have the use of, or earn interest on, their funds pending acceptance of their subscription.

This Offering is made only by means of this Offering Circular and prospective investors must read and rely on the information provided in this Offering Circular in connection with their decision to purchase the Shares.

State Qualification and Suitability Standards

This Offering Circular does not constitute an offer to sell or the solicitation of an offer to purchase any Shares in any jurisdiction in which, or to any person to whom, it would be unlawful to do so. An investment in the Shares involves substantial risks and possible loss by investors of their entire investment See "Risk Factors."

These Shares have not been qualified under the securities laws of any state or jurisdiction. We plan to qualify the Offering only in Delaware.

CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

LEGAL MATTERS

The validity of the common stock offered by this prospectus will be passed upon for us by Indeglia & Carney, P.C., Irvine, California.

EXPERTS

The consolidated financial statements of our company included in this prospectus and in the registration statement have been audited by BDO USA LLP, independent registered public accounting firm, to the extent and for the periods set forth in their report appearing elsewhere herein and in the registration statement, and are included in reliance on such report, given the authority of said firm as an expert in auditing and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We undertake to make available to every investor during the course of this Offering, the opportunity to ask questions of, and receive answers from us concerning the terms and conditions of this Offering and to obtain any appropriate additional information: (i) necessary to verify of the accuracy of the information contained in this Offering Circular or (ii) for any other purpose relevant to a prospective investment in the Company.

All communications or inquiries regarding the Offering should be directed to the Company at 5300 Westview Drive, Suite 406, Frederick, MD 21703. (301) 668-8400.

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Vaccinogen Inc. and Subsidiaries

Consolidated Financial Statements
Years Ended December 31, 2012 and 2011



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Vaccinogen Inc. and Subsidiaries

Consolidated Financial Statements
Years Ended December 31, 2012 and 2011

VACCINOGEN INC. AND SUBSIDIARIES

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Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders
Vaccinogen, Inc.
Frederick, Maryland

We have audited the accompanying consolidated balance sheets of Vaccinogen Inc. and subsidiaries as of December 31, 2012 and 2011 and the related consolidated statements of operations, comprehensive loss, changes in stockholders' equity (deficit), and cash flows for years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Vaccinogen Inc. and subsidiaries at December 31, 2012 and 2011, and the results of their operations and their cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has suffered recurring losses from operations, has a negative working capital, and losses are expected to continue in the future. These factors raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

BDO USA, LLP

Bethesda, Maryland
April 22, 2013

BDO USA, LLP, a Delaware limited liability partnership, is the U.S. member of BDO International Limited, a UK company limited by guarantee, and forms part of the International BDO network of independent member firms.

BDO is the brand name for the BDO network and for each of the BDO Member Firms.

**Consolidated
Financial Statements**

VACCIINOGEN INC. AND SUBSIDIARIES

Consolidated Balance Sheets

December 31,	2012	2011
Assets		
Current Assets		
Cash and cash equivalents	\$ 113,840	\$ 236,681
Restricted cash	42,044	40,481
Inventory	102,174	105,621
Prepaid expenses and other current assets	140,343	75,411
Total Current Assets	398,401	458,194
Prepaid expenses	1,301,463	-
Property and equipment, net	107,455	162,616
Intangible assets, net	69,428,831	76,132,103
Total Assets	\$ 71,236,150	\$ 76,752,913
Liabilities, Redeemable Preferred Stock, and Stockholders' Equity (Deficit)		
Current Liabilities		
Notes payable	\$ 5,300,000	\$ 4,975,373
Accounts payable	2,021,039	1,058,006
Financial instruments	2,590,655	36,940
Accrued interest	929,915	672,899
Accrued compensation	620,212	170,379
Related party payable	34,099	-
Accrued expenses and other liabilities	400,678	233,734
Total Current Liabilities	11,896,598	7,147,331
Commitments and Contingencies		
Redeemable Preferred Stock		
Series AA Preferred Stock, redeemable, convertible, \$0.0001 par value; 0 and 15,000,000 shares authorized; 0 and 913,361 share issued and outstanding at December 31, 2012 and 2011, respectively.	-	8,993,418
Series B Preferred Stock, redeemable, convertible, \$0.0001 par value; 0 and 35,000,000 shares authorized; 0 and 14,425,377 shares issued and outstanding at December 31, 2012 and 2011, respectively.	-	110,135,112
Stockholders' Equity (Deficit)		
Preferred stock, \$0.0001 par value; 50,000,000 shares authorized; 0 shares issued and outstanding	-	-
Common stock, \$0.0001 par value; 200,000,000 and 75,000,000 share authorized; 30,601,700 and 12,003,455 share issued and outstanding at December 31, 2012 and 2011, respectively.	3,060	1,200
Additional paid-in capital	138,118,424	-
Accumulated other comprehensive loss	(83,152)	(37,669)
Accumulated deficit	(78,698,780)	(49,486,479)
Total Stockholders' Equity (Deficit)	59,339,552	(49,522,948)
Total Liabilities, Redeemable Preferred Stock, and Stockholders' Equity (Deficit)	\$ 71,236,150	\$ 76,752,913

See accompanying notes to consolidated financial statements.

VACCINOGEN INC. AND SUBSIDIARIES

Consolidated Statements of Operations

<i>Years ending December 31,</i>	2012	2011
Revenues	\$ -	\$ -
Operation Expenses:		
Research and development	8,139,038	8,564,519
General and administrative	2,960,939	2,783,460
Total Operating Expenses	11,099,977	11,347,979
Loss From Operations	(11,099,977)	(11,347,979)
Loss on Financial Instruments	(1,281,916)	-
Interest and Other Expenses	(312,257)	(176,489)
Net Loss	\$ (12,694,150)	\$ (11,524,468)
Less: Accretion of preferred stock	(16,518,151)	(27,667,590)
Net loss available to common stockholders	\$ (29,212,301)	\$ (39,192,058)
Basic and diluted weighted average share outstanding	19,686,792	12,003,455
Basic and diluted loss per common share	\$ (1.48)	\$ (3.27)

See accompanying notes to consolidated financial statements.

VACCI NOGEN INC. AND SUBSIDIARIES
Consolidated Statements of Comprehensive Loss

<i>Years ended December 31,</i>	2012	2011
Comprehensive Loss		
Net loss	\$ (12,694,150)	\$ (11,524,468)
Foreign currency translation adjustments	(45,483)	34,839
	\$ (12,739,633)	\$ (11,489,629)

See accompanying notes to consolidated financial statements.

VACCINOGEN INC. AND SUBSIDIARIES

Consolidated Statements of Changes in Stockholders' (Deficit)/Equity

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity (Deficit)
	Shares	Amount				
Balance, January 1, 2011	11,893,455	\$ 1,189	\$ 7,594,709	\$ (18,458,493)	\$ (72,508)	\$ (10,935,103)
Accretion on preferred stock	-	-	(8,164,072)	(19,503,518)	-	(27,667,590)
Stock-based compensation	110,000	11	569,447	-	-	569,458
Stock dividends	-	-	(84)	-	-	(84)
Other comprehensive income	-	-	-	-	34,839	34,839
Net loss	-	-	-	(11,524,468)	-	(11,524,468)
Balance, December 31, 2011	12,003,455	\$ 1,200	\$ -	\$ (49,486,479)	\$ (37,669)	\$ (49,522,948)
Accretion on preferred stock	-	-	-	(16,518,151)	-	(16,518,151)
Conversion of preferred stock to common stock	18,163,748	1,816	135,644,865	-	-	135,646,681
Issuance of common stock to Kodiak	236,364	24	1,301,463	-	-	1,301,487
Issuance of common stock for cash	167,273	17	725,740	-	-	725,757
Conversion of payable to common stock	30,860	3	133,621	-	-	133,624
Warrants issued for services	-	-	312,735	-	-	312,735
Other comprehensive loss	-	-	-	-	(45,483)	(45,483)
Net loss	-	-	-	(12,694,150)	-	(12,694,150)
Balance, December 31, 2012	30,601,700	\$ 3,060	\$ 138,118,424	\$ (78,698,780)	\$ (83,152)	\$ 59,339,552

See accompanying notes to consolidated financial statements.

VACCINOGEN INC. AND SUBSIDIARIES

Consolidated Statements of Operations

<i>Years ending December 31,</i>	2012	2011
Cash Flows from Operating Activities		
Net loss	\$ (12,694,150)	\$ (11,524,468)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	109,817	95,656
Amortization of intangible assets	6,703,273	6,706,552
Loss on financial instruments	1,281,916	-
Stock based compensation	-	569,458
Stock based compensation - non employees	312,735	-
Non-cash interest	47,077	12,313
Changes in operating assets and liabilities, net:		
Restricted cash	(711)	(707)
Prepaid expenses and other assets	(65,420)	86,032
Accrued interest	257,017	137,691
Accounts payable and accrued expenses and other liabilities	1,775,543	405,884
Net cash use in operating activities	(2,272,903)	(3,511,589)
Cash flow from investing activities		
Purchase of property and equipment	(48,282)	(80,230)
Net cash used in investing activities	(48,282)	(80,230)
Cash flows from financing activities		
Proceeds from 2012 bridge loan	1,019,000	-
Proceeds from notes payable	300,000	1,500,000
Proceeds from issuance of preferred stock	-	1,102,448
Proceeds from issuance of common stock and warrants	920,002	-
Dividends on common stock	-	(84)
Net cash provided by financial activities	2,239,002	2,602,364
Change in foreign currency translation	(40,658)	25,378
Net decrease in cash and cash equivalents	(122,841)	(964,077)
Cash and cash equivalents, beginning of year	236,681	1,200,758
Cash and cash equivalents, end of year	\$ 113,840	\$ 236,681

See accompanying notes to consolidated financial statements.

VACCINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

1. Organization

The Business

Vaccinogen, Inc. (the "Company" or "Vaccinogen"), a biotechnology Company headquartered in Frederick, Maryland, was incorporated in the State of Delaware during 2007 for the purpose of developing therapies and vaccines to combat cancer by using the body's own immune system. On November 23, 2010, the Company changed its domicile from Delaware to Maryland by means of a merger of the Company with and into its wholly owned subsidiary Vaccinogen I, Inc., a Maryland corporation.

On October 10, 2007, the Company entered into a license agreement with Intracel Holdings Corporation ("Intracel"), a related party, for the exclusive and indefinite rights to use the OncoVAX® technology platform. OncoVAX® is an active specific immunotherapy ("ASI") that uses the patient's own cancer cells to create a vaccine that in turn is used to block the return of cancer following surgery. In June 2010, the Company entered into an agreement with Intracel (the "Asset Transfer Agreement") whereby the Company acquired title to the patents associated with the OncoVAX® (See Note 4). On October 23, 2007, Vaccinogen acquired out of bankruptcy, certain tangible assets that had been previously owned and used by Intracel's wholly owned subsidiary in the Netherlands. These assets will be used to conduct research and development and in the commercialization of OncoVAX® to produce vaccines. In connection with the acquisition of these assets, the Company formed a wholly owned subsidiary, Vaccinogen BV, for the purposes of continuing development of OncoVAX®.

2. Going Concern

The accompanying financial statements have been prepared assuming the Company will continue as a going concern. As of December 31, 2012, the Company had an accumulated deficit of approximately \$78.7 million and negative working capital of approximately \$11.5 million. Since inception, the Company has financed its activities principally from the proceeds from the issuance of equity and debt securities and loans from officers.

The Company's ability to continue as a going concern is dependent upon the Company's ability to raise additional debt and equity capital. As discussed in Note 5 to these consolidated financial statements, the Company has entered into a series of agreements with the Kodiak Capital Group, LLC ("Kodiak") to provide up to \$26 million of additional equity capital. The proceeds from the agreements with Kodiak would primarily be used to continue the Company's research and development activities including the furtherance of clinical trials using OncoVax to develop cancer related vaccines. However, Kodiak is not required to provide funding until certain conditions are met, including the registration and trading of the Company's equity securities as defined in those agreements. There can be no assurance that the Company will meet the conditions under which Kodiak will be required to provide the equity capital or that the capital available under such agreements will be sufficient to allow the Company to fund its continuing research and development activities. If the Company is unable to raise the additional equity capital from Kodiak, the Company will need to seek alternative sources of debt or equity capital. There can be no assurance that such capital will be available in sufficient amounts or on terms acceptable to the Company. These factors raise substantial doubt about the Company's ability to continue as a going concern. The accompanying financial statements do not include any adjustments relating to the recoverability of the recorded assets or the classification of liabilities that may be necessary should the Company be unable to continue as a going concern.

VACCI NOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

3. Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include accounts of Vaccinogen and its wholly owned subsidiary, Vaccinogen BV (a company incorporated in the Netherlands). All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles in the United States requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities in its financial statements. On an ongoing basis, the Company evaluates the estimates used in recording common stock warrant related liabilities, derivative financial instruments, stock based compensation, and where applicable, the fair value of assets. The Company may base such estimates on various assumptions which it believes to be reasonable under the circumstances. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid securities with a maturity of three months or less at acquisition to be cash equivalents. Cash and cash equivalents include demand deposits with financial institutions and at times the amounts may exceed federally insured deposit limits. The Company has not experienced any losses and does not believe it is exposed to any significant credit risk related to demand deposits.

Restricted Cash

Restricted cash represents monies pledged by the Company's foreign subsidiary for a lease obligation related to the manufacturing facility and to the Dutch government as required for companies with irradiator equipment.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents. The Company maintains its cash and cash equivalents with high-credit-quality financial institutions in the United States.

Cash and cash equivalents are maintained at financial institutions and, at times, balances may exceed federally insured limits. All non-interest bearing cash balances were fully insured at December 31, 2012 due to a temporary federal program in effect from December 31, 2010 through December 31, 2012. Under the program, there is no limit to the amount of insurance for eligible accounts. Beginning 2013, insurance coverage will revert to \$250,000 per depositor at each financial institution, and noninterest bearing cash balances may again exceed federally insured limits.

VACCINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Inventory

Inventory is reported at the lower of cost or market value. The Company analyzes its inventory and writes down inventory that has become obsolete, or has a cost basis in excess of its expected net realizable value and inventory quantities in excess of expected requirements. Inventory primarily consists of a product used in creating vaccines using the OncoVAX® technology platform.

Property and Equipment

Property and equipment are recorded at cost and are depreciated or amortized over their estimated useful lives using the straight-line method. Estimated useful lives are as follows:

Machinery and equipment	3 - 5 years
Automobile	3 - 5 years
Furniture and fixtures	3 years
Computers and software	3 years

Maintenance and repairs are charged to expense as incurred. Major betterments and improvements, which extend the useful life of the underlying assets, are capitalized and depreciated.

Intangible Assets

Intangible assets consist primarily of the cost of acquired patents associated with OncoVAX® to be used in research and development and the commercialization of cancer related vaccines. The Company has capitalized the cost of the acquired patents because the Company has identified alternative future research and development efforts for numerous forms of cancer which it intends to pursue and for which management believes will result in commercialization of related vaccines. Acquired patents are carried at cost less accumulated amortization. Amortization is calculated on a straight-line basis, over the estimated useful economic life of the patent, which is 15 years for OncoVAX®.

Impairment of Long-Lived Assets

Long-lived assets, including identifiable intangible assets with finite lives, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. The Company has determined that no impairment has occurred as of December 31, 2012.

Redeemable Preferred Stock

Conditionally redeemable preferred stock whose redemption is outside the control of the Company is recorded as temporary equity in accordance with Accounting Standards Codification ("ASC") Topic 480 *Distinguishing Liabilities from Equity* ("Topic 480") and Securities and Exchange Commission ("SEC") guidance contained in SEC Accounting Release Series No. 268.

VACCINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Foreign Currency Translation

The financial statements of foreign subsidiaries are maintained in their functional currency, which generally is the local currency. The assets and liabilities are translated to U.S. dollars using the exchange rate in effect at the balance sheet date. Revenues, expenses and cash flows of these operations are translated using average exchange rates during the reporting period which they occur. The resulting translation adjustments are reflected in other comprehensive loss. As of December 31, 2012, the assets and net deficit of Vaccinogen BV, excluding intercompany balances, were approximately \$177,000 and \$204,000, respectively. As of December 31, 2011, the net assets and net deficit of Vaccinogen BV, excluding intercompany balances, were approximately \$196,000 and 280,000, respectively. The net loss of Vaccinogen BV was approximately \$1.2 million and \$1.3 million for the years ended December 31, 2012 and 2011 respectively.

Revenue Recognition

To date, the Company has not earned any revenues as the use of OncoVAX® to create cancer related vaccines is still undergoing clinical trials and has not received regulatory approval for commercialization and sale.

Research and Development Expense

Research and development costs are expensed as incurred. Research and development expenses primarily include the amortization of intangible assets, cost of conducting clinical trials, compensation and related overhead for employees, consultants, facilities costs and the cost of materials purchased for research and development.

Stock-Based Compensation

The Company measures the cost of employee services received in exchange for stock options or restricted stock awards based upon the fair value of the award on the date of the grant. The Company recognizes the estimated grant date fair value of the award as stock-based compensation expense on a straight-line basis over the requisite service period, which is generally the vesting period.

The Company initially measures the cost of awards granted to non-employees based on the fair value of the award on the date of grant however such cost is re-measured at the end of each reporting period until performance is fully satisfied or services are rendered by the non-employee.

The fair value of stock options granted is calculated using the Black-Scholes option-pricing model, which requires the use of subjective assumptions including volatility, expected term, risk-free rate, and the fair value of the underlying common stock. The fair value of non-vested stock awards is determined based upon the estimated fair value of the Company's common stock.

Income Taxes

Deferred income tax assets and liabilities are determined based on differences between the financial statements and tax basis of assets and liabilities, as measured using the enacted tax rates, which are expected to be in effect when the differences reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

VACCINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

The tax effects of uncertain tax positions are recognized in the financial statements only if the position is more likely than not to be sustained on audit, based on the technical merits of the position. For tax positions meeting the more likely than not threshold, the amount recognized in the consolidated financial statements is the largest benefit that had greater than 50% likelihood of being realized. Management has not identified any uncertain tax positions with the exception of income tax return filing penalties and accordingly has established a liability under ASC 740-10 ("FIN 48"). It is the Company's accounting policy to account for ASC 740-10 related penalties and interest in other liabilities/expenses and not include it in the income tax provision of consolidated statement of operations. The Company has identified its U.S. Federal income tax return and its state return in Maryland as its major tax jurisdictions. Tax returns for fiscal years 2007 and forward are still open for examination.

Financial Instruments

Warrants Accounted for as Liabilities

Abell Warrants

In October 2011, the Company entered into a borrowing arrangement with The Abell Foundation ("Abell"). In connection with that arrangement, the Company also issued warrants (the "Abell Warrants") exercisable into common stock of the Company. In February 2012, the Company and Abell amended the agreement to provide for additional borrowings. In 2013, the borrowing arrangement was amended on two occasions, first to extend the maturity to March 31, 2013 and a second time to extend the maturity date to May 31, 2013.

The number of shares issuable pursuant to the Abell Warrants was originally determined based upon a fixed amount of \$500,000 divided by 85% of the per share price of stock sold in the next qualifying round of venture capital financing (defined as a round that raised at least \$20 million). In connection with February 2012 amendment to the borrowing arrangement, the fixed amount used to determine the ultimate number of shares into which the Abell Warrants are exercisable was increased to \$800,000. In connection with the 2013 amendments to the borrowing arrangement, the fixed amount used to determine the ultimate number of shares into which the Abell Warrants are exercisable was increased to \$1.1 million and the total proceeds of the next qualifying round of venture capital financing was increased to \$35 million. The Abell Warrants have a contractual term of 10 years and were fully vested upon issuance.

The Abell Warrants represent a fixed obligation that is to be settled through the issuance of a variable number of shares of the Company's common stock. Consistent with the provisions of Topic 480, the Company has concluded that the Abell Warrants should be accounted for as a liability. The Company is required to record the Abell Warrants at their estimated fair value at the end of each reporting period, with changes in the estimated fair value recorded in the consolidated statements of operations as a component of other income (expense). As of December 31, 2012 and 2011, the estimated fair value of the Abell Warrants was \$831,806 and \$36,940, respectively. The change in the estimated fair value of the liability of \$772,416 and zero was recorded as an expense and classified in Loss on Financial Instruments in the accompanying consolidated statements of operations for the years ended December 31, 2012 and 2011, respectively.

VACCINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Derivative Financial Instruments

The Company may enter into transactions that represent free-standing or embedded derivative financial instruments as those terms are defined in ASC Topic 815 *Derivatives and Hedging* ("Topic 815"). The Company records the estimated fair value of derivative financial instruments in its consolidated balance sheets and records changes in the estimated fair value of derivative financial instruments as income or expense in its consolidated statements of operations.

Round C Warrants

From October 2012 through December 2012, the Company issued warrants to certain investors in the common stock of the Company (the "Round C Warrants"). A total of 59,439 shares of common stock are issuable under the Round C Warrants. The Round C Warrants have an exercise price of \$6.05, a contractual term of 5 years and were fully vested upon issuance.

The terms of the Round C Warrants provide for "down-round" anti-dilution adjustments in certain situations whereby the Company sells or issues (a) stock at a price per share less than the exercise price of the Round C Warrants or (b) equity linked financial instruments with an exercise price less than the exercise price of the Round C Warrants. Consistent with the provisions of ASC Topic 815-40, the Round C Warrants are classified as derivative financial instruments. The Company is required to record the estimated fair value of derivative financial instruments at the end of each reporting period, with changes in the estimated fair value of such derivatives recorded in the consolidated statements of operations as a component of Loss on Financial Instruments. As of December 31, 2012, the estimated fair value of the liability associated with the Round C Warrants was \$230,349 and is included in derivative financial instruments in the accompanying consolidated balance sheets. There was no change in the fair value of the Round C Warrants during 2012, accordingly no gain or loss was recorded in the accompanying consolidated statements of operations.

2012 Bridge Loan

Between April 2012 and October 2012, the Company entered into transactions with various investors which resulted in the Company raising \$1,019,000 from the issuance of unsecured notes payable (collectively the "Bridge Loan"). The Bridge Loan has no contractual maturity date, and is repayable only in the event that the Company closes on a future round of equity financing which results in gross proceeds of at least \$20 million. If the Company fails to raise sufficient additional capital, there is no obligation to pay interest or repay any amount borrowed under the Bridge Loan. Should the Company be successful in raising sufficient equity capital, the Company must repay an amount to the investors equal to 2 times the amount originally raised.

The Company has classified the Bridge Loan as a derivative financial instrument. As of December 31, 2012, the estimated fair value of liability associated with the Bridge Loan was \$1,528,500 which has been recorded and included in derivative financial instruments in the accompanying consolidated balance sheet. The change in the estimated fair value of the Bridge Loan from the dates of issuance through December 31, 2012 of approximately \$509,500 has been recorded as an expense and classified in Loss on Financial Instruments in the accompanying consolidated statements of operations for the year ending December 31, 2012.

VACCINOGEN INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements

Net Loss Per Share

Basic loss per share is determined by dividing loss attributable to common stockholders by the weighted-average number of common shares outstanding during the period, without consideration of common stock equivalents. Diluted loss per share is computed by dividing the loss attributable to common stockholders by the weighted-average number of common share equivalents outstanding for the period. The treasury stock method is used to determine the dilutive effect of the Company's outstanding stock warrants, unvested restricted stock and the if-converted method is used to determine the dilutive effect of convertible preferred stock and convertible debt. The following common stock equivalents were excluded in the calculation of diluted loss per share because their effect would be anti-dilutive:

	2012	2011
Series AA preferred stock	-	1,507,666
Series B preferred stock	-	16,656,082
Convertible debt	136,799	281,690
Restricted stock awards	200,732	1,274,253
Warrants	662,212	547,505

Recent Accounting Pronouncements

In May 2011, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2011-04, Fair Value Measurement ("ASU 2011-04"), which contains amendments to achieve common fair value measurement and disclosures in U.S. GAAP and International Financial Reporting Standards. ASU 2011-04 explains how to measure fair value for financial reporting and requires certain disclosures related to fair value measurements. The guidance does not require fair value measurements in addition to those already required or permitted by other Topics. The provisions of ASU 2011-04 became effective January 1, 2012. The adoption of ASU 2011-04 did not have a material effect on the Company's consolidated results of operations, financial position or liquidity.

4. Agreements with Intracel

License Agreement

On October 10, 2007, the Company entered into an agreement (the "License Agreement") with Intracel Holdings Corporation ("Intracel"), for the exclusive and indefinite rights to license and use the OncoVAX® technology platform. OncoVAX® is an active specific immunotherapy ("ASI") that uses the patient's own cancer cells to block the return of cancer following surgery. In exchange for the rights to OncoVAX®, the Company (i) agreed to issue equity securities equal to 10% of the fully diluted capitalization of the Company, (ii) assumed liabilities of Intracel to Organon Teknika Corporation ("Organon") totaling \$4.0 million under an October 31, 2007 Letter Agreement between Intracel and Organon, (iii) agreed to pay \$450,000 in cash for settling trade payable related to the OncoVAX intellectual property, and (iv) agreed to make royalty payments to Intracel based on future sales of OncoVAX®. The terms of the securities issued to Intracel provided Intracel with anti-dilution rights with respect to its 10% ownership interest (See Note 10). The License Agreement also contained a provision such that if the Company obtained specified levels of financing in a specified time period, that title to OncoVAX® would transfer to the Company without further consideration. If the Company did not reach the specified levels of

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VACCINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

financing in the specified period of time, Intracel could cancel the License Agreement and could re-purchase the rights to OncoVAX®. The Company did not obtain the necessary financing in the period specified.

Asset Transfer Agreement and Stock Exchange Agreement

As a result of the Company's inability to raise the necessary capital under the License Agreement, the Company and Intracel negotiated amended terms to the License Agreement. On June 24, 2010, the Company and Intracel entered into the Asset Transfer Agreement pursuant to which the title to all of the intellectual property associated with OncoVAX® was transferred to the Company. Under the Asset Transfer Agreement, the Company also agreed to exchange the previously issued common stock and Series AA preferred stock representing a 10% interest in the Company for shares of its Series B preferred stock equal to a 20% interest in the Company on a fully diluted basis. The terms and conditions of the Series B preferred stock provided Intracel with anti-dilution rights with respect to its 20% ownership interest (See Note 10). In addition, the Company agreed that Intracel's ownership position (and corresponding anti-dilution rights) would increase to 50% upon failure of the Company to meet certain defined milestones, which included but were not limited to, the Company attaining specified levels of additional financing. The Company did not meet these milestones and consequently, in December 2010, was required to increase Intracel's total ownership interest in the Company to 50% through the issuance of additional shares of Series B preferred stock. As of December 31, 2012, Intracel directly owns approximately 40% of the Company on a fully diluted basis, and certain stockholders of Intracel own approximately 10% of the Company on a fully diluted basis. Intracel also continues to hold certain royalty rights associated with future commercial sales of vaccines developed using OncoVAX®.

5. Contingent Equity Lines of Credit

Initial Equity Line of Credit

On July 18, 2012, the Company entered into an Investment Agreement ("Initial Investment Agreement") with Kodiak Capital Group, LLC ("Kodiak"). The Investment Agreement provides the Company an equity line whereby the Company can issue and sell to Kodiak, from time to time, shares of the Company's common stock up to an aggregate purchase price of \$1.0 million (the "Initial Kodiak Shares") during the Initial Open Period (as defined below). Under the terms of the Investment Agreement, the Company has the right to deliver from time to time a written notice (the "Notice") to Kodiak stating the dollar amount of Initial Kodiak Shares the Company intends to sell to Kodiak with the price per share based on the following formula: eighty percent (80%) of the lowest daily volume-weighted average price of the Company's common stock during the period beginning on the date of the Notice and ending five (5) days thereafter. Under the Initial Investment Agreement, the Company may not deliver the Notice until the Company becomes quoted or listed on a Principal Market (as defined in the Initial Investment Agreement, which includes the Over-the-Counter Bulletin Board and the OTC Market Group's OTC Link quotation system) (the "Effective Date"). Additionally, provided that the Investment Agreement does not terminate earlier, the Company has a twelve (12) month period, beginning on the trading day immediately following the Effective Date, during which it may deliver the Notice or Notices to Kodiak (the "Initial Open Period"). In addition, the Company cannot submit a new Notice until the closing of the previous Notice, and in no event shall Kodiak be entitled to purchase that number of Initial Kodiak Shares which when added to the sum of the number of shares of common stock already beneficially owned by Kodiak would exceed 9.99% of the number of shares of common stock outstanding on the applicable closing date.

VACCINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

The Initial Investment Agreement also provides that the Company shall not be entitled to deliver a Notice and Kodiak shall not be obligated to purchase any Initial Kodiak Shares unless each of the following conditions are satisfied: (i) at all times during the period beginning on the date of the Notice and ending on the date of the related closing, the Company's common stock has been listed on the Principal Market and shall not have been suspended from trading thereon for a period of two (2) consecutive trading days during the Open Period; (ii) the Company has complied with its obligations and is otherwise not in breach of or in default under the Initial Investment Agreement, or any other agreement executed in connection therewith; (iii) no injunction has been issued and remains in force, and no action has been commenced by a governmental authority which has not been stayed or abandoned, prohibiting the purchase or the issuance of the Initial Kodiak Shares; and (iv) the issuance of the Shares will not violate any shareholder approval requirements of the market or exchange on which the Company's common stock are principally listed.

The Investment Agreement will terminate when any of the following events occur: (i) Kodiak has purchased an aggregate of \$1.0 million of the Company's common stock, (ii) on the date which is twelve months (12) months following the effectiveness of the registration statement, or (iii) upon written notice from the Company to Kodiak. Similarly, the Initial Investment Agreement, may, at the option of the non-breaching party, terminate if Kodiak or the Company commits a material breach, or becomes insolvent or enters bankruptcy proceedings.

Subsequent Equity Line of Credit

On July 18, 2012, the Company entered into an Investment Agreement ("Subsequent Investment Agreement") with Kodiak. The Subsequent Investment Agreement provides the Company an equity line (the "Subsequent Financing") whereby the Company can issue and sell to Kodiak, from time to time, shares of the Company's common stock up to an aggregate purchase price of \$25.0 million (the "Subsequent Kodiak Shares") during the Subsequent Open Period (as defined below). Under the terms of the Subsequent Investment Agreement, the Company has the right to deliver from time to time a Notice to Kodiak stating the dollar amount of Subsequent Kodiak Shares the Company intends to sell to Kodiak with the price per share based on the following formula: eighty percent (80%) of the lowest daily volume-weighted average price of the Company's common stock during the period beginning on the date of the Notice and ending five (5) days thereafter. Under the Subsequent Investment Agreement, the Company may not deliver the Notice until after the resale of the Subsequent Kodiak Shares has been registered pursuant to a registration statement filed with the Securities and Exchange Commission. Additionally, provided that the Subsequent Investment Agreement does not terminate earlier, the Company has an eighteen (18) month period, beginning on the trading day immediately following the effectiveness of the registration statement, during which it may deliver the Notice or Notices to Kodiak (the "Subsequent Open Period"). In addition, the Company cannot submit a new Notice until the closing of the previous Notice, and in no event shall Kodiak be entitled to purchase that number of Subsequent Kodiak Shares which when added to the sum of the number of shares of common stock already beneficially owned by Kodiak would exceed 9.99% of the number of shares of common stock outstanding on the applicable closing date.

The Subsequent Investment Agreement also provides that the Company shall not be entitled to deliver a Notice and Kodiak shall not be obligated to purchase any Subsequent Kodiak Shares unless each of the following conditions are satisfied: (i) a registration statement has been declared effective and remains effective for the resale of the Subsequent Kodiak Shares until the closing with respect to the subject Notice; (ii) at all times during the period beginning on the date of the Notice and ending on the date of the related closing, the Company's common stock has

VACCIINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

been listed on the Principal Market as defined in the Subsequent Investment Agreement (which includes, among others, the Over-the-Counter Bulletin Board and the OTC Market Group's OTC Link quotation system) and shall not have been suspended from trading thereon for a period of two (2) consecutive trading days during the Open Period; (iii) the Company has complied with its obligations and is otherwise not in breach of or in default under the Subsequent Investment Agreement, the Registration Rights Agreement or any other agreement executed in connection therewith; (iv) no injunction has been issued and remains in force, and no action has been commenced by a governmental authority which has not been stayed or abandoned, prohibiting the purchase or the issuance of the Subsequent Kodiak Shares; and (v) the issuance of the Shares will not violate any shareholder approval requirements of the market or exchange on which the Company's common stock are principally listed.

The Subsequent Investment Agreement will terminate when any of the following events occur: (i) Kodiak has purchased an aggregate of \$25.0 million of the Company's common stock, (ii) on the date which is eighteen months (18) months following the effectiveness of the registration statement, or (iii) upon written notice from the Company to Kodiak. Similarly, this Subsequent Investment Agreement, may, at the option of the non-breaching party, terminate if Kodiak or the Company commits a material breach, or becomes insolvent or enters bankruptcy proceedings.

6. Property and Equipment

Property and equipment consisted of the following:

<i>December 31,</i>	2012	2011
Machinery and equipment	\$ 753,769	\$ 724,757
Automobile	3,965	10,877
Furniture and fixtures	6,690	8,283
Computers and software	1,921	5,076
	<u>766,345</u>	<u>748,993</u>
Less accumulated depreciation	(658,890)	(586,377)
	<u>\$ 107,455</u>	<u>\$ 162,616</u>

Depreciation expense was \$109,817 and \$95,656 for the years ended December 31, 2012 and 2011, respectively.

7. Intangible Assets

Intangible assets consist of the capitalized costs associated with the acquisition of patents related to OncoVAX® (the "Intellectual Property") and the costs associated with website development and domain names.

As discussed in Note 4 to these consolidated financial statements, the total purchase price for the Intellectual Property was ultimately determined based upon the estimated fair value of the Series B preferred stock representing a 50% stock ownership in the Company, the value of cash payments made of \$450,000 and, obligations of Intracel assumed of \$4 million.

VACCINOGEN INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements

Intangible assets by major asset class were as follows at December 31, 2012:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intellectual Property	\$ 84,481,856	\$ 15,093,909	\$ 69,387,947
Other Intangible Assets	121,944	81,060	40,884
	\$ 84,603,800	\$ 15,174,969	\$ 69,428,831

Intangible assets by major asset class were as follows at December 31, 2011:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intellectual Property	\$ 84,481,856	\$ 8,395,379	\$ 76,086,477
Other Intangible Assets	121,944	76,318	45,626
	\$ 84,603,800	\$ 8,471,697	\$ 76,132,103

The amortization expense for intangible assets was approximately \$6.7 million and \$6.7 million for the years ended December 31, 2012 and 2011, respectively. The weighted average amortization period for intangible assets was 12.6 years.

The estimated future amortization relating to all intangible assets that are recorded in the consolidated balance sheets as of December 31, 2012 is as follows:

<i>Years ending December 31,</i>	
2013	\$ 6,698,530
2014	6,698,530
2015	6,698,530
2016	6,698,530
2017	6,698,530
Thereafter	35,936,181
	\$ 69,428,831

8. Notes Payable

Notes payable are as follows:

<i>December 31,</i>	2012	2011
Organon Obligation	\$ 3,500,000	\$ 3,500,000
Abell Loan	1,800,000	1,475,373
	\$ 5,300,000	\$ 4,975,373

VACCINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Organon Obligation

Organon, currently owned by Merck & Co, Inc., manufactures a key component used with the OncoVAX® technology. In 2007, in conjunction with the Agreement with Intracel, the Company assumed \$4.0 million of related liabilities from Intracel due to Organon ("Organon Obligation"). Of the \$4.0 million due to Organon, \$500,000 was paid at the time of the Agreement. The remaining \$3.5 million was due in installments with an additional \$500,000 (plus accrued interest) payable the first year but no later than one year after the agreement date of October 31, 2007. Organon may elect to receive this first \$500,000 installment in stock. Commencing one year after the earlier of the first marketing approval of OncoVAX® by the United States Food and Drug Administration or the European Medicines Agency or October 31, 2007, Vaccinogen would make an annual payment of \$1.0 million to Organon until repayment of the entire liability amount. The obligation accrued interest based on a simple annual interest rate based on the US prime lending rate, which was 3.25% as of December 31, 2012. Interest expense under this agreement was approximately \$114,000 for the years ended December 31, 2012 and December 31, 2011, respectively. This obligation was secured by the OncoVAX® Intellectual Property. While the Company has not paid the installment due one year after the Agreement, no event of default has been declared by Organon or its successors including Merck & Co, Inc. Due to the right to declare an event of default and to accelerate all amounts owed on this obligation, all amounts owed under the Agreement have been classified as current in the accompanying consolidated balance sheets. If an event of default were declared, the Company would need to pay the principal payment of \$500,000 plus accrued interest within 45 days in order to cure such de fault.

Abell Loan

On October 26, 2011, the Company obtained a \$1.5 million working capital loan from The Abell Foundation Inc. ("Abell"). The loan (the "Abell Loan") was originally due on April 26, 2012, with 8% simple interest accruing and payable on the maturity date. On February 16, 2012, Vaccinogen received an additional \$300,000, thereby increasing the amount outstanding to \$1.8 million. In January 2013, the maturity of the Abell Loan was extended to March 31, 2013. In April 2013, the borrowing arrangement was again amended to extend the maturity date to May 31, 2013, at which time all principal plus accrued interest is due in full. Payments of amounts due are required prior to the maturity date based on a percentage of proceeds received from the Company's subsequent equity financing transactions, as outlined in the agreement. The Abell Loans are secured by all accounts, chattel paper, deposit accounts, equipment, general intangibles, instruments, inventory, investment property and letter of credit rights. The amendments to the Abell Loan were accounted for as modifications as defined under ASC Topic 470-50, *Debt*,

Modifications and Extinguishments

Under the terms of the loan, in the event of default, the interest rate would increase to 10% per annum. Interest expense under the Abell Loan was approximately \$143,000 and \$20,000 for the years ended December 31, 2012 and December 31, 2011, respectively.

As described in Note 3 to these consolidated financial statements, in connection with the Abell Loan and the various amendments, the Company issued the Abell Warrants which are exercisable into common stock of the Company. The number of shares into which the Abell Warrants are exercisable was revised with each amendment to the Abell Loan and is ultimately equal \$1.1 million divided by 85% of the purchase price per share of stock sold in the Company's next venture capital financing resulting in proceeds of not less than \$35.0 million.

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Notes to Consolidated Financial Statements

The fair value of the Abell Warrants issued in connection with the Abell Loan and subsequent amendments were recorded upon issuance as a debt discount based upon the estimated fair value and are being amortized as additional interest expense using the effective interest method.

9. Fair Value Measurements

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction occurring in the most advantageous market. The Company determines fair value based on a hierarchy that prioritizes valuation techniques used to measure fair value based on observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources. Unobservable inputs reflect assumptions based on the best information available.

The three levels of the fair value hierarchy are:

Level 1 – Inputs are quoted prices for identical assets or liabilities in an active market

Level 2 – Inputs include quoted prices in active markets for similar assets and liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (interest rates and yield curves), and inputs that are derived principally from or corroborated by observable market data correlation or other means

Level 3 – Inputs that are unobservable and significant to the fair value measurement

The Company is required to record or disclose the fair value of certain assets and liabilities. The fair value guidance described above is used in measuring and recording the fair value of the liability associated with the Abell Warrants, and the fair value of the financial derivatives including the Round C Warrants and the Bridge Financing. This fair value guidance also applies to the disclosure of the fair value of financial instruments not otherwise recorded in the Company's consolidated balance sheet at fair value.

The Company's financial instruments measured on a recurring basis using fair value estimates are as follows:

Description	Total	December 31, 2012		
		Level 1	Level 2	Level 3
Abell Warrants	\$ 831,806	\$ -	\$ -	\$ 831,806
Round C Warrants	230,349	-	-	230,349
Bridge Loan	1,528,500	-	-	1,528,500
	\$ 2,590,655	\$ -	\$ -	\$ 2,590,655

Description	Total	December 31, 2011		
		Level 1	Level 2	Level 3
Abell Warrants	\$ 36,940	\$ -	\$ -	\$ 36,940
	\$ 36,940	\$ -	\$ -	\$ 36,940

VACCINOGEN INC. AND SUBSIDIARIES

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The following is a reconciliation of level 3 fair value measurements from January 1, 2011 to December 31, 2012.

	Abell Warrants	Round C Warrants	Bridge Loan
Balance, January 1, 2011	\$ -	\$ -	\$ -
Issuance of securities	36,940	-	-
Balance, December 31, 2011	36,940	-	-
Issuance of securities	22,450	230,349	1,019,000
Fair value change included in earnings	772,416	-	509,500
Balance, December 31, 2012	\$ 831,806	\$ 230,349	\$ 1,528,500

Abell Warrants and Round C Warrants

The fair value of the Abell Warrants and the Round C Warrants are estimated at the end of each reporting period using an option pricing model. More specifically, the Black-Scholes option pricing model was utilized in the valuation of the Abell Warrants and a Monte Carlo simulation methodology was utilized in the valuation of the Round C Warrants. The following assumptions were used:

	Abell Warrants		Round C Warrants	
	2012	2011	2012	2011
Volatility	90%	90%	90%	-
Exercise price	\$4.68	\$4.68	\$3.05-\$6.96	-
Stock price at December 31	\$5.71	\$1.60	\$5.71	-
Risk free interest rate	0.27%	0.25%	0.68- 0.72%	-
Dividend yield	0%	0%	0%	-
Expected life	9	10	4.8 - 5.0	-

As described in Note 3 to the consolidated financial statements, the exercise price of the Abell Warrants is ultimately dependent upon the per share price and size of future rounds of equity financing. The Black-Scholes option pricing model was used to value the Abell Warrants as management believes that it can reasonably estimate the terms and conditions of future equity offerings that would impact the valuation of the Abell Warrants. Management's ability to estimate these terms is based in part upon the terms and conditions of binding agreements to raise future equity capital in place at the time of each valuation.

As described in Note 3 to the consolidated financial statements, the Round C Warrants include a form of anti-dilution protection that may result in future adjustments to the terms of the warrants. A Monte Carlo simulation approach was used to value the Round C Warrants since the terms are subject to adjustment based on future issuances of the Company's stock. This approach incorporates a range of simulated future stock prices to derive the range of potential exercise prices used as inputs to the model.

Because of the inherent subjectivity in the assumptions used to estimate the fair value of the Abell Warrants and the Round C Warrants, the Company considers the derived fair value to have been determined using Level 3 inputs.

VACCINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Significant changes to the assumptions used in the Company's model would result in changes in the fair value of the Abell Warrants and the Round C Warrants.

Bridge Loan

The estimated fair value of the Bridge Loan was determined based upon the present value of probability weighted cash flows, using assumptions about the timing and amount of future cash flows and discount rates that management considers to be appropriate in the circumstances. Because of the inherent subjectivity in management's assumptions, the Company considers the derived fair value to have been determined using Level 3 inputs.

Significant changes to the assumptions used in the Company's model would result in changes in the fair value of Bridge Loan.

Disclosure of the Fair Value of Financial Instruments

Cash and cash equivalents, accounts receivable, and accounts payable, are carried at amounts that approximate their fair values due to the short term nature of these financial instruments. The fair value of the Abell Loan approximates its carrying value due to the short term nature of the Abell Loan's maturity. The fair value of the Organon Obligation approximates its carrying value as the note is due on demand.

10. Redeemable Preferred Stock and Stockholders' Equity (Deficit)

As of January 1, 2011, the aggregate number of shares which the Company was authorized to issue was 75,000,000 shares of common stock with par value of \$.0001 per share and 50,000,000 shares of preferred stock. The Company designated 15,000,000 shares of preferred stock as Series AA Convertible Redeemable Preferred Stock with a par value of \$.0001 per share ("Series AA") and 35,000,000 shares of preferred stock as Series B Convertible Redeemable Preferred Stock with a par value of \$.0001 per share ("Series B").

In August 2012, the Company amended and restated its Certificate of Incorporation to increase the number of shares authorized for issuance to 200,000,000 shares of common stock with a par value \$.0001 and 50,000,000 shares of preferred stock with a par value of \$.0001 per share.

Common Stock

On August 1, 2012, the Company issued 1,507,666 shares of common stock to the holders of the Series AA preferred stock in consideration for the conversion of all outstanding shares of Series AA preferred stock.

On August 1, 2012, the Company issued 16,656,082 shares of common stock to the former holders of our Series B Preferred Stock in consideration for the conversion of all outstanding shares of Series B preferred stock.

VACCINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

During 2012, the Company issued 236,364 shares of common stock to Kodiak in exchange for their commitment to enter into the equity financing agreements described in Note 5 to these consolidated financial statements. The Company estimated the fair value of the common stock issued to be approximately \$1.3 million and has recorded that value as a deferred cost. These costs will be offset against the anticipated proceeds of the equity financing agreements with Kodiak. The carrying value associated with these shares of common stock is included in long-term prepaid expenses in the accompanying consolidated balance sheet as of December 31, 2012. The amount will be written off if no proceeds are received or it is determined that financing will not be probable.

During 2012, the Company raised additional capital of \$920,002 through the issuance of 167,273 shares of common stock and common stock warrants (Round C Warrants) to purchase 50,181 shares of common stock. \$725,757 was allocated to the common stock and \$194,245 was allocated to the common stock warrants. The common stock warrants were determined to be a derivative financial instrument. In addition, the Company satisfied a payable to a board member of the Company in the amount of \$169,729 by issuing 30,860 shares of common stock and common stock warrants (Round C Warrants) exercisable into 9,258 shares of common stock. \$133,624 was allocated to the common stock and \$36,105 was allocated to the common stock warrants. The common stock warrants were determined to be a derivative financial instrument. The terms and conditions of the Round C Warrants are described in Note 3 to the consolidated financial statements.

Series AA Preferred Stock

In 2010, the Company created a class of preferred stock known as Series AA preferred stock and authorized 15,000,000 shares for issuance as Series AA preferred stock. All shares of Series AA were issued with an original purchase price of \$9.0797 per share ("Series AA Original Issuance Price"). As noted above, all shares of Series AA were converted into common stock of the Company in 2012.

Dividends - Dividends on Series AA were cumulative and accrue at a rate of 7% of the Series AA Original Issuance Price, payable in cash or through the issuance of additional shares of Series AA when and if declared. If paid in stock, the shares to be issued are calculated by dividing the accrued dividend amount by the Series AA Original Issuance Price.

Conversion - Each share of Series AA was convertible at any time at the option of the holder or automatically upon a qualified public offering. The conversion ratio was one to one, subject to adjustment for specific dilutive events. In addition, the conversion ratio would be adjusted in the event the Company issues additional Series B shares, under the Mandatory Series B issuance described below, such that the Series AA in the aggregate could convert shares of Series AA into the same percentage of the outstanding common stock, on a fully-diluted and as-converted basis, as such holders of Series AA were entitled to convert immediately prior to the issuance of the Mandatory Series B Issuance. The conversion feature was determined to be clearly and closely related to the Series AA as that term is defined under Topic 815 and, as a result, is not required to be accounted for as a free standing derivative financial instrument. Management has also determined that the conversion feature does not represent a beneficial conversion feature as defined in ASC Topic 740-20, *Debt, Beneficial Conversion* ("Topic 470-20").

VACCI NOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Voting and Board Representation - The holders of Series AA generally were entitled to vote, together with the holders of Series B and common stock. Each preferred stockholder was entitled to the number of votes equal the number of shares of common stock into which each share of Series A were convertible at the time of such vote. The holders of Series AA were entitled to elect one member to the board of directors of the Company.

Redemption - Prior to the conversion into common stock in 2012, the Series AA were subject to redemption at the option of the holder beginning February 5, 2015 for the Series AA Original Issuance price plus accrued and unpaid dividends.

Liquidation Preference - The holders of Series AA had liquidation preference over the holders of Series B and Common Stock. In the event of liquidation, holders of Series AA would be entitled to receive, prior to any distributions to the holders of Series B or common stock, an amount per share equal to the greater of (i) the Series AA Original Issuance Price plus accrued and unpaid dividends or (ii) such amount per share payable had the shares of Series AA been converted into common stock prior to liquidation.

From January 13, 2011 to October 24, 2011, the Company issued 123,015 shares of Series AA Preferred Stock to 15 third party investors in a private offering at a price of \$9.0797 per share resulting in net proceeds of approximately \$1.1 million after approximately \$14,000 in related stock issuance costs.

The activity related to Series AA Preferred Stock from January 1, 2011 through December 31, 2012 is as follows:

	Series AA Preferred Stock	
	Shares	Amount
Balance, January 1, 2011	\$ 790,346	\$ 7,299,388
Issuance of Series AA preferred stock for cash, net of issuance costs	123,015	1,102,448
Accretion on preferred stock	-	591,582
Balance, December 31, 2011	913,361	8,993,418
Accretion on preferred stock	-	415,074
Conversion of preferred stock to common stock	(913,361)	(9,408,492)
Balance, December 31, 2012	\$ -	\$ -

Series B Preferred Stock

In 2010, the Company created a class of preferred stock known as Series B preferred stock and authorized 35,000,000 shares for issuance as Series B Preferred Stock. All shares of Series B were issued pursuant to a Stock Exchange Agreement entered into concurrently with the June 2010 Asset Transfer Agreement with Intracel. As noted above, all shares of Series B were converted into common stock in 2012.

VACCI NOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

Dividends - Dividends on Series B were cumulative and accrue at a rate of 7% of \$9.0797 per share, payable in cash or through the issuance of additional shares of Series B when and if declared. If paid in stock, the shares to be issued were calculated by dividing the accrued dividend amount by \$9.0797.

Conversion - Each share of Series B was convertible at any time at the option of the holder or automatically upon a qualified public offering at a conversion ratio of one to one, subject to adjustment for specific dilutive events. The conversion feature was determined to be clearly and closely related to the Series B as that term is defined by Topic 815 and, as a result, is not required to be accounted for as a free standing derivative financial instrument. Management has also determined that the conversion feature does not represent a beneficial conversion feature as defined in Topic 470-20.

Issuance of Additional Series B - The holders of Series B had the right to receive additional shares of Series B in an amount necessary to cause the holders of Series B holders to maintain their equity ownership of the Company on a fully-diluted and as-converted following any anti-dilutive event. These anti-dilution rights are further explained below.

Voting and Board Representation - The holders of Series B generally were entitled to vote, together with the holders of Series B and common stock. Each preferred stockholder was entitled to the number of votes equal the number of shares of Common Stock into which each share of Series B were convertible at the time of such vote. The holders of Series B were entitled to elect 20% of the members to the board of directors of the Company, but not less than one member.

Redemption - Prior to conversion into common stock in 2012, the Series B were subject to redemption at the option of the holder beginning February 5, 2015 for the \$9.0797 per share plus accrued and unpaid dividends.

Liquidation Preference - The holders of Series B had liquidation preference over the holders of common stock. In the event of liquidation, holders of Series B would be entitled to receive, after payment of the Series A liquidation preference but prior to any distributions to the holders of Common Stock, an amount per share equal to the greater of (i) the Series AA Original Issuance Price plus accrued and unpaid dividends or (ii) such amount per share payable had the shares of Series B been converted into common prior to liquidation.

Anti-dilution Rights - As discussed in Note 4 to these consolidated financial statements the Series B preferred stock issued to Intracel in 2010 requires the Company to maintain Intracel's ownership interest in the Company at not less than 50% of the total outstanding equity ownership of the Company on a fully-diluted and as-converted basis. Pursuant to these provisions, rights to additional shares of Series B preferred stock in the amount of 1,972,919 shares in 2010, 233,620 shares in 2011; and 24,166 shares in 2012 accumulated in those periods, respectively. During 2012, all outstanding shares of Series B were converted to common shares. The conversion ratio was adjusted as a result of these provisions increasing the number of common shares issued by 2,230,705 shares. These anti-dilution rights expired upon conversion of the Series B preferred stock to common stock in 2012. The anti-dilution rights afforded to holders of the Series B were determined to be clearly and closely related to the Series B as that term is defined in Topic 815 and as a result these rights are not required to be accounted for as a free standing derivative financial instrument.

VACCINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

The subscription agreement for the Company's most recent financing through the issuance of common stock ("Round C") provides a form of anti-dilution protection to subscribers. Pursuant to the subscription agreement, if the market price of the Company's common stock on the effective date of the Company's initial public offering ("IPO Price") is less than \$5.50 per share, then the Company will issue to each subscriber additional shares of common stock. The number of shares issued would equal the difference between a) the number of shares that would have been issued if the price per unit was equal to the greater of the IPO Price or \$5.00 and b) the number of shares originally issued to the subscriber. The anti-dilution rights are determined to be clearly and closely related to the Round C common stock as that term is defined in Topic 815 and as a result these rights are not required to be accounted for as a free standing derivative financial instrument.

The activity related to Series B Preferred Stock from January 1, 2011 through December 31, 2012 is as follows:

	Series B Preferred Stock	
	Shares	Amount
Balance, January 1, 2011	\$ 14,425,377	\$ 83,059,104
Accretion on preferred stock	-	27,076,008
Balance, December 31, 2011	14,425,377	110,135,112
Accretion on preferred stock	-	16,103,077
Conversion of preferred stock to common stock	(14,425,377)	(126,238,189)
Balance, December 31, 2012	\$ -	\$ -

11. Stock-Based Compensation

Restricted Stock

The Company from time to time has issued shares of restricted common shares to employees. From August 2010 through December 31, 2012, the Company issued 119,734 shares of restricted common stock to employees whose vesting is contingent upon a successful initial public stock offering with a 10 year contractual life. In 2007 and 2010 the Company issued 180,000 and 1.1 million shares, respectively of restricted common stock to employees whose vesting is dependent upon future employment. Those shares generally vest over periods of 4 to 5 years.

The Company records compensation expense for the award of restricted stock based upon the awards fair value determined as the based difference in the estimated fair value of the Company's common stock and the price paid by the employee, if any, generally on the date of grant. The fair value of restricted stock awards is recognized as compensation expense over the service period which is generally the same as the vesting period. No compensation cost has been or will be recognized for the restricted stock awards whose vesting is contingent upon a successful initial public offering until such event is probable of occurring. As of December 31, 2012, management has determined that such an event is not yet probable of occurring. Compensation expense related to awards with service based vesting was zero and \$569,458 during the years ended December 31, 2012 and December 31, 2011, respectively.

VACCINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

The following table summarizes activity related to restricted-stock awards for 2011 and 2012. The weighted average fair values for the awards below are based on the fair value at the grant date of the respective awards, which is equal to the value of the Company's common stock on such date.

	2012		2011	
	Shares	Weighted Average Fair Value	Shares	Weighted Average Fair Value
Balance, beginning of year	985,190	\$ 3.59	1,080,646	\$ 6.62
Granted	14,544	\$ 5.71	14,544	\$ 1.60
Vested	-	-	(110,000)	\$ 3.65
Forfeitures	(880,000)	\$ 3.65	-	-
Balance, end of year	119,734	\$ 3.42	985,190	\$ 3.59

As of December 31, 2012, total unrecognized compensation costs related to nonvested restricted stock awards to purchase 119,734 shares of common stock was approximately \$410,000, which will be recognized upon a successful initial public offering of the Company's stock. The nonvested restricted stock awards have a weighted average remaining contractual term of 8.0 years. The total fair value of awards vested during the years ended December 31, 2012 and 2011 was approximately zero and \$569,458, respectively.

In December 2010, the Company has committed to issue \$462,500 of restricted stock, subject to restrictions yet to be defined, to an officer of the Company if and only if the Company completes a financing round that provides bona fide equity capital to the Company of at least \$35.0 million.

On July 17, 2012, the Company's board of directors approved the grant of 200,000 options to acquire Vaccinogen common stock to be awarded to existing employees. No options have been issued through December 31, 2012. On October 23, 2012, the Company committed to grant an option to purchase 20,000 shares of common stock to an employee if the Company's stock begins trading on the "Over the Counter Bulletin Board". The exercise price of the award will be equal to the Company's stock closing price on the first day of trading on the "Over the Counter Bulletin Board" and the awards will vest over four years from that date.

Stock Purchase Warrants

From time to time the Company has issued stock purchase warrants to non-employees in exchange for services rendered. As of December 31, 2012, approximately 785,575 warrants were issued and outstanding with exercise prices ranging from \$1.00 to \$5.50. To date, all warrants have been issued for past services, with the exercise prices at least equal to the then estimated fair value of the underlying security, were fully vested upon issuance, and had contractual terms ranging from 2.5 to 7.5 years. During 2012, 80,000 fully vested warrants were issued and \$312,735 of expense was recognized based on the fair value of the warrant measured on the date of grant. The fair value of the warrants was estimated on the date of grant using the Black-Scholes model assuming volatility of 90%, dividend yield of 0%, and a risk free interest rate of 0.27%.

VACCINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

The following table summarizes the warrant activity for 2012 and 2011.

	2012		2011	
	Shares	Weighted Average Fair Value	Shares	Weighted Average Fair Value
Balance, beginning of year	705,575	\$ 1.33	705,575	\$ 1.33
Granted	80,000	\$ 2.87	-	-
Balance, end of year	785,575	\$ 1.48	705,575	\$ 1.33

The following table summarizes information on warrants outstanding as of December 31, 2012:

Exercise price	Shares	Weighted Average Remaining Life	Weighted Average Exercise Price
\$1.00	705,575	2.06	\$1.00
\$5.50	80,000	4.75	\$5.50
Total	785,575		

12. Commitments and Contingencies

Leases

The Company leases office space, a manufacturing facility, and equipment under operating leases expiring in 2013. In addition, the Company leases storage facilities on a month to month basis. Rent expense was approximately \$147,000 and \$134,000 for the years ended December 31, 2012 and December 31, 2011, respectively.

Minimum future rental payments under non-cancel able operating leases, including amendments to leases entered through the date the financial statements were available to be issued, total \$123,247 for 2013.

Royalty Agreement with Intracel

Pursuant to the Agreement, the Company agreed to pay Intracel the following royalties on the Net Sales of Colon Cancer Products (as defined): (i) 3% of net sales on the first \$350.0 million of Net Sales of Colon Cancer Products occurring in the calendar year; (ii) 4% of net sales of Net Sales of Colon Cancer Products occurring in the calendar year in excess of \$350.0 million and up to and including \$750.0 million and (iii) 5% of net sales of Net Sales of Colon Cancer Products occurring in the calendar year in excess of \$750.0 million.

Royalty Agreement with Organon

The Company has agreed to pay Organon a royalty of 10% of the Net Sales of OncoVAX® (and all other TICE BCG related products, if any) until the Organon Obligation is paid in full, including interest, and 3% for 5 years thereafter.

VACCI NOGEN INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements

Litigation

The Company may be subject to certain claims arising in the ordinary course of business. The Company and a vendor are in dispute over amounts owed for services performed. A claim has been filed against the Company in the amount of approximately \$150,000. Management believes the vendor did not perform under the terms of the contract and contends that no amounts are due to the vendor. Management has offered to settle the matter for \$75,000 to be paid upon the Company's successful initial public offering and has accrued \$75,000 in the accompanying financial statements.

13. Related Party Transactions

Vaccinogen's chief executive officer is a minority shareholder of Intracel and currently, holds less than 1% interest in Intracel.

On April 15, 2012, Intracel provided an unsecured note payable in the amount of \$30,000. The note is unsecured, non-interest bearing, and becomes due on the date on which a minimum equity raise of \$1.0 million occurs. Currently the note is in default. The carrying value of the note payable to Intracel is included in related party payable in the accompanying consolidated financial statements as of December 31, 2012.

In 2012, an executive of the Company loaned the Company \$10,000. As of December 31, 2012, the balance due of \$4,099 is past due and in default. The carrying value of this amount due to the Company executive is included in related party payable in the accompanying consolidated financial statements as of December 31, 2012.

As discussed in Note 10, on February 14, 2012, a member of the board of directors of the Company, agreed to loan the Company money to pay one of the Company's vendors an outstanding amount of \$169,729. The Company subsequently issued to this board member 30,860 shares of common stock and a warrant exercisable into 9,258 warrants (Round C Warrant).

VACCI NOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

14. Income Taxes

The Company is subject to U.S. Federal, state and foreign income taxes. The provision/(benefit) for income taxes for the tax years ended December 31, 2012 and December 31, 2011 are as follows:

	December 31,	
	2012	2011
<i>Current:</i>		
Federal	\$ -	\$ -
State	-	-
Foreign	-	-
Total Current	-	-
<i>Deferred:</i>		
Federal	(3,567,528)	(3,388,520)
State	(571,329)	(542,662)
Foreign	(231,982)	(307,371)
Total Deferred	(4,370,839)	(4,238,553)
Valuation Allowance	4,370,839	4,238,553
Total Tax Provision/(Benefit)	\$ -	\$ -

The benefit for income taxes differed from the amount computed by applying the federal statutory income tax rate to loss before income taxes due to the following items for the years ended December 31, 2012 and 2011:

<i>December 31,</i>	2012	2011
Tax benefit at statutory rates	\$ (4,370,839)	\$ (4,238,553)
Change in valuation allowance	4,370,839	4,238,553
Total Tax Provision/(Benefit)	\$ -	\$ -

The Company has approximately \$3.5 million of net operating losses ("NOLs") available for federal and state purposes as of December 31, 2012, which will expire between 2027 and 2032.

The Company has approximately \$8.2 million of net operating loss ("NOL") available for foreign purposes as of December 31, 2012, which will expire between 2016 and 2021.

Pursuant to Section 382 of the Internal Revenue Code ("IRC Sec. 382"), the Company believes that it may have undergone ownership changes in the past. As a result, the use of the Company's net operating losses may be subject to an annual limitation under IRC Sec. 382.

VACCINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

The temporary differences that arise between financial statement reporting and income tax basis carrying amounts of assets and liabilities give rise to deferred income taxes. The Company's deferred income tax assets and liabilities as of December 31, 2012 and 2011 were as follows:

<i>December 31,</i>	2012	2011
Total current deferred tax assets	\$ -	\$ -
Long-term deferred tax assets:		
Start-up expenditures and amortization	11,595,539	7,682,365
U.S. net operating loss	1,388,768	1,163,084
Foreign net operating loss	1,630,858	1,398,877
Total long-term deferred income taxes:	14,615,165	10,244,326
Valuation allowance	(14,615,165)	(10,244,326)
Total Current and Deferred Income Tax Assets/(Liabilities)	\$ -	\$ -

Management assesses the available positive and negative evidence to estimate if sufficient future taxable income will be generated to utilize the existing deferred tax assets. A significant piece of the objective negative evidence evaluated was the cumulative loss incurred over the three year period ended December 31, 2012. Such objective evidence limits the ability to consider other subjective evidence such as our projection for future growth.

On the basis of this evaluation, as of December 31, 2012 and 2011, a valuation allowance of \$14.6 million and \$10.2 million has been recorded to record the portion of the deferred tax asset that is more likely than not to be realized. The amount of the deferred tax asset considered realizable, however, could be adjusted if estimates of future taxable income during the carryforward period are reduced or increased or if objective negative evidence in the form of cumulative losses is no longer present and additional weight may be given to subjective evidence such as our projections for growth.

The Company is subject to income taxes in the U.S. as well as certain state and foreign jurisdictions. Tax regulations within each jurisdiction are subject to interpretation and require significant judgment to apply.

Management has not identified any uncertain tax positions with the exception of income tax return filing penalties and accordingly has established a liability under ASC 740-10 ("FIN 48"). It is the Company's accounting policy to account for ASC 740-10 related penalties and interest in other liabilities/expenses and not include it in the income tax provision of consolidated statement of operations. The Company has net operating loss carryovers therefore, the statutes of limitation, for U.S. purposes, remain open until the net operating losses are utilized. The Company is not currently under examination by any taxing authority.

The total unrecognized tax benefits as of December 31, 2012 and 2011 were \$0, with penalties and interest accrued of \$90,000 for both years. The Company does not expect its unrecognized tax benefits to significantly increase or decrease over the next 12 months.

VACCI NOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

<i>December 31,</i>	2012	2011
Balance at January 1,	\$ 90,000	\$ 70,000
Penalties and interest	-	20,000
Balance at December 31,	\$ 90,000	\$ 90,000

The following table summarizes the open tax years for each major jurisdiction:

Jurisdiction	Open Tax Years
United States Federal	2007-2012
Switzerland	2008-2012
Netherlands	2007-2012

The Company's various tax positions could be challenged by the Internal Revenue Service ("IRS") at such time the Company becomes profitable. The Company has treated the acquisition of the OncoVAX® technology as the acquisition of a portfolio of assets and not as a trade or business. The Company has taken the position that the purchase price paid in stock represents a taxable acquisition under the Internal Revenue Code ("IRC") with a taxable basis in those assets equal to the fair market value of the stock paid. In the event the Company is challenged upon receiving a tax benefit, the Company could be subject to income tax understatement penalties.

15. Supplemental Disclosure of Cash Flow Information

For the years ended December 31, 2012 and December 31, 2011 the Company paid interest costs of \$55,241 and \$7,045, respectively.

During 2012, the Company issued 236,634 shares of common stock, valued at approximately \$1.3 million, to Kodiak in satisfaction of the commitment fund for the equity line of credit.

During 2012, the Company issued 18,163,748 shares of common stock to former holders of preferred stock in consideration for the conversion of all outstanding shares of preferred stock.

During 2012, the Company satisfied a payable to a board member of the Company in the amount of \$169,729 by issuing 30,860 shares of common stock and common stock warrants (Round C Warrants) exercisable into 9,258 shares of common stock.

16. Subsequent Events

Subsequent events were evaluated through April 22, 2013, the date the consolidated financial statements were available to be issued. In addition to events occurring after December 31, 2012 previously described herein, the following additional transactions occurred subsequent to December 31, 2012.

January 1, 2013 through April 22, 2013, the Company raised additional capital totaling approximately \$0.97 million (net of issuance costs) through the issuance of 176,697 shares of Common Stock and warrants to purchase 53,008 shares of Common Stock.

VACCIINOGEN INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

On January 16, 2013, the Company entered into an investment agreement whereby at the request of the investor the Company shall issue and sell to the investor up to \$5.0 million of common stock. The number of shares issued will be based on the lowest price paid by any purchaser of shares in the Company's Venture Capital Financing (as defined in the agreement). The investor will not exercise this above option unless the Company has received \$25.0 million dollars pursuant to the equity lines with Kodiak described in Note 5 and an additional \$10.0 million from investors other than Kodiak.

On March 20, 2013 the Company entered into an Investment Banking Agreement with John Thomas Financial (JTF) for the purpose of introducing potential investors, acting as agent with respect to private placement of securities, assist in presentations to the Company's Board of Directors and assist in the Company's efforts to have its securities listed on a national stock exchange. Upon execution of the agreement an initial non-refundable retainer of twenty-five thousand dollars (\$25,000) was paid. JTF will be compensated in cash in the amount of eight percent (8%) of gross cash proceeds and warrants to purchase a number of shares of the Company's common stock equal to five percent (5%) of the shares of common stock issued under the agreement unless the gross proceeds exceed \$7,500,000 when JTF will receive warrants to purchase a number of shares of the Company's common stock equal to ten percent (10%) of the shares of common stock issued under the agreement.

In April 2013, the board of directors authorized the Company to offer the investors in the 2012 Bridge Loan, the option to convert the amount otherwise due and payable to them in the event of a successful qualified offering, or \$2,038,000, into common stock of the Company, at a per share price equal to that provided in the Round C common stock offering, or \$5.50 per share plus 30% warrant coverage. The bridge loan holder will have until May 3, 2013 or the close of the C round, whichever comes first. In order to accommodate all bridge loan holders, the total dollar value of common stock issuable in the Round C offering was increased from \$11 million to \$13 million.

Vaccinogen, Inc. and Subsidiaries

Unaudited Condensed Consolidated Financial Statements
For the Three Months Ended March 31, 2013 and 2012

Vaccinogen, Inc. and Subsidiaries

Unaudited Condensed Consolidated Financial Statements

For the Three Months Ended March 31, 2013 and 2012

VACCINOGEN, INC. AND SUBSIDIARIES

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**Unaudited Condensed Consolidated
Financial Statements**

VACCINOGEN, INC. AND SUBSIDIARIES

Condensed Consolidated Balance Sheets

	March 31, 2013 (Unaudited)	December 31, 2012
Assets		
Current Assets		
Cash and cash equivalents	\$ 124,169	\$ 113,840
Restricted cash	40,933	42,044
Inventory	101,367	102,174
Prepaid expenses and other current assets	167,615	140,343
Total Current Assets	434,084	398,401
Prepaid expenses	1,301,463	1,301,463
Property and equipment, net	96,777	107,455
Intangible assets, net	67,753,014	69,428,831
Total Assets	\$ 69,585,338	\$ 71,236,150
Liabilities and Stockholders' Equity		
Current Liabilities		
Notes payable	\$ 5,300,000	\$ 5,300,000
Accounts payable	2,315,387	2,021,039
Financial instruments	9,128,119	2,590,655
Accrued interest	955,803	929,915
Accrued compensation	765,040	620,212
Related party payable	34,099	34,099
Accrued expenses and other liabilities	391,132	400,678
Total Current Liabilities	18,889,580	11,896,598
Total Liabilities	18,889,580	11,896,598
Commitments and Contingencies		
Stockholders' Equity		
Preferred stock, \$0.0001 par value: 50,000,000 shares authorized; 0 shares issued and outstanding		
Common stock, \$0.0001 par value; 200,000,000 and 200,000,000 shares authorized; 30,778,397 and 30,601,700 shares issued and outstanding at March 31, 2013 and December 31, 2012, respectively.	3,078	3,060
Additional paid-in capital	138,921,218	138,118,424
Accumulated other comprehensive loss	(47,689)	(83,152)
Accumulated deficit	(88,180,849)	(78,698,780)
Total Stockholders' Equity	50,695,758	59,339,552
Total Liabilities and Stockholders' Equity	\$ 69,585,338	\$ 71,236,150

See accompanying notes to unaudited condensed consolidated financial statements.

VACCINOGEN, INC. AND SUBSIDIARIES

Unaudited Condensed Consolidated Statements of Operations

	For the Three Months Ended March 31,	
	2013	2012
Revenues	\$ -	\$ -
Operating Expenses:		
Research and Development	2,073,184	2,025,004
General and administrative expenses	6,929,760	653,572
Total Operating Expenses	9,002,944	2,678,576
Loss From Operations	(9,002,944)	(2,678,576)
Loss on Financial Instruments	(413,895)	(92,368)
Interest Expense and Other Expenses	(65,230)	(131,938)
Net Loss	\$ (9,482,069)	\$ (2,902,882)
Less: Accretion of preferred stock	-	(7,023,167)
Net loss available to common stockholders	\$ (9,482,069)	\$ (9,926,049)
Basic and diluted weighted average shares outstanding	19,794,127	12,003,455
Basic and diluted loss per common share	\$ (0.48)	\$ (0.83)

See accompanying notes to unaudited condensed consolidated financial statements.



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VACCINOGEN, INC. AND SUBSIDIARIES

Unaudited Condensed Consolidated Statements of Comprehensive Loss

	For the Three Months Ended March 31,	
	2013	2012
Comprehensive Loss		
Net loss	\$ (9,482,069)	\$ (2,902,882)
Foreign currency translation adjustments	35,463	28,198
Total Comprehensive Loss	\$ (9,446,606)	\$ (2,874,684)

See accompanying notes to unaudited condensed consolidated financial statements.

VACCINOGEN, INC. AND SUBSIDIARIES

Unaudited Condensed Consolidated Statement of Changes in Stockholders' Equity For the Three Months Ended March 31, 2013

	Stockholders' Equity					
	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount				
Balance, January 1, 2013	30,601,700	\$ 3,060	\$ 138,118,424	\$ (78,698,780)	\$ (83,152)	\$ 59,339,552
Issuance of common stock for cash	176,697	18	802,794	-	-	802,812
Other comprehensive income	-	-	-	-	35,463	35,463
Net Loss	-	-	-	(9,482,069)	-	(9,482,069)
Balance, March 31, 2013	30,778,397	\$ 3,078	\$ 138,921,218	\$ (88,180,849)	\$ (47,689)	\$ 50,695,758

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See accompanying notes to unaudited condensed consolidated financial statements.

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VACCINOGEN, INC. AND SUBSIDIARIES

Unaudited Condensed Consolidated Statements of Cash Flows

	Three Months Ended March 31,	
	2013	2012
Cash Flows From Operating Activities		
Net loss	\$ (9,482,069)	\$ (2,902,882)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	7,356	10,763
Amortization of intangible assets	1,675,817	1,674,839
Loss on financial instruments	413,895	92,368
Stock based compensation - non-employees	5,954,545	-
Non-cash interest expense	-	68,825
Changes in operating assets and liabilities, net:		
Changes in restricted cash	(165)	(263)
Prepaid expenses and other assets	(28,294)	48,147
Accrued interest	25,888	75,342
Accounts payable and accrued expenses and other liabilities	431,490	447,177
	(1,001,537)	(485,684)
Cash Flows From Investing Activities		
Purchases of property and equipment	(722)	(57,823)
	(722)	(57,823)
Cash Flows From Financing Activities		
Proceeds from notes payable	-	300,000
Proceeds from issuance of common stock and warrants	971,836	-
	971,836	300,000
Impact of foreign currency translation on cash and cash equivalents	40,752	7,648
Net Increase (Decrease) in Cash and Cash Equivalents	10,329	(235,859)
Cash and Cash Equivalents, beginning of period	113,840	236,681
Cash and Cash Equivalents, end of period	\$ 124,169	\$ 82

See accompanying notes to unaudited condensed consolidated financial statements.

VACCINOGEN, INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

1. Organization

The Business

Vaccinogen, Inc. (the "Company" or "Vaccinogen"), a biotechnology Company headquartered in Frederick, Maryland, was incorporated in the State of Delaware during 2007 for the purpose of developing therapies and vaccines to combat cancer by using the body's own immune system. On November 23, 2010, the Company changed its domicile from Delaware to Maryland by means of a merger of the Company with and into its wholly owned subsidiary Vaccinogen I, Inc., a Maryland corporation.

On October 10, 2007, the Company entered into a license agreement with Intracel Holdings Corporation ("Intracel"), a related party, for the exclusive and indefinite rights to use the OncoVAX® technology platform. OncoVAX® is an active specific immunotherapy ("ASI") that uses the patient's own cancer cells to create a vaccine that in turn is used to block the return of cancer following surgery. In June 2010, the Company entered into an agreement with Intracel (the "Asset Transfer Agreement") whereby the Company acquired title to the patents associated with the OncoVAX® (See Note 4). On October 23, 2007, Vaccinogen acquired out of bankruptcy, certain tangible assets that had been previously owned and used by Intracel's wholly owned subsidiary in the Netherlands. These assets will be used to conduct research and development and in the commercialization of OncoVAX® to produce vaccines. In connection with the acquisition of these assets, the Company formed a wholly owned subsidiary, Vaccinogen BV, for the purposes of continuing development of OncoVAX®.

2. Going Concern

The accompanying unaudited condensed consolidated financial statements have been prepared assuming the Company will continue as a going concern. As of March 31, 2013, the Company had an accumulated deficit of approximately \$88.2 million and negative working capital of approximately \$18.5 million. Since inception, the Company has financed its activities principally from the proceeds from the issuance of equity and debt securities and loans from officers.

The Company's ability to continue as a going concern is dependent upon the Company's ability to raise additional debt and equity capital. As discussed in Note 5 to these unaudited condensed consolidated financial statements, the Company has entered into a series of agreements with the Kodiak Capital Group, LLC ("Kodiak") to provide up to \$26 million of additional equity capital. The proceeds from the agreements with Kodiak would primarily be used to continue the Company's research and development activities including the furtherance of clinical trials using OncoVAX® to develop cancer related vaccines. However, Kodiak is not required to provide funding until certain conditions are met, including the registration and trading of the Company's equity securities as defined in those agreements. There can be no assurance that the Company will meet the conditions under which Kodiak will be required to provide the equity capital or that the capital available under such agreements will be sufficient to allow the Company to fund its continuing research and development activities. If the Company is unable to raise the additional equity capital from Kodiak, the Company will need to seek alternative sources of debt or equity capital. There can be no assurance that such capital will be available in sufficient amounts or on terms acceptable to the Company. These factors raise substantial doubt about the Company's ability to continue as a going concern. The accompanying unaudited condensed consolidated financial statements do not include any adjustments relating to the recoverability of the recorded

VACCINOGEN, INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

assets or the classification of liabilities that may be necessary should the Company be unable to continue as a going concern.

3. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements as of March 31, 2013 and for the three months ended March 31, 2013 and 2012, respectively include the accounts of Vaccinogen, Inc. and its wholly owned subsidiary and have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission ("SEC") and, therefore, omit or condense certain disclosures and other information required under generally accepted accounting principles in the United States of America (US GAAP) for complete financial statements. These unaudited condensed consolidated financial statements should therefore be read in conjunction with the audited consolidated financial statements and the accompanying notes for the year ended December 31, 2012.

In the opinion of management, the accompanying unaudited condensed consolidated financial statements reflect all the adjustments and reclassifications necessary for a fair presentation for the periods presented in accordance with US GAAP. The results for the three months ended March 31, 2013 are not necessarily indicative of the results to be expected for the full year.

Principles of Consolidation

The unaudited condensed consolidated financial statements include accounts of Vaccinogen and its wholly owned subsidiary, Vaccinogen BV (a company incorporated in the Netherlands). All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles in the United States requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities in its financial statements. On an ongoing basis, the Company evaluates the estimates used in recording common stock warrant related liabilities, derivative financial instruments, stock based compensation, and where applicable, the fair value of assets. The Company may base such estimates on various assumptions which it believes to be reasonable under the circumstances. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid securities with a maturity of three months or less at acquisition to be cash equivalents. Cash and cash equivalents include demand deposits with financial institutions and at times the amounts may exceed federally insured deposit limits. The Company has not experienced any losses and does not believe it is exposed to any significant credit risk related to demand deposits.

VACCIINOGEN, INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

Restricted Cash

Restricted cash represents monies pledged by the Company's foreign subsidiary for a lease obligation related to the manufacturing facility and to the Dutch government as required for companies with irradiator equipment.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents. The Company maintains its cash and cash equivalents with high-credit-quality financial institutions in the United States.

Cash and cash equivalents are maintained at financial institutions and, at times, balances may exceed federally insured limits. The temporary federal program in effect from December 31, 2010 through December 31, 2012 that fully insured all non-interest bearing cash balances expired on December 31, 2012. Beginning 2013, insurance coverage will revert to \$250,000 per depositor at each financial institution, and noninterest bearing cash balances may again exceed federally insured limits.

Inventory

Inventory is reported at the lower of cost or market value. The Company analyzes its inventory and writes down inventory that has become obsolete, or has a cost basis in excess of its expected net realizable value and inventory quantities in excess of expected requirements. Inventory primarily consists of a product used in creating vaccines using the OncoVAX® technology platform.

Property and Equipment

Property and equipment are recorded at cost and are depreciated or amortized over their estimated useful lives using the straight-line method. Estimated useful lives are as follows:

Machinery and equipment	3 - 5 years
Automobile	3 - 5 years
Furniture and fixtures	3 years
Computers and software	3 years

Maintenance and repairs are charged to expense as incurred. Major betterments and improvements, which extend the useful life of the underlying assets, are capitalized and depreciated.

Intangible Assets

Intangible assets consist primarily of the cost of acquired patents associated with OncoVAX® to be used in research and development and the commercialization of cancer related vaccines. The Company has capitalized the cost of the acquired patents because the Company has identified alternative future research and development efforts for numerous forms of cancer which it intends to pursue and which management believes will result in commercialization of related vaccines. Acquired patents are carried at cost less accumulated amortization. Amortization is

VACCI NOGEN, INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

calculated on a straight-line basis, over the estimated useful economic life of the patent, which is 15 years for OncoVAX®.

Impairment of Long-Lived Assets

Long-lived assets, including identifiable intangible assets with finite lives, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. The Company has determined that no impairment has occurred as of March 31, 2013.

Foreign Currency Translation

The financial statements of foreign subsidiaries are maintained in their functional currency, which generally is the local currency. The assets and liabilities are translated to U.S. dollars using the exchange rate in effect at the balance sheet date. Revenues, expenses and cash flows of these operations are translated using average exchange rates during the reporting period which they occur. The resulting translation adjustments are reflected in other comprehensive loss. As of March 31, 2013, the assets and net deficit of Vaccinogen BV, excluding intercompany balances, were approximately \$252,000 and \$314,000, respectively. As of December 31, 2012, the net assets and net deficit of Vaccinogen BV, excluding intercompany balances, were approximately \$177,000 and 204,000, respectively. The net loss of Vaccinogen BV was approximately \$387,000 and \$273,000 for the quarters ended March 31, 2013 and 2012, respectively.

Revenue Recognition

To date, the Company has not earned any revenues as the use of OncoVAX® to create cancer related vaccines is still undergoing clinical trials and has not received regulatory approval for commercialization and sale.

Research and Development Expense

Research and development costs are expensed as incurred. Research and development expenses primarily include the amortization of intangible assets, cost of conducting clinical trials, compensation and related overhead for employees, consultants, facilities costs and the cost of materials purchased for research and development.

Stock-Based Compensation

The Company measures the cost of employee services received in exchange for stock options or restricted stock awards based upon the fair value of the award on the date of the grant. The Company recognizes the estimated grant date fair value of the award as stock-based compensation expense on a straight-line basis over the requisite service period, which is generally the vesting period.

The Company initially measures the cost of awards granted to non-employees based on the fair value of the award on the date of grant however such cost is re-measured at the end of each reporting period until performance is fully satisfied or services are rendered by the non-employee.

The fair value of stock options granted is calculated using the Black-Scholes option-pricing model, which requires the use of subjective assumptions including volatility, expected term, risk-free

VACCINOGEN, INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

rate, and the fair value of the underlying common stock. The fair value of non-vested stock awards is determined based upon the estimated fair value of the Company's common stock.

Income Taxes

Deferred income tax assets and liabilities are determined based on differences between the financial statements and tax basis of assets and liabilities, as measured using the enacted tax rates, which are expected to be in effect when the differences reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. The tax effects of uncertain tax positions are recognized in the financial statements only if the position is more likely than not to be sustained on audit, based on the technical merits of the position. For tax positions meeting the more likely than not threshold, the amount recognized in the consolidated financial statements is the largest benefit that had greater than 50% likelihood of being realized. Management has not identified any uncertain tax positions with the exception of income tax return filing penalties and accordingly has established a liability under Accounting Standards Codification ("ASC") Topic 740-10 ("FIN 48"). It is the Company's accounting policy to account for Topic 740-10 related penalties and interest in other liabilities/expenses and not include it in the income tax provision of consolidated statement of operations. The Company has identified its U.S. Federal income tax return and its state return in Maryland as its major tax jurisdictions. Tax returns for fiscal years 2007 and forward are still open for examination.

Financial Instruments

Stock Awards Accounted for as Liabilities

Abell Warrants

In October 2011, the Company entered into a borrowing arrangement with The Abell Foundation ("Abell"). In connection with that arrangement, the Company also issued warrants (the "Abell Warrants") exercisable into common stock of the Company. In February 2012, the Company and Abell amended the agreement to provide for additional borrowings. In January 2013, the maturity of the Abell Loan was extended to March 31, 2013. In April 2013, the borrowing arrangement was again amended to extend the maturity date to May 31, 2013. On May 31, 2013, the borrowing arrangement was amended to extend the maturity date to July 31, 2013, at which time all principal plus accrued interest is due in full.

The number of shares issuable pursuant to the Abell Warrants was originally determined based upon a fixed amount of \$500,000 divided by 85% of the per share price of stock sold in the next qualifying round of venture capital financing (defined as a round that raised at least \$20 million). In connection with February 2012 amendment to the borrowing arrangement, the fixed amount used to determine the ultimate number of shares into which the Abell Warrants are exercisable was increased to \$800,000. In connection with the January 2013 amendment to the borrowing arrangement, the fixed amount used to determine the ultimate number of shares into which the Abell Warrants are exercisable was increased to \$1.1 million and the total proceeds of the next qualifying round of venture capital financing was increased to \$35 million. The Abell Warrants have a contractual term of 10 years and were fully vested upon issuance.

The Abell Warrants represent a fixed obligation that is to be settled through the issuance of a variable number of shares of the Company's common stock. Consistent with the provisions of ASC Topic 480, *Distinguishing Liabilities from Equity*, the Company has concluded that the Abell

VACCINOGEN, INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

Warrants should be accounted for as a liability. The Company is required to record the Abell Warrants at their estimated fair value at the end of each reporting period, with changes in the estimated fair value recorded in the unaudited condensed consolidated statements of operations as a component of other income (expense). As of March 31, 2013 and December 31, 2012, the estimated fair value of the Abell Warrants was \$984,618 and \$831,806, respectively. The change in the carrying value of the liability includes an increase of \$275,813 related to the increase in the fixed dollar amount used to determine the number of warrants issuable associated with the January 2013 amendment, and a decrease in the estimated fair value of the liability of \$123,001 from its carrying value as of December 31, 2012. The increase in fair value attributable to the amendment to the warrant agreement has been included in the determination of the loss resulting from the deemed extinguishment of the Abell Loan in January 2013 and has been included in Loss on Financial Instruments in the accompanying unaudited condensed consolidated statement of operations for the three months ended March 31, 2013. The decrease attributable to the change in the fair value was recorded as a gain and classified in Loss on Financial Instruments in the accompanying unaudited condensed consolidated statements of operations for the three months ended March 31, 2013. The change in fair value of the Abell Warrants from December 31, 2011 to March 31, 2012, was a loss of \$92,368.

Abell Investment Option

On January 16, 2013, the Company entered into an investment agreement with the Abell under which Abell was granted an option to acquire up to \$5.0 million of common stock of the Company (the "Abell Option"). The number of shares to be issued will be based on the lowest price paid by any purchaser of shares in a subsequent round of equity financing meeting certain conditions defined in the agreement. Abell cannot exercise its rights to purchase any stock unless the Company has received \$25.0 million dollars pursuant to the equity lines with Kodiak described in Note 5 and an additional \$10.0 million from investors other than Kodiak. The term of the agreement and Abell's right to exercise is perpetual.

The Abell Option represents a fixed obligation that is to be settled through the issuance of a variable number of shares of the Company's common stock. Consistent with the provisions of ASC Topic 480, the Company has concluded that the Abell Option should be accounted for as a liability and should be recorded as the conditions necessary to trigger the holders rights to exercise are considered by management to be probable of occurring as of March 31, 2013. The Company is required to record the Abell Option at its estimated fair value at the end of each reporting period, with changes in the estimated fair value recorded in the unaudited condensed consolidated statements of operations as a component of general and administrative expenses. As of March 31, 2013, the estimated value of the Abell Option is \$5,954,545, which the Company has recorded as a liability. The Company has classified the carrying value of the Abell Option in Financial Instruments in the accompanying unaudited condensed consolidated balance sheet.

Derivative Financial Instruments

The Company may enter into transactions that represent free-standing or embedded derivative financial instruments as those terms are defined in ASC Topic 815 *Derivatives and Hedging* ("Topic 815"). The Company records the estimated fair value of derivative financial instruments in its consolidated balance sheets and records changes in the estimated fair value of derivative financial instruments as income or expense in its consolidated statements of operations.

VACCINOGEN, INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

Round C Warrants

From October 2012 through December 2012, and then again from January 2013 through March 2013, the Company issued warrants to certain investors in the common stock of the Company (the "Round C Warrants"). Round C Warrants to acquire 59,439 shares of common stock were issued in 2012 and Round C Warrants to acquire 53,008 shares of common stock were issued in the three month period ended March 31, 2013. The Round C Warrants have an exercise price of \$6.05, a contractual term of 5 years and were fully vested upon issuance.

The terms of the Round C Warrants provide for "down-round" anti-dilution adjustments in certain situations whereby the Company sells or issues (a) stock at a price per share less than the exercise price of the Round C Warrants or (b) equity linked financial instruments with an exercise price less than the exercise price of the Round C Warrants. Consistent with the provisions of ASC Topic 815-40, the Round C Warrants are classified as derivative financial instruments. The Company is required to record the estimated fair value of derivative financial instruments at the end of each reporting period, with changes in the estimated fair value of such derivatives recorded in the consolidated statements of operations as a component of Loss on Financial Instruments. As of March 31, 2013 and December 31, 2012, the estimated fair value of the liability associated with the Round C Warrants was \$354,756 and \$230,349, respectively, and is included in derivative financial instruments in the accompanying unaudited condensed consolidated balance sheets. The change in the estimated fair value of the Round C Warrants liability for the three month period ended March 31, 2013 of \$44,617 has been included as a gain and classified in Loss on Financial Instruments in the accompanying unaudited condensed consolidated statements of operations.

2012 Bridge Loan

Between April 2012 and October 2012, the Company entered into transactions with various investors which resulted in the Company raising \$1,019,000 from the issuance of unsecured notes payable (collectively the "Bridge Loan"). The Bridge Loan has no contractual maturity date, and is repayable only in the event that the Company closes on a future round of equity financing which results in gross proceeds of at least \$20 million. If the Company fails to raise sufficient additional capital, there is no obligation to pay interest or repay any amount borrowed under the Bridge Loan. Should the Company be successful in raising sufficient equity capital, the Company must repay an amount to the investors equal to 2 times the amount originally raised.

In April 2013, the board of directors authorized the Company to offer the investors in the 2012 Bridge Loan, the option to convert the amount otherwise due and payable to them in the event of a successful qualified offering, or \$2,038,000, into common stock of the Company, at a per share price equal to that provided in the Round C common stock offering, or \$5.50 per share plus 30% warrant coverage. The bridge loan holder will have until May 3, 2013 or the close of the C round, whichever comes first. In order to accommodate all bridge loan holders, the total dollar value of common stock issuable in the Round C offering was increased from \$11 million to \$13 million.

The Company has classified the Bridge Loan as a derivative financial instrument. As of March 31, 2013, and December 31, 2012, the estimated fair value of the liability associated with the Bridge Loan was \$1,834,200 and \$1,528,500 respectively, which has been recorded and included in Financial Instruments in the accompanying unaudited condensed consolidated balance sheets. The change in the estimated fair value of the Bridge Loan for the three months ended March 31,

VACCINOGEN, INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

2013 of \$305,700 has been recorded as an expense and classified in Loss on Financial Instruments in the accompanying unaudited condensed consolidated statements of operations for the three months ended March 31, 2013.

Net Loss Per Share

Basic loss per share is determined by dividing loss attributable to common stockholders by the weighted-average number of common shares outstanding during the period, without consideration of common stock equivalents. Diluted loss per share is computed by dividing the loss attributable to common stockholders by the weighted-average number of common share equivalents outstanding for the period. The treasury stock method is used to determine the dilutive effect of the Company's outstanding stock warrants, unvested restricted stock and the if-converted method is used to determine the dilutive effect of convertible preferred stock and convertible debt. The following common stock equivalents were excluded in the calculation of diluted loss per share because their effect would be anti-dilutive:

<i>For the three months ended March 31,</i>	2013	2012
Series AA preferred stock	-	1,507,666
Series B preferred stock	-	16,656,082
Convertible debt	91,324	312,500
Restricted stock awards	207,997	1,274,253
Warrants	610,467	264,591
Abell Option	223,122	-

4. Agreements with Intracel

License Agreement

On October 10, 2007, the Company entered into an agreement (the "License Agreement") with Intracel Holdings Corporation ("Intracel"), for the exclusive and indefinite rights to license and use the OncoVAX® technology platform. OncoVAX® is an active specific immunotherapy ("ASI") that uses the patient's own cancer cells to block the return of cancer following surgery. In exchange for the rights to OncoVAX®, the Company (i) agreed to issue equity securities equal to 10% of the fully diluted capitalization of the Company, (ii) assumed liabilities of Intracel to Organon Teknika Corporation ("Organon") totaling \$4.0 million under an October 31, 2007 Letter Agreement between Intracel and Organon, (iii) agreed to pay \$450,000 in cash for settling trade payable related to the OncoVAX intellectual property, and (iv) agreed to make royalty payments to Intracel based on future sales of OncoVAX®. The terms of the securities issued to Intracel provided Intracel with anti-dilution rights with respect to its 10% ownership interest (See Note 10). The License Agreement also contained a provision such that if the Company obtained specified levels of financing in a specified time period, that title to OncoVAX® would transfer to the Company without further consideration. If the Company did not reach the specified levels of financing in the specified period of time, Intracel could cancel the License Agreement and could re-purchase the rights to OncoVAX®. The Company did not obtain the necessary financing in the period specified.

VACCINOGEN, INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

Asset Transfer Agreement and Stock Exchange Agreement

As a result of the Company's inability to raise the necessary capital under the License Agreement, the Company and Intracel negotiated amended terms to the License Agreement. On June 24, 2010, the Company and Intracel entered into the Asset Transfer Agreement pursuant to which the title to all of the intellectual property associated with OncoVAX® was transferred to the Company. Under the Asset Transfer Agreement, the Company also agreed to exchange the previously issued common stock and Series AA preferred stock representing a 10% interest in the Company for shares of its Series B preferred stock equal to a 20% interest in the Company on a fully diluted basis. The terms and conditions of the Series B preferred stock provided Intracel with anti-dilution rights with respect to its 20% ownership interest (See Note 10). In addition, the Company agreed that Intracel's ownership position (and corresponding anti-dilution rights) would increase to 50% upon failure of the Company to meet certain defined milestones, which included but were not limited to, the Company attaining specified levels of additional financing. The Company did not meet these milestones and consequently, in December 2010, was required to increase Intracel's total ownership interest in the Company to 50% through the issuance of additional shares of Series B preferred stock. As of March 31, 2013, Intracel directly owns approximately 40% of the Company on a fully diluted basis, and certain stockholders of Intracel own approximately 10% of the Company on a fully diluted basis. Intracel also continues to hold certain royalty rights associated with future commercial sales of vaccines developed using OncoVAX®.

5. Contingent Equity Lines of Credit

Initial Equity Line of Credit

On July 18, 2012, the Company entered into an Investment Agreement ("Initial Investment Agreement") with Kodiak Capital Group, LLC ("Kodiak"). The Investment Agreement provides the Company an equity line whereby the Company can issue and sell to Kodiak, from time to time, shares of the Company's common stock up to an aggregate purchase price of \$1.0 million (the "Initial Kodiak Shares") during the Initial Open Period (as defined below). Under the terms of the Investment Agreement, the Company has the right to deliver from time to time a written notice (the "Notice") to Kodiak stating the dollar amount of Initial Kodiak Shares the Company intends to sell to Kodiak with the price per share based on the following formula: eighty percent (80%) of the lowest daily volume-weighted average price of the Company's common stock during the period beginning on the date of the Notice and ending five (5) days thereafter. Under the Initial Investment Agreement, the Company may not deliver the Notice until the Company becomes quoted or listed on a Principal Market (as defined in the Initial Investment Agreement, which includes the Over-the-Counter ("OTC") Bulletin Board and the OTC Market Group's OTC Link quotation system) (the "Effective Date"). Additionally, provided that the Investment Agreement does not terminate earlier, the Company has a twelve (12) month period, beginning on the trading day immediately following the Effective Date, during which it may deliver the Notice or Notices to Kodiak (the "Initial Open Period"). In addition, the Company cannot submit a new Notice until the closing of the previous Notice, and in no event shall Kodiak be entitled to purchase that number of Initial Kodiak Shares which when added to the sum of the number of shares of common stock already beneficially owned by Kodiak would exceed 9.99% of the number of shares of common stock outstanding on the applicable closing date.

The Initial Investment Agreement also provides that the Company shall not be entitled to deliver a Notice and Kodiak shall not be obligated to purchase any Initial Kodiak Shares unless each of the

VACCINOGEN, INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

following conditions are satisfied: (i) at all times during the period beginning on the date of the Notice and ending on the date of the related closing, the Company's common stock has been listed on the Principal Market and shall not have been suspended from trading thereon for a period of two (2) consecutive trading days during the Open Period; (ii) the Company has complied with its obligations and is otherwise not in breach of or in default under the Initial Investment Agreement, or any other agreement executed in connection therewith; (iii) no injunction has been issued and remains in force, and no action has been commenced by a governmental authority which has not been stayed or abandoned, prohibiting the purchase or the issuance of the Initial Kodiak Shares; and (iv) the issuance of the Shares will not violate any shareholder approval requirements of the market or exchange on which the Company's common stock are principally listed.

The Investment Agreement will terminate when any of the following events occur: (i) Kodiak has purchased an aggregate of \$1.0 million of the Company's common stock, (ii) on the date which is twelve months (12) months following the effectiveness of the registration statement, or (iii) upon written notice from the Company to Kodiak. Similarly, the Initial Investment Agreement, may, at the option of the non-breaching party, terminate if Kodiak or the Company commits a material breach, or becomes insolvent or enters bankruptcy proceedings.

Subsequent Equity Line of Credit

On July 18, 2012, the Company entered into an Investment Agreement ("Subsequent Investment Agreement") with Kodiak. The Subsequent Investment Agreement provides the Company an equity line (the "Subsequent Financing") whereby the Company can issue and sell to Kodiak, from time to time, shares of the Company's common stock up to an aggregate purchase price of \$25.0 million (the "Subsequent Kodiak Shares") during the Subsequent Open Period (as defined below). Under the terms of the Subsequent Investment Agreement, the Company has the right to deliver from time to time a Notice to Kodiak stating the dollar amount of Subsequent Kodiak Shares the Company intends to sell to Kodiak with the price per share based on the following formula: eighty percent (80%) of the lowest daily volume-weighted average price of the Company's common stock during the period beginning on the date of the Notice and ending five (5) days thereafter. Under the Subsequent Investment Agreement, the Company may not deliver the Notice until after the resale of the Subsequent Kodiak Shares has been registered pursuant to a registration statement filed with the Securities and Exchange Commission. Additionally, provided that the Subsequent Investment Agreement does not terminate earlier, the Company has an eighteen (18) month period, beginning on the trading day immediately following the effectiveness of the registration statement, during which it may deliver the Notice or Notices to Kodiak (the "Subsequent Open Period"). In addition, the Company cannot submit a new Notice until the closing of the previous Notice, and in no event shall Kodiak be entitled to purchase that number of Subsequent Kodiak Shares which when added to the sum of the number of shares of common stock already beneficially owned by Kodiak would exceed 9.99% of the number of shares of common stock outstanding on the applicable closing date.

The Subsequent Investment Agreement also provides that the Company shall not be entitled to deliver a Notice and Kodiak shall not be obligated to purchase any Subsequent Kodiak Shares unless each of the following conditions are satisfied: (i) a registration statement has been declared effective and remains effective for the resale of the Subsequent Kodiak Shares until the closing with respect to the subject Notice; (ii) at all times during the period beginning on the date of the Notice and ending on the date of the related closing, the Company's common stock has been listed on the Principal Market as defined in the Subsequent Investment Agreement (which includes, among others, the Over-the-Counter Bulletin Board and the OTC Market Group's OTC

VACCINOGEN, INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

Link quotation system) and shall not have been suspended from trading thereon for a period of two (2) consecutive trading days during the Open Period; (iii) the Company has complied with its obligations and is otherwise not in breach of or in default under the Subsequent Investment Agreement, the Registration Rights Agreement or any other agreement executed in connection therewith; (iv) no injunction has been issued and remains in force, and no action has been commenced by a governmental authority which has not been stayed or abandoned, prohibiting the purchase or the issuance of the Subsequent Kodiak Shares; and (v) the issuance of the Shares will not violate any shareholder approval requirements of the market or exchange on which the Company's common stock are principally listed.

The Subsequent Investment Agreement will terminate when any of the following events occur: (i) Kodiak has purchased an aggregate of \$25.0 million of the Company's common stock, (ii) on the date which is eighteen months (18) months following the effectiveness of the registration statement, or (iii) upon written notice from the Company to Kodiak. Similarly, this Subsequent Investment Agreement, may, at the option of the non-breaching party, terminate if Kodiak or the Company commits a material breach, or becomes insolvent or enters bankruptcy proceedings.

6. Property and Equipment

Property and equipment consisted of the following:

	March 31, 2013	December 31, 2012
Machinery and equipment	\$ 742,728	\$ 753,769
Automobile	3,845	3,965
Furniture and fixtures	6,690	6,690
Computers and software	1,386	1,921
	754,649	766,345
Less accumulated depreciation	(657,872)	(658,890)
	\$ 96,777	\$ 107,455

Depreciation expense was \$7,356 and \$10,763 for the three month ended March 31, 2013 and 2012, respectively.

7. Intangible Assets

Intangible assets consist of the capitalized costs associated with the acquisition of patents related to OncoVAX® (the "Intellectual Property") and the costs associated with website development and domain names.

As discussed in Note 4 to these unaudited condensed consolidated financial statements, the total purchase price for the Intellectual Property was ultimately determined based upon the estimated fair value of the Series B preferred stock representing a 50% stock ownership in the Company, the value of cash payments made of \$450,000 and, obligations of Intracel assumed of \$4 million. Intangible assets by major asset class were as follows at March 31, 2013:

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Notes to Unaudited Condensed Consolidated Financial Statements

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intellectual Property	\$ 84,481,856	\$ 16,768,540	\$ 67,713,316
Other Intangible Assets	121,944	82,246	39,698
	\$ 84,603,800	\$ 16,850,786	\$ 67,753,014

Intangible assets by major asset class were as follows at December 31, 2012:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intellectual Property	\$ 84,481,856	\$ 15,093,909	\$ 69,387,947
Other Intangible Assets	121,944	81,060	40,884
	\$ 84,603,800	\$ 15,174,969	\$ 69,428,831

The amortization expense for intangible assets was approximately \$1.7 million for both the three months ended March 31, 2013 and 2012, respectively. The weighted average amortization period for intangible assets was 12.3 years.

The estimated future amortization relating to all intangible assets that are recorded in the unaudited condensed consolidated balance sheets as of March 31, 2013 is as follows:

<i>Years ending December 31,</i>	
2013	\$ 5,022,713
2014	6,698,530
2015	6,698,530
2016	6,698,530
2017	6,698,530
Thereafter	35,936,181
	\$ 67,753,014

VACCINOGEN, INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

8. Notes Payable

Notes payable are as follows:

	March 31, 2013	December 31, 2012
Organon Obligation	\$ 3,500,000	\$ 3,500,000
Abell Loan	1,800,000	1,800,000
	<u>\$ 5,300,000</u>	<u>\$ 5,300,000</u>

Organon Obligation

Organon, currently owned by Merck & Co, Inc., manufactures a key component used with the OncoVAX® technology. In 2007, in conjunction with the Agreement with Intracel, the Company assumed \$4.0 million of related liabilities from Intracel due to Organon ("Organon Obligation"). Of the \$4.0 million due to Organon, \$500,000 was paid at the time of the Agreement. The remaining \$3.5 million was due in installments with an additional \$500,000 (plus accrued interest) payable the first year but no later than one year after the agreement date of October 31, 2007. Organon may elect to receive this first \$500,000 installment in stock. Commencing one year after the earlier of the first marketing approval of OncoVAX® by the United States Food and Drug Administration or the European Medicines Agency or October 31, 2007, Vaccinogen would make an annual payment of \$1.0 million to Organon until repayment of the entire liability amount. The obligation accrued interest based on a simple annual interest rate based on the US prime lending rate, which was 3.25% as of March 31, 2013. Interest expense related to this agreement was \$28,438 and \$28,438 for the three months ended March 31, 2013 and 2012, respectively. This obligation was secured by the OncoVAX® Intellectual Property. While the Company has not paid the installment due one year after the Agreement, no event of default has been declared by Organon or its successors including Merck & Co, Inc. Due to the right to declare an event of default and to accelerate all amounts owed on this obligation, all amounts owed under the Agreement have been classified as current in the accompanying unaudited condensed consolidated balance sheets. If an event of default were declared, the Company would need to pay the principal payment of \$500,000 plus accrued interest within 45 days in order to cure such default.

Abell Loan

On October 26, 2011, the Company obtained a \$1.5 million working capital loan from The Abell Foundation Inc. ("Abell"). The loan (the "Abell Loan") was originally due on April 26, 2012, with 8% simple interest accruing and payable on the maturity date. On February 16, 2012, Vaccinogen received an additional \$300,000, thereby increasing the amount outstanding to \$1.8 million. In January 2013, the maturity of the Abell Loan was extended to March 31, 2013. In April 2013, the borrowing arrangement was again amended to extend the maturity date to May 31, 2013. On May 31, 2013, the borrowing arrangement was amended to extend the maturity date to July 31, 2013, at which time all principal plus accrued interest is due in full. The 2012 amendment to the Abell Loan was accounted for as a modification and the January 2013 amendment was accounted for as an extinguishment as those terms are defined under ASC Topic 470-50, *Debt, Modifications and Extinguishments*.

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Notes to Unaudited Condensed Consolidated Financial Statements

Payments of amounts due are required prior to the maturity date based on a percentage of proceeds received from the Company's subsequent equity financing transactions, as outlined in the agreement. The Abell Loans are secured by all accounts, chattel paper, deposit accounts, equipment, general intangibles, instruments, inventory, investment property and letter of credit rights.

Under the terms of the loan, in the event of default, the interest rate increases to 10% per annum. Interest expense under the Abell Loan was \$36,000 and \$35,308 for the three months ended March 31, 2013 and 2012, respectively.

As described in Note 3 to these unaudited condensed consolidated financial statements, in connection with the Abell Loan and the various amendments, the Company issued the Abell Warrants which are exercisable into common stock of the Company. The number of shares into which the Abell Warrants are exercisable was revised with each amendment to the Abell Loan and is ultimately equal \$1.1 million divided by 85% of the purchase price per share of stock sold in the Company's next venture capital financing resulting in proceeds of not less than \$35.0 million.

The fair value of the Abell Warrants issued in connection with the Abell Loan in 2011 and subsequent amendment in February 2012 were recorded upon issuance as a debt discount based upon the estimated fair value and were amortized as additional interest expense through the original maturity date. The Company recorded \$68,825 of additional interest expense related to the amortization of debt discount for the three months ended March 31, 2012. The fair value of the Abell Warrants of \$275,813 issued in connection with the January 2013 amendment were included in the determination of the loss associated with the deemed extinguishment of the Abell Loan at that time. That loss has been classified within Loss on Financial instruments in the accompanying unaudited condensed consolidated statements of operations for the three months ended March 31, 2013.

9. Fair Value Measurements

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction occurring in the most advantageous market. The Company determines fair value based on a hierarchy that prioritizes valuation techniques used to measure fair value based on observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources. Unobservable inputs reflect assumptions based on the best information available.

The three levels of the fair value hierarchy are:

Level 1 – Inputs are quoted prices for identical assets or liabilities in an active market

Level 2 – Inputs include quoted prices in active markets for similar assets and liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (interest rates and yield curves), and inputs that are derived principally from or corroborated by observable market data correlation or other means

Level 3 – Inputs that are unobservable and significant to the fair value measurement

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The Company is required to record or disclose the fair value of certain assets and liabilities. The fair value guidance described above is used in measuring and recording the fair value of the liability associated with the Abell Warrants, and the fair value of the financial derivatives including the Round C Warrants and the Bridge Financing. This fair value guidance also applies to the disclosure of the fair value of financial instruments not otherwise recorded in the Company's consolidated balance sheet at fair value.

The Company's financial instruments measured on a recurring basis using fair value estimates are as follows:

Description	Total	March 31, 2013		
		Level 1	Level 2	Level 3
Abell Warrants	\$ 984,618	\$ -	\$ -	\$ 984,618
Abell Option	5,954,545	-	-	5,954,545
Round C Warrants	354,756	-	-	354,756
Bridge Loan	1,834,200	-	-	1,834,200
	\$ 9,128,119	\$ -	\$ -	\$ 9,128,119

Description	Total	December 31, 2012		
		Level 1	Level 2	Level 3
Abell Warrants	\$ 831,806	\$ -	\$ -	\$ 831,806
Round C Warrants	230,349	-	-	230,349
Bridge Loan	1,528,500	-	-	1,528,500
	\$ 2,590,655	\$ -	\$ -	\$ 2,590,655

The following is a reconciliation of level 3 fair value measurements for the three months ended March 31, 2013 and 2012, respectively.

	Abell Warrants	Abell Options	Round C Warrants	Bridge Loan
Balance, December 31, 2012	\$ 831,806	\$ -	\$ 230,349	\$ 1,528,500
Issuance of securities	275,813	5,954,545	169,024	-
Fair value change included in earnings	(123,001)	-	(44,617)	305,700
Balance, March 31, 2013	\$ 984,618	\$ 5,954,545	\$ 354,756	\$ 1,834,200

	Abell Warrants	Round C Warrants	Bridge Loan
Balance, December 31, 2011	\$ 36,940	\$ -	\$ -
Issuance of securities	79,022	-	-
Fair value change included in earnings	92,368	-	-
Balance, March 31, 2012	\$ 208,330	\$ -	\$ -

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Abell Warrants and Round C Warrants

The fair value of the Abell Warrants and the Round C Warrants are estimated at the end of each reporting period using an option pricing model. More specifically, the Black-Scholes option pricing model was utilized in the valuation of the Abell Warrants and a Monte Carlo simulation methodology was utilized in the valuation of the Round C Warrants. The following assumptions were used to estimate the fair value of the warrants as of March 31, 2013 and December 31, 2012:

	Abell Warrants		Round C Warrants	
	March 31, 2013	December 31, 2012	March 31, 2013	December 31,2012
Volatility	80%	90%	90%	90%
Exercise price	\$4.68	\$4.68	\$6.05	\$3.05-\$6.96
Stock price	\$5.42	\$5.71	\$5.42	5.71
Risk free interest rate	1.58-1.83%	0.27%	0.66-0.73%	0.68-.072%
Dividend yield	0%	0%	0%	0%
Expected life	8.6-9.8	9.0	4.6-5.0	4.8-5.0

As described in Note 3 to these unaudited condensed consolidated financial statements, the exercise price of the Abell Warrants is ultimately dependent upon the per share price and size of future rounds of equity financing. The Black-Scholes option pricing model was used to value the Abell Warrants as management believes that it can reasonably estimate the terms and conditions of future equity offerings that would impact the valuation of the Abell Warrants. Management's ability to estimate these terms is based in part upon the terms and conditions of binding agreements to raise future equity capital in place at the time of each valuation.

As described in Note 3 to these unaudited condensed consolidated financial statements, the Round C Warrants include a form of anti-dilution protection that may result in future adjustments to the terms of the warrants. A Monte Carlo simulation approach was used to value the Round C Warrants since the terms are subject to adjustment based on future issuances of the Company's stock. This approach incorporates a range of simulated future stock prices to derive the range of potential exercise prices used as inputs to the model.

Because of the inherent subjectivity in the assumptions used to estimate the fair value of the Abell Warrants and the Round C Warrants, the Company considers the derived fair value to have been determined using Level 3 inputs.

Significant changes to the assumptions used in the Company's model would result in changes in the fair value of the Abell Warrants and the Round C Warrants.

Abell Option

As described in Note 3 to these unaudited condensed consolidated financial statements, the number of shares issuable under the Abell Option is dependent upon the lowest price paid for shares in a future qualified round of equity financing. Management has valued the Abell Option based upon an estimate of the fair value of the Company's underlying stock because management believes it can reasonably estimate the occurrence and the terms of the future equity offering necessary to trigger Abell's right to exercise the option and establish an exercise price, and because the right to exercise the option has no expiration.

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Because of the inherent subjectivity in the assumptions used to estimate the fair value of the Company's common stock, the Company considers the derived fair value to have been determined using Level 3 inputs.

Significant changes to the assumptions used in the Company's model would result in changes in the fair value of the Abell Option.

Bridge Loan

The estimated fair value of the Bridge Loan was determined based upon the present value of probability weighted cash flows, using assumptions about the timing and amount of future cash flows and discount rates that management considers to be appropriate in the circumstances. Because of the inherent subjectivity in management's assumptions, the Company considers the derived fair value to have been determined using Level 3 inputs.

Significant changes to the assumptions used in the Company's model would result in changes in the fair value of Bridge Loan.

Disclosure of the Fair Value of Financial Instruments

Cash and cash equivalents, accounts receivable, and accounts payable, are carried at amounts that approximate their fair values due to the short term nature of these financial instruments. The fair value of the Abell Loan approximates its carrying value due to the short term nature of the Abell Loan's maturity. The fair value of the Organon Obligation approximates its carrying value as the note is due on demand.

10. Redeemable Preferred Stock and Stockholders' Equity

As of January 1, 2011, the aggregate number of shares which the Company was authorized to issue was 75,000,000 shares of common stock with par value of \$.0001 per share and 50,000,000 shares of preferred stock. The Company designated 15,000,000 shares of preferred stock as Series AA Convertible Redeemable Preferred Stock with a par value of \$.0001 per share ("Series AA") and 35,000,000 shares of preferred stock as Series B Convertible Redeemable Preferred Stock with a par value of \$.0001 per share ("Series B").

In August 2012, the Company amended and restated its Certificate of Incorporation to increase the number of shares authorized for issuance to 200,000,000 shares of common stock with a par value \$.0001 and 50,000,000 shares of preferred stock with a par value of \$.0001 per share.

Common Stock

On August 1, 2012, the Company issued 1,507,666 shares of common stock to the holders of the Series AA preferred stock in consideration for the conversion of all outstanding shares of Series AA preferred stock.

On August 1, 2012, the Company issued 16,656,082 shares of common stock to the former holders of our Series B Preferred Stock in consideration for the conversion of all outstanding shares of Series B preferred stock.

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In August 2012, the Company issued 236,364 shares of common stock to Kodiak in exchange for their commitment to enter into the equity financing agreements described in Note 5 to these unaudited condensed consolidated financial statements. The Company estimated the fair value of the common stock issued to be approximately \$1.3 million and has recorded that value as a deferred cost. These costs will be offset against the anticipated proceeds of the equity financing agreements with Kodiak. The carrying value associated with these shares of common stock is included in long-term prepaid expenses in the accompanying unaudited condensed consolidated balance sheet as of December 31, 2012. The amount will be written off if no proceeds are received or it is determined that financing will not be probable.

From October 2012 through December 2012, the Company raised additional capital totaling approximately \$920,002 through the issuance of 167,273 shares of common stock (Round C Stock) and common stock warrants (Round C Warrants) to purchase 50,181 shares of common stock. The Company allocated \$725,757 of the total proceeds to the common stock and \$194,245 of the total proceeds to the common stock warrants.

From January 1, 2013 through March 31, 2013, the Company raised additional capital totaling approximately \$972,000 (net of issuance costs) from the issuance of 176,697 shares of Round C Stock and additional Round C Warrants to purchase 53,008 shares of common stock. The Company allocated \$802,812 of the total 2013 proceeds to the common stock and \$169,024 of the total proceeds to the common stock warrants.

In addition, in December of 2012, the Company satisfied a payable to a board member of the Company in the amount of \$169,729 by issuing 30,860 shares of Round C Stock and Round C Warrants exercisable into 9,258 shares of common stock. The Company allocated \$133,624 to the common stock and \$36,105 of the total proceeds to the common stock warrants.

The Round C Warrants described above are derivative financial instruments. The terms and conditions of the Round C Warrants are described in Note 3 to the consolidated financial statements.

On March 20, 2013 the Company entered into an Investment Banking Agreement with John Thomas Financial ("JTF") for the purpose of introducing potential investors, acting as agent with respect to private placement of securities, assist in presentations to the Company's Board of Directors and assist in the Company's efforts to have its securities listed on a national stock exchange. Upon execution of the agreement an initial non-refundable retainer of twenty-five thousand dollars (\$25,000) was paid. JTF will be compensated in cash in the amount of eight percent (8%) of gross cash proceeds and warrants to purchase a number of shares of the Company's common stock equal to five percent (5%) of the shares of common stock issued under the agreement unless the gross proceeds exceed \$7,500,000 when JTF will receive warrants to purchase a number of shares of the Company's common stock equal to ten percent (10%) of the shares of common stock issued under the agreement.

Series AA Preferred Stock

In 2010, the Company created a class of preferred stock known as Series AA preferred stock and authorized 15,000,000 shares for issuance as Series AA preferred stock. All shares of Series AA were issued with an original purchase price of \$9.0797 per share ("Series AA Original Issuance Price"). As noted above, all shares of Series AA were converted into common stock of the Company in 2012.

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Dividends - Dividends on Series AA were cumulative and accrue at a rate of 7% of the Series AA Original Issuance Price, payable in cash or through the issuance of additional shares of Series AA when and if declared. If paid in stock, the shares to be issued are calculated by dividing the accrued dividend amount by the Series AA Original Issuance Price.

Conversion - Each share of Series AA was convertible at any time at the option of the holder or automatically upon a qualified public offering. The conversion ratio was one to one, subject to adjustment for specific dilutive events. In addition, the conversion ratio would be adjusted in the event the Company issues additional Series B shares, under the Mandatory Series B issuance described below, such that the Series AA in the aggregate could convert shares of Series AA into the same percentage of the outstanding common stock, on a fully-diluted and as-converted basis, as such holders of Series AA were entitled to convert immediately prior to the issuance of the Mandatory Series B Issuance. The conversion feature was determined to be clearly and closely related to the Series AA as that term is defined under Topic 815 and, as a result, is not required to be accounted for as a free standing derivative financial instrument. Management has also determined that the conversion feature does not represent a beneficial conversion feature as defined in ASC Topic 740-20, *Debt, Beneficial Conversion* ("Topic 470-20").

Voting and Board Representation - The holders of Series AA generally were entitled to vote, together with the holders of Series B and common stock. Each preferred stockholder was entitled to the number of votes equal the number of shares of common stock into which each share of Series A were convertible at the time of such vote. The holders of Series AA were entitled to elect one member to the board of directors of the Company.

Redemption - Prior to the conversion into common stock in 2012, the Series AA were subject to redemption at the option of the holder beginning February 5, 2015 for the Series AA Original Issuance price plus accrued and unpaid dividends.

Liquidation Preference - The holders of Series AA had liquidation preference over the holders of Series B and Common Stock. In the event of liquidation, holders of Series AA would be entitled to receive, prior to any distributions to the holders of Series B or common stock, an amount per share equal to the greater of (i) the Series AA Original Issuance Price plus accrued and unpaid dividends or (ii) such amount per share payable had the shares of Series AA been converted into common stock prior to liquidation.

From January 13, 2011 to October 24, 2011, the Company issued 123,015 shares of Series AA Preferred Stock to 15 third party investors in a private offering at a price of \$9.0797 per share resulting in net proceeds of approximately \$1.1 million after approximately \$14,000 in related stock issuance costs.

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The activity related to Series AA Preferred Stock for the three month period ended through March 31, 2012 is as follows:

	Series AA Preferred Stock	
	Shares	Amount
Balance, December 31, 2011	913,361	\$ 8,993,418
Accretion on preferred stock	-	145,636
Balance, March 31, 2012	913,361	\$ 9,139,054

Series B Preferred Stock

In 2010, the Company created a class of preferred stock known as Series B preferred stock and authorized 35,000,000 shares for issuance as Series B Preferred Stock. All shares of Series B were issued pursuant to a Stock Exchange Agreement entered into concurrently with the June 2010 Asset Transfer Agreement with Intracel. As noted above, all shares of Series B were converted into common stock in 2012.

Dividends - Dividends on Series B were cumulative and accrue at a rate of 7% of \$9.0797 per share, payable in cash or through the issuance of additional shares of Series B when and if declared. If paid in stock, the shares to be issued were calculated by dividing the accrued dividend amount by \$9.0797.

Conversion - Each share of Series B was convertible at any time at the option of the holder or automatically upon a qualified public offering at a conversion ratio of one to one, subject to adjustment for specific dilutive events. The conversion feature was determined to be clearly and closely related to the Series B as that term is defined by Topic 815 and, as a result, is not required to be accounted for as a free standing derivative financial instrument. Management has also determined that the conversion feature does not represent a beneficial conversion feature as defined in Topic 470-20.

Issuance of Additional Series B - The holders of Series B had the right to receive additional shares of Series B in an amount necessary to cause the holders of Series B holders to maintain their equity ownership of the Company on a fully-diluted and as-converted following any anti-dilutive event. These anti-dilution rights are further explained below.

Voting and Board Representation - The holders of Series B generally were entitled to vote, together with the holders of Series B and common stock. Each preferred stockholder was entitled to the number of votes equal the number of shares of Common Stock into which each share of Series B were convertible at the time of such vote. The holders of Series B were entitled to elect 20% of the members to the board of directors of the Company, but not less than one member.

Redemption - Prior to conversion into common stock in 2012, the Series B were subject to redemption at the option of the holder beginning February 5, 2015 for the \$9.0797 per share plus accrued and unpaid dividends.

Liquidation Preference - The holders of Series B had liquidation preference over the holders of common stock. In the event of liquidation, holders of Series B would be entitled to receive, after

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payment of the Series A liquidation preference but prior to any distributions to the holders of Common Stock, an amount per share equal to the greater of (i) the Series AA Original Issuance Price plus accrued and unpaid dividends or (ii) such amount per share payable had the shares of Series B been converted into common prior to liquidation.

Anti-dilution Rights - As discussed in Note 4 to these unaudited condensed consolidated financial statements the Series B preferred stock issued to Intracel in 2010 requires the Company to maintain Intracel's ownership interest in the Company at not less than 50% of the total outstanding equity ownership of the Company on a fully-diluted and as-converted basis. Pursuant to these provisions, rights to additional shares of Series B preferred stock in the amount of 1,972,919 shares in 2010, 233,620 shares in 2011; and 24,166 shares in 2012 accumulated in those periods, respectively. During 2012, all outstanding shares of Series B were converted to common shares. The conversion ratio was adjusted as a result of these provisions increasing the number of common shares issued by 2,230,705 shares. These anti-dilution rights expired upon conversion of the Series B preferred stock to common stock in 2012. The anti-dilution rights afforded to holders of the Series B were determined to be clearly and closely related to the Series B as that term is defined in Topic 815 and as a result these rights are not required to be accounted for as a free standing derivative financial instrument.

The subscription agreement for the Company's most recent financing through the issuance of common stock ("Round C") provides a form of anti-dilution protection to subscribers. Pursuant to the subscription agreement, if the market price of the Company's common stock on the effective date of the Company's initial public offering ("IPO Price") is less than \$5.50 per share, then the Company will issue to each subscriber additional shares of common stock. The number of shares issued would equal the difference between a) the number of shares that would have been issued if the price per unit was equal to the greater of the IPO Price or \$5.00 and b) the number of shares originally issued to the subscriber. The anti-dilution rights are determined to be clearly and closely related to the Round C common stock as that term is defined in Topic 815 and as a result these rights are not required to be accounted for as a free standing derivative financial instrument.

The activity related to Series B Preferred Stock for the three month period ended March 31, 2012 is as follows:

	Series B Preferred Stock	
	Shares	Amount
Balance, December 31, 2011	14,425,377	\$ 110,135,112
Accretion on preferred stock	-	6,877,531
Balance, March 31, 2012	14,425,377	\$ 117,012,643

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Notes to Unaudited Condensed Consolidated Financial Statements

11. Stock-Based Compensation

Restricted Stock

The Company from time to time has issued shares of restricted common shares to employees. From August 2010 through December 31, 2012, the Company issued 119,734 shares of restricted common stock to employees whose vesting is contingent upon a successful initial public stock offering with a 10 year contractual life. In 2007 and 2010 the Company issued 180,000 and 1.1 million shares, respectively of restricted common stock to employees whose vesting is dependent upon future employment. Those shares generally vest over periods of 4 to 5 years.

The Company records compensation expense for the award of restricted stock based upon the awards fair value determined as the based difference in the estimated fair value of the Company's common stock and the price paid by the employee, if any, generally on the date of grant. The fair value of restricted stock awards is recognized as compensation expense over the service period which is generally the same as the vesting period. No compensation cost has been or will be recognized for the restricted stock awards whose vesting is contingent upon a successful initial public offering until such event is probable of occurring. As of March 31, 2013, management has determined that such an event is not yet probable of occurring.

No restricted stock was awarded and no shares of outstanding restricted stock vested in the three month periods ended March 31, 2013 and 2012. As a result, no compensation expense has been recorded in the three month periods ended March 31, 2013 and 2012, respectively. As of March 31, 2013, total unrecognized compensation costs related to nonvested restricted stock awards to purchase 119,734 shares of common stock was approximately \$410,000, which will be recognized upon a successful initial public offering of the Company's stock. The nonvested restricted stock awards have a weighted average remaining contractual term of approximately 8.0 years.

In December 2010, the Company committed to issue \$462,500 of restricted stock, subject to restrictions yet to be defined, to an officer of the Company if and only if the Company completes a financing round that provides bona fide equity capital to the Company of at least \$35.0 million. On July 17, 2012, the Company's board of directors approved the grant of 200,000 options to acquire Vaccinogen common stock to be awarded to existing employees. No options have been issued through December 31, 2012. On October 23, 2012, the Company committed to grant an option to purchase 20,000 shares of common stock to an employee if the Company's stock begins trading on the "Over the Counter Bulletin Board". The exercise price of the award will be equal to the Company's stock closing price on the first day of trading on the "Over the Counter Bulletin Board" and the awards will vest over four years from that date. No compensation cost has been or will be recognized for stock options whose vesting is contingent upon a successful securities registration until such event is probable of occurring. As of March 31, 2013, management has determined that such an event is not yet probable of occurring.

Stock Purchase Warrants

From time to time the Company has issued stock purchase warrants to non-employees in exchange for services rendered. As of March 31, 2013, and December 31, 2012, 785,575 warrants were issued and outstanding with exercise prices ranging from \$1.00 to \$5.50. To date, all warrants have been issued for past services, with the exercise prices at least equal to the then estimated fair value of the underlying security, were fully vested upon issuance, and had contractual terms

VACCINOGEN, INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

ranging from 2.5 to 7.5 years. No stock warrants were issued to non-employees for services in the three month periods ended March 31, 2013 and 2012, respectively.

The following table summarizes information related to warrants outstanding issued to non-employees in exchange for services as of March 31, 2013:

Exercise price	Shares	Weighted Average Remaining Life	Weighted Average Exercise Price
\$1.00	705,575	2.06	\$1.00
\$5.50	80,000	4.75	\$5.50
Total	785,575		

12. Commitments and Contingencies

Leases

The Company leases office space, a manufacturing facility, and equipment under operating leases expiring in 2013. In addition, the Company leases storage facilities on a month to month basis. Rent expense was approximately \$18,627 and \$20,435 for the quarters ended March 31, 2013 and 2012, respectively.

Minimum future rental payments under non-cancelable operating leases, including amendments to leases entered through the date the financial statements were available to be issued, total \$91,388 for 2013.

Royalty Agreement with Intracel

Pursuant to the Agreement, the Company agreed to pay Intracel the following royalties on the Net Sales of Colon Cancer Products (as defined): (i) 3% of net sales on the first \$350.0 million of Net Sales of Colon Cancer Products occurring in the calendar year; (ii) 4% of net sales of Net Sales of Colon Cancer Products occurring in the calendar year in excess of \$350.0 million and up to and including \$750.0 million and (iii) 5% of net sales of Net Sales of Colon Cancer Products occurring in the calendar year in excess of \$750.0 million.

Royalty Agreement with Organon

The Company has agreed to pay Organon a royalty of 10% of the Net Sales of OncoVAX® (and all other TICE BCG related products, if any) until the Organon Obligation is paid in full, including interest, and 3% for 5 years thereafter.

Litigation

The Company may be subject to certain claims arising in the ordinary course of business. The Company and a vendor are in dispute over amounts owed for services performed. A claim has been filed against the Company in the amount of approximately \$150,000. Management believes the vendor did not perform under the terms of the contract and contends that no amounts are due to the vendor. Management has offered to settle the matter for \$75,000 to be paid upon the

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VACCINOGEN, INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

Company's successful initial public offering and has accrued \$75,000 in the accompanying financial statements.

13. Related Party Transactions

Vaccinogen's chief executive officer is a minority shareholder of Intracel and currently, holds less than 1% interest in Intracel.

On April 15, 2012, Intracel provided an unsecured note payable in the amount of \$30,000. The note is unsecured, non-interest bearing, and becomes due on the date on which a minimum equity raise of \$1.0 million occurs. Currently the note is in default. The carrying value of the note payable to Intracel is included in related party payable in the accompanying unaudited condensed consolidated financial statements as of March 31, 2013.

In 2012, an executive of the Company loaned the Company \$10,000. As of March 31, 2013, the balance due of \$4,099 is past due and in default. The carrying value of this amount due to the Company executive is included in related party payable in the accompanying unaudited condensed consolidated financial statements as of March 31, 2013.

As discussed in Note 10, on February 14, 2012, a member of the board of directors of the Company, agreed to loan the Company money to pay one of the Company's vendors an outstanding amount of \$169,729. The Company subsequently issued to this board member 30,860 shares of common stock and a Round C Warrant exercisable into 9,258 shares of common stock of the Company.

14. Supplemental Disclosure of Cash Flow Information

For the quarters ended March 31, 2013 and 2012 and the Company paid interest costs of \$38,550 and \$1,421, respectively.

15. Subsequent Events

Subsequent events were evaluated through June 11, 2013, the date the unaudited condensed consolidated financial statements were available to be issued. In addition to events occurring after December 31, 2012 previously described herein, the following additional transactions occurred subsequent to March 31, 2013.

In April 2013, the board of directors authorized the Company to offer the investors in the 2012 Bridge loan, the option to convert the amount otherwise due and payable to them in the event of a successful qualified offering, or \$2,038,000, into common stock of the Company, at a per share price equal to that of previously issued Round C Stock offering, or \$5.50 per share, plus Round C Warrants equivalent to 30% of the shares of Round C Stock issued in the conversion. The holders of the 2012 Bridge Loan were given until May 3, 2013 or the close of the offering period for the Round C Stock, whichever comes first. Investors owning \$838,000 of the \$2,038,000 of the 2012 Bridge Loan have indicated their intent to convert their interests in exchange for 152,359 shares of Round C Stock and the issuance of Round C Warrants exercisable into 45,705 shares of common stock.

VACCINOGEN, INC. AND SUBSIDIARIES

Notes to Unaudited Condensed Consolidated Financial Statements

For the period of April 1, 2013 to June 11, 2013, the Company raised \$1,056,000 of capital from the issuance of 192,000 shares of common stock and Round C Warrants exercisable into 57,599 shares of common stock.

On May 13, 2013 Vaccinogen and Kodiak Capital Group, LLC terminated the Initial Equity Line of Credit as discussed in Note 5.

On June 11, 2013, Vaccinogen and John Thomas Financial terminated the Investment Banking Agreement as discussed in Note 10.

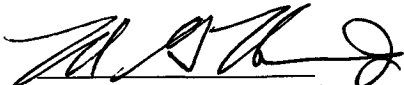
SIGNATURES

The issuer has duly caused this Offering Statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Rockville, State of Maryland on May 17 2013.

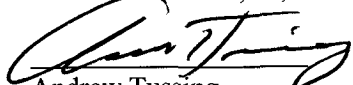
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Signatures

Title


Michael G. Hanna, Jr., Ph.D

Chairman and Chief Executive Officer


Andrew Tussing

President, Chief Operating Officer and acting Chief Financial Officer

John Nicolis

Director

Daniel Fitzgerald

Director

Alan Cohen

Director

Daniel Kane

Director

SIGNATURES

The issuer has duly caused this Offering Statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Rockville, State of Maryland on ~~May~~ ^{June} 11, 2013.

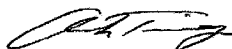
Signatures

Title



Michael G. Hanna, Jr., Ph.D

Chairman and Chief Executive Officer

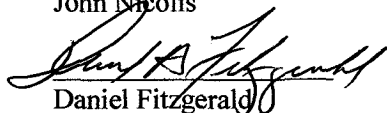


Andrew Tussing

President, Chief Operating Officer and acting Chief Financial Officer

John Nicolis

Director



Daniel Fitzgerald

Director

Alan Cohen

Director

Daniel Kane

Director

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Michael G. Hanna, Jr., Ph.D

Chairman and Chief Executive Officer

Andrew Tussing

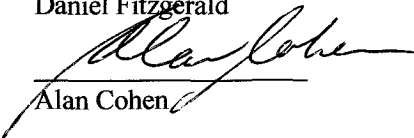
President, Chief Operating Officer and acting Chief Financial Officer

John Nicolis

Director

Daniel Fitzgerald

Director



Alan Cohen

Director

Daniel Kane

Director

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Signatures _____ Title _____

Michael G. Hanna, Jr., Ph.D Chairman and Chief Executive Officer

Andrew Tussing President, Chief Operating Officer and acting Chief Financial Officer

John Nicolis Director

Daniel Fitzgerald Director

Alan Cohen Director

Daniel Kane

Daniel Kane Director

PART III -EXHIBITS

Index to Exhibits

The following exhibits are filed with this Regulation A Offering Statement on Form 1-A or are incorporated by reference as described below.

<u>Exhibit No.</u>	<u>Description</u>	<u>Page No.</u>
2.1	Articles of Incorporation of Vaccinogen, 1 Inc. dated November 23, 2012.	171
2.2	Articles of Merger of Vaccinogen, Inc., Delaware corporation with and into Vaccinogen 1 Inc., a Maryland corporation (including name change to "Vaccinogen Inc.") dated November 23, 2012.	203
2.3	Articles of Amendment and Restated of Vaccinogen, Inc. dated August 1, 2012.	206
2.4	Bylaws	223
3.1	Investor Rights Agreement dated June 24, 2010 by and among Vaccinogen, Inc., Intracel Holdings Corporation and the other parties set forth therein.	238
3.2	Fourth Amended and Restated Promissory Note dated May 31, 2013 in the amount of \$1,800,000 made by Vaccinogen, Inc. in favor of The Abell Foundation, Inc.	267
3.3	Common Stock Purchase Warrant issued to The Abell Foundation	275
3.4	Form of Promissory Note (2012 bridge note offering).	284
3.5	Form of Warrant (2012-2013 Unit Offering)	293
4.1	Form of Subscription Agreement.	310
6.1	New Security Agreement dated October 31, 2007 by and among Intracel Holdings Corporation, OrgaononTeknika Corp. and Organon Biosciences International BV.	340
6.2	Extension and Second Amendment to Lease dated October 23, 2012 by and between Martens Properties LLLP and Vaccinogen	359
6.3	Security Agreement dated October 26, 2011 by and between Vaccinogen, Inc. and The Abell Foundation, Inc.	362
6.4	Agreement dated April 16, 2012 between the Company and Oncology Trials Insight, Inc.	371
6.5	Investment Agreement dated July 18, 2012 between Kodiak Capital LLC and Vaccinogen, Inc.	382
6.6	Investment Agreement dated January 16, 2013 between The Abell Foundation and Vaccinogen, Inc.	416
6.7	Registration Rights Agreement dated July 18, 2012 between Kodiak Capital LLC and Vaccinogen.	446
6.8	Registration Rights Agreement dated June 24, 2010 by and between Vaccinogen, Inc. Intracel Holdings Corporation and the ogeher parties thereto (series B preferred stockholders).	463
6.9	Amended and Restated Registration Rights Agreement by and between Vaccinogen, Inc. and the other parties thereto (series AA preferred stockholders)	488
6.10	Advisory Agreement dated May 1, 2009 between Alms and Associates Inc. and Vaccinogen Inc.	506

6.11	Agreement dated October 10, 2012 between Marquant Partners and Vaccinogen, Inc.	511
6.12	Employment Agreement between Vaccinogen and Michael G. Hanna, Jr., Ph.D.	518
6.13	Employment Agreement between Vaccinogen and Andrew Tussing.	538
6.14	Patent Security Agreement dated April 2013 by and between Vaccinogen and The Abell Foundation, Inc.	557
6.15	Amendment No. 3 to Note and Warrant Purchase Agreement dated April 18, 2013 between Vaccinogen and The Abell Foundation.	566
6.16	Extension and Third Amendment to Lease dated April 2013 by and between Martens Properties LLLP and Vaccinogen.	590
6.17	Agreement between Vaccinogen and First Liberties Financial dated November 6, 2012.	594
6.18	Amendment No. 4 to Note and Warrant Purchase Agreement dated May 31, 2013 between Vaccinogen and The Abell Foundation.	602
8.1	Asset Transfer Agreement dated June 24, 2010 by and among Vaccinogen, Inc., Intracel Holdings Corporation and the other parties set forth therein.	610
8.2	License Agreement dated October 10, 2007 between Vaccinogen, Inc. and Intracel Holdings Corporation.	630
8.3	Letter Agreement dated October 31, 2007 by and among Intracel Holdings Corporation, Intracel Acquisition Holding Company LLC, OrganonTeknika Corp. and Organon Biosciences International BV.	666
8.4	Stock Exchange Agreement dated as of June 24, 2010 by and between Vaccinogen, Inc.	677
10.1	Consent of Independent Public Accountants, BDO USA, LLP.	694
11.1	Opinion of Indeglia & Carney, PC	696

EXHIBIT 2.1

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

VACCINOGEN 1, INC.

ARTICLES OF INCORPORATION

FIRST: The undersigned, Michael L. Kranda, whose address is 5300 Westview Drive, Suite 406, Frederick, MD 21703, being at least 18 years of age, does hereby form a corporation under the general laws of the State of Maryland.

SECOND: The name of the corporation (which is hereinafter called the "Corporation") is:

Vaccinogen 1, Inc.

THIRD: The Corporation is formed for the purpose of carrying on any lawful act or activity for which corporations may be organized under the Maryland General Corporation Law (the "MGCL") as now or hereafter in force.

FOURTH: The address of the principal office of the Corporation in this State is 5300 Westview Drive, Suite 406, Frederick, MD 21703.

FIFTH: The name of the resident agent of the Corporation in the State of Maryland is The Corporation Trust Incorporated, whose address is 351 West Camden, Baltimore, Maryland 21201. The resident agent is a Maryland corporation.

SIXTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 75,000,000 shares of Common Stock, \$.0001 par value per share, and (ii) 50,000,000 shares of Preferred Stock, \$.0001 par value per share ("**Preferred Stock**"). The aggregate par value of all authorized shares having a par value is \$12,500.

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. Voting. The holders of the Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings). There shall be no cumulative voting. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of the charter of the Corporation (the "**Charter**")) the affirmative vote of the

holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote.

B. SERIES AA PREFERRED STOCK PREFERRED STOCK

15,000,000 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated "**Series AA Preferred Stock**" with the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated, references to "Sections" or "Subsections" in this Part B of this Article SIXTH refer to sections and subsections of Part B of this Article SIXTH.

1. Dividends.

1.1 Definition. The "**Series AA Original Issue Price**" shall mean \$9.0797 per share, as and subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series AA Preferred Stock.

1.2 Series AA Accruing Dividends. Dividends shall accrue on each share of Series AA Preferred Stock from the date of issuance of such share at the rate per annum of 7% times the Series AA Original Issue Price (the "**Series AA Accruing Dividends**"). Series AA Accruing Dividends shall accrue from day to day from the date each share of Series AA Preferred Stock has been issued, whether or not declared, and shall be cumulative. Any Series AA Accruing Dividends that have accrued between January 1 and December 31 of each year shall be payable on the 15th day following the end of each calendar year (each such accrual time period, a "**Series AA Dividend Period**"), but only when, as, and if authorized by the Board of Directors and declared by the Corporation.

1.3 Payments to Holders of Series AA Preferred Stock. The Corporation may, in lieu of paying all or any portion on any Series AA Accruing Dividends in cash, issue to each holder of Series AA Preferred Stock additional shares of Series AA Preferred Stock, based on the following formula: (1) the amount of Series AA Accruing Dividends payable to such holder that will be paid in Series AA Preferred Stock; divided by (2) the Series AA Original Issue Price (a "**Series AA PIK Dividend**"). No fractional shares of Series AA Preferred Stock shall be issued as a dividend, but the Corporation shall pay cash equal to the fractional share of Series AA Preferred Stock that such holder would have received, multiplied by the Series AA Original Issue Price.

1.4 Limit on Dividends. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock and the issuance to the holders of Series B Preferred Stock (as defined in Part C of this Article SIXTH) of Series B PIK Dividends (as defined in Part C of this Article SIXTH)) unless the holders of the Series AA Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series AA Preferred Stock in an amount at least equal to the aggregate Series AA Accruing Dividends for all completed Series AA Dividend Periods, which have not been previously paid in accordance with Section 1.2 and 1.3.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Payments to Holders of Series AA Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, the holders of shares of Series AA Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders before any payment shall be made to the holders of Series B Preferred Stock or Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) the Series AA Original Issue Price, plus any dividends accrued but unpaid thereon (whether or not declared), on all outstanding shares Series AA Preferred Stock or (ii) such amount per share as would have been payable had all shares of Series AA Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution or winding up (the amount payable pursuant to this sentence is hereinafter referred to as the “**Series AA Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series AA Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1, the holders of shares of Series AA Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.2 Payments to Holders of Common Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, after the payment of all preferential amounts required to be paid to the holders of shares of Series AA Preferred Stock, the Series B Preferred Stock and any other stock with rights upon liquidation senior to the Common Stock (“**Senior Stock**”), the remaining assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of shares of Common Stock pro rata based on the number of shares held by each such holder.

2.3 Deemed Liquidation Events.

2.3.1 Definition. Each of the following events shall be considered a “**Deemed Liquidation Event**” unless (x) the holders of at least a majority of the outstanding shares of Series AA Preferred Stock and (y) the holders of at least a majority of the outstanding shares of Series B Preferred Stock (each of (x) and (y) voting as a separate class) elect otherwise by written notice sent to the Corporation at least 5 days prior to the effective date of any such event (and the Corporation consents to such election):

- (a) a merger or consolidation in which
 - (i) the Corporation is a constituent party, or
 - (ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or

consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation (provided that, for the purpose of this Subsection 2.3.1, all shares of Common Stock issuable upon exercise of options outstanding immediately prior to such merger or consolidation or upon conversion of convertible securities outstanding immediately prior to such merger or consolidation shall be deemed to be outstanding immediately prior to such merger or consolidation and, if applicable, converted or exchanged in such merger or consolidation on the same terms as the actual outstanding shares of Common Stock are converted or exchanged) (such excepted type of merger or consolidation, a “Non-Change of Control Merger”); or

(b) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, or the sale or disposition (whether by merger or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly-owned subsidiary of the Corporation; or

(c) the approval by the Board of Directors of a liquidation and/or dissolution of the Corporation.

2.3.2 Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(i) unless the agreement or plan of merger or consolidation for such transaction (the “**Merger Agreement**”) provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 of this Part B and Subsections 2.1, 2.2 and 2.3.2(c) of Part C of this Article SIXTH.

(b) In the event of a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(ii) or 2.3.1(b), and if the Corporation does not effect a dissolution of the Corporation under the MGCL within 90 days after such Deemed Liquidation Event, then (i) the Corporation shall send a written notice to each holder of Series AA Preferred Stock no later than the 90th day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (ii) to require the redemption of such shares of Series AA Preferred Stock, and (ii) if the holders of at least a majority of the then outstanding shares of Series AA Preferred Stock so request in a written instrument delivered to the Corporation not later than 120 days after such Deemed Liquidation Event, the Corporation shall use the Available Proceeds (as defined below), to the extent legally available therefor, on the 150th day after such Deemed Liquidation Event, to redeem all outstanding shares of Series AA Preferred Stock at a price per share equal to the Series AA Liquidation Amount. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all

outstanding shares of Series AA Preferred Stock, the Corporation shall redeem a pro rata portion of each holder's shares of Series AA Preferred Stock to the fullest extent of such Available Proceeds, based on the respective amounts which would otherwise be payable in respect of the shares to be redeemed if the Available Proceeds were sufficient to redeem all such shares, and shall redeem the remaining shares to have been redeemed as soon as practicable after the Corporation has funds legally available therefor. The provisions of Subsections 6.2 through 6.4 shall apply, with such necessary changes in the details thereof as are necessitated by the context, to the redemption of the Series AA Preferred Stock pursuant to this Subsection 2.3.2(b). Prior to the distribution or redemption provided for in this Subsection 2.3.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business. "Available Proceeds" shall mean the consideration received by the Corporation for a Deemed Liquidation Event referred to in Subsections 2.3.1(a)(ii) or 2.3.1(b) (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors), together with any other assets of the Corporation available for distribution to its stockholders.

(c) Notwithstanding Section 2.3.2(b), in the event that a Deemed Liquidation Event does not result in a Change of Control, the holders of the Common Stock, Series AA Preferred Stock and the Series B Preferred Stock, voting together as a class, may determine that such event is not a Deemed Liquidation Event by a vote or consent within 10 days of notice from the Corporation of such Deemed Liquidation Event. "Change of Control" shall mean one or more transactions resulting in either: (a) a merger or consolidation other than a Non-Change of Control Merger; or (b) the sale, lease, transfer, exclusive license or other disposition in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, or the sale or disposition (whether by merger or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is (1) to an entity in which the Corporation owns, directly or indirectly, at least 80% of the outstanding equity of such entity or (2) is pro rata among the stockholders of the Corporation based on the stockholders respective preferences and liquidation rights pursuant to a dissolution of the Corporation.

2.3.3 Amount Deemed Paid or Distributed. The amount deemed paid or distributed to the holders of capital stock of the Corporation upon any such merger, consolidation, sale, transfer, exclusive license, other disposition or redemption shall be the cash or the value of the property, rights or securities paid or distributed to the holders of shares Common Stock, the holders of shares of Series AA Preferred Stock, the holders of shares of Series B Preferred Stock and the holders of any other outstanding class or series of stock by the Corporation or the acquiring person, firm or other entity. The value of such property, rights or securities shall be determined in good faith by the Board of Directors and allocated in accordance with this Section 2.

2.3.4 Allocation of Escrow. In the event of a Deemed Liquidation Event pursuant to Subsection 2.3.1(a)(i), if any portion of the consideration payable to the stockholders of the Corporation is placed into escrow and/or is payable to the stockholders of the Corporation

subject to contingencies, the Merger Agreement shall provide that (a) the portion of such consideration that is not placed in escrow and not subject to any contingencies (the “**Initial Consideration**”) shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 of this Part B and Subsections 2.1, 2.2 and 2.3.2(c) of Part C of this Article SIXTH as if the Initial Consideration was the only consideration payable in connection with such Deemed Liquidation Event and (b) any additional consideration which becomes payable to the stockholders of the Corporation upon release from escrow or satisfaction of contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 of this Part B and Subsections 2.1, 2.2 and 2.3.2(c) of Part C of this Article SIXTH after taking into account the previous payment of the Initial Consideration as part of the same transaction.

3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Series AA Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Series AA Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of the Charter, holders of Series AA Preferred Stock shall vote together with the holders of Series B Preferred Stock and Common Stock as a single class.

3.2 Election of Directors. The holders of record of the shares of Series AA Preferred Stock, exclusively and as a separate class, shall be entitled to elect one director of the Corporation. Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the holders of a majority of the outstanding Series AA Preferred Stock, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of Series AA Preferred Stock fail to elect a director to fill the directorship pursuant to the first sentence of this Subsection 3.2, then the directorship not so filled shall remain vacant until such time as the holders of the Series AA Preferred Stock elect such director. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Series AA Preferred Stock), exclusively and voting together as a single class, shall be entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Subsection 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote (or written consent in lieu of a meeting) of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Subsection 3.2. The rights of the holders of the Series AA Preferred Stock under the first sentence of this Subsection 3.2 shall terminate on the first date following the date of the original issuance of any Shares of Series AA Preferred Stock on which there are issued and outstanding less than half of the maximum number of shares of Series AA Preferred Stock as were outstanding at any time (the “**Series AA Termination Date**”).

4. Optional Conversion.

The holders of the Series AA Preferred Stock shall have Series AA Conversion Rights as follows (the “**Series AA Conversion Rights**”):

4.1 Right to Convert.

4.1.1 Conversion Ratio. Each share of Series AA Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Series AA Original Issue Price by the Series AA Conversion Price (as defined below) in effect at the time of conversion. The “**Series AA Conversion Price**” shall initially be equal to \$9.0797. Such initial Series AA Conversion Price, and the rate at which shares of Series AA Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

4.1.2 Termination of Series AA Conversion Rights. In the event of a notice of redemption of any shares of Series AA Preferred Stock pursuant to Section 6, the Series AA Conversion Rights of the shares designated for redemption shall terminate at the close of business on the last full day preceding the date fixed for redemption, unless the redemption price is not fully paid on such redemption date, in which case the Series AA Conversion Rights for such shares shall continue until such price is paid in full. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Series AA Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Series AA Preferred Stock.

4.2 Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Series AA Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Series AA Preferred Stock that the holder is converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Series AA Preferred Stock to voluntarily convert shares of Series AA Preferred Stock into shares of Common Stock, such holder shall surrender the certificate or certificates for such shares of Series AA Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Series AA Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent), together with written notice that such holder elects to convert all or any number of the shares of the Series AA Preferred Stock represented by such certificate or certificates and, if applicable, any event on which such conversion is contingent. Such notice

shall state such holder's name or the names of the nominees in which such holder wishes the certificate or certificates for shares of Common Stock to be issued. If required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such certificates (or lost certificate affidavit and agreement) and notice shall be the time of conversion (the "**Series AA Conversion Time**"), and the shares of Common Stock issuable upon conversion of the shares represented by such certificate shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Series AA Conversion Time, (i) issue and deliver to such holder of Series AA Preferred Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Series AA Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Series AA Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when the Series AA Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Series AA Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Series AA Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series AA Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to the Charter. Before taking any action which would cause an adjustment reducing the Series AA Conversion Price below the then par value of the shares of Common Stock issuable upon conversion of the Series AA Preferred Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and nonassessable shares of Common Stock at such adjusted Series AA Conversion Price.

4.3.3 Effect of Conversion. All shares of Series AA Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Series AA Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Subsection 4.2 and to receive payment of any dividends accrued but unpaid thereon. Any shares of Series AA Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series AA Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Series AA Conversion Price shall be made for any declared but unpaid dividends on the Series AA Preferred Stock surrendered for conversion or on the Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Series AA Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Series AA Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 [RESERVED].

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the issuance of Series AA Preferred Stock (the “**Series AA Original Issuance Date**”) effect a subdivision of the outstanding Common Stock, the Series AA Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Series AA Original Issue Date combine the outstanding shares of Common Stock, the Series AA Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this subsection shall become effective immediately upon the effectiveness of the subdivision or combination.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series AA Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the Series AA Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Series AA Conversion Price then in effect by a fraction:

- (1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and
- (2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares

of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing, (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Series AA Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Series AA Conversion Price shall be adjusted pursuant to this subsection 4.6(2)(a) as of the time of actual payment of such dividends or distributions; and (b) that no such adjustment shall be made if the holders of Series AA Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of Series AA Preferred Stock had been converted into Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series AA Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property (other than cash), then and in each such event provision shall be made so that the holders of the Series AA Preferred Stock shall receive upon conversion thereof, in addition to the number of shares of Common Stock receivable thereupon, the kind and amount of securities of the Corporation or property which they would have been entitled to receive had the Series AA Preferred Stock been converted into Common Stock on the date of such event and had they thereafter, during the period from the date of such event to and including the conversion date, retained such securities receivable by them as aforesaid during such period, giving application to all adjustments called for during such period under this paragraph with respect to the rights of the holders of the Series AA Preferred Stock; provided, however, that no such provision shall be made if the holders of Series AA Preferred Stock receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or property in an amount equal to the amount of such securities or property as they would have received if all outstanding shares of Series AA Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Subsection 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Series AA Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Subsections 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Series AA Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one share of Series AA Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the Series AA Preferred Stock, to the end that the provisions set forth in this Section 4 (including

provisions with respect to changes in and other adjustments of the Series AA Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Series AA Preferred Stock.

4.9 Series AA Qualified Public Offering. The closing of the sale of shares of Common Stock to the public in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended is a **“Public Offering.”** A Public Offering in which (a) shares of Common Stock are sold at a price of at least the Series AA Original Issue Price, plus any dividends accrued but unpaid thereon (whether or not declared), per share, and (b) the Corporation receives \$75,000,000 of gross proceeds to the Corporation is a **“Series AA Qualified Public Offering.”**

5. Change in Conversion Price upon Certain Issuances of Additional Series B Preferred. In the event that the Corporation issues, as required by Sections 4.2 of the Investors’ Rights Agreement (Series B Preferred Stock), dated as of June 24, 2010 (the **“Series B Investors’ Rights Agreement”**), by and among Vaccinogen, Inc., a Delaware corporation (**“Vaccinogen DE”**), Intracel Holding Corporation, a Delaware corporation and the other investors listed on Schedule A thereto, as may be amended from time to time, or pursuant to Section 4.11 of Part C hereof, additional Series B Preferred Stock (a **“Mandatory Series B Issuance”**), the Series AA Conversion Price shall be adjusted so that, immediately after each such Mandatory Series B Issuance and such adjustment, the new Series AA Conversion Price will entitle the holders of the Series AA Preferred Stock, in the aggregate, to convert such shares of Series AA Preferred Stock into such percentage of the outstanding Common Stock, on a fully-diluted and as-converted basis, as such holders of Series AA Preferred Stock were entitled to convert immediately prior to the issuance of the Mandatory Series B Issuance.

5.1 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Series AA Conversion Price pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than 30 days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Series AA Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the Series AA Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Series AA Preferred Stock (but in any event not later than 20 days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the Series AA Conversion Price then in effect, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of Series AA Preferred Stock.

5.2 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Series AA Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(a) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event; or

(b) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Series AA Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Series AA Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Series AA Preferred Stock and the Common Stock. Such notice shall be sent at least 10 days prior to the record date or effective date for the event specified in such notice.

6. Mandatory Conversion.

6.1 Trigger Events. Upon either (a) the closing of a Series AA Qualified Public Offering; or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of at least a majority of the then outstanding shares of Series AA Preferred Stock (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**Mandatory Series AA Conversion Time**”), (i) all outstanding shares of Series AA Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate and (ii) such shares may not be reissued by the Corporation.

6.2 Procedural Requirements. All holders of record of shares of Series AA Preferred Stock shall be sent written notice of the Mandatory Series AA Conversion Time and the place designated for mandatory conversion of all such shares of Series AA Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Series AA Conversion Time. Upon receipt of such notice, each holder of shares of Series AA Preferred Stock shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Series AA Preferred Stock converted pursuant to Section 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Series AA Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender the certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of their

certificate or certificates (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.2. As soon as practicable after the Mandatory Series AA Conversion Time and the surrender of the certificate or certificates (or lost certificate affidavit and agreement) for Series AA Preferred Stock, the Corporation shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof, together with cash as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Series AA Preferred Stock converted. Such converted Series AA Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series AA Preferred Stock accordingly.

7. Redemption.

7.1 Mandatory Redemption. On or after February 5, 2015 (the “**Series AA Fifth Anniversary Date**”), the Corporation shall, upon the request of the holders of at least a majority of the then outstanding shares of Series AA Preferred Stock, redeem all outstanding shares of Series AA Preferred Stock, out of funds lawfully available therefor, at a price equal to the Series AA Original Issue Price per share, plus all accrued but unpaid dividends thereon (whether or not declared) (the “**Series AA Mandatory Redemption Price**”). The redemption shall occur not more than 120 days after the request and the date of such redemption shall be referred to as a “**Mandatory Redemption Date.**” On the Mandatory Redemption Date, the Corporation shall redeem the outstanding shares of Series AA Preferred Stock. If the Corporation does not have sufficient funds legally available to redeem on any Mandatory Redemption Date all shares of Series AA Preferred Stock to be redeemed Series AA Preferred Stock on such Mandatory Redemption Date, the Corporation shall redeem a pro rata portion of each holder’s redeemable shares of such capital stock out of funds legally available therefor, based on the respective amounts which would otherwise be payable in respect of the shares to be redeemed if the legally available funds were sufficient to redeem all such shares, and shall redeem the remaining shares to have been redeemed as soon as practicable after the Corporation has funds legally available therefore.

7.2 Optional Redemption. At any time, shares of Series AA Preferred Stock may be redeemed by the Corporation, at its election, out of funds lawfully available therefor at a price equal to the Series AA Original Issue Price per share, plus all accrued but unpaid dividends thereon (whether or not declared) and, if such redemption is prior to the Series AA Fifth Anniversary Date, plus all dividends that would accrue on the Series AA Preferred Stock through the Series AA Fifth Anniversary Date (the “**Series AA Optional Redemption Price**”). The date of any such redemption shall be referred to as a “**Optional Redemption Date.**” If the Corporation does not redeem all outstanding shares of Series AA Preferred Stock on any Optional Redemption Date, the Corporation may redeem a pro rata portion of each holder’s redeemable shares of such capital stock. Nothing in this Section 6 shall be deemed to limit the Corporation’s power to repurchase shares of Series AA Preferred Stock in a negotiated transaction with one or more stockholders.

7.3 Series AA Redemption Notice. The Corporation shall send written notice of the mandatory or optional redemption (the “**Series AA Redemption Notice**”) to each holder of record of Series AA Preferred Stock not less than 30 days prior to a Mandatory Redemption Date or Optional Redemption Date, as applicable. Each Series AA Redemption Notice shall state:

(a) the number of shares of Series AA Preferred Stock held by the holder that the Corporation shall redeem on the Mandatory Redemption Date or Optional Redemption Date, as applicable, specified in the Series AA Redemption Notice;

(b) the Mandatory Redemption Date or Optional Redemption Date, as applicable, and the Series AA Mandatory Redemption Price or the Series AA Optional Redemption Price, as applicable;

(c) the date upon which the holder’s right to convert such shares terminates (as determined in accordance with Subsection 4.1); and

(d) that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Series AA Preferred Stock to be redeemed.

7.4 Surrender of Certificates; Payment. On or before the Mandatory Redemption Date or Optional Redemption Date, as applicable, each holder of shares of Series AA Preferred Stock to be redeemed on such date, unless such holder has exercised his, her or its right to convert such shares as provided in Section 4, shall surrender the certificate or certificates representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation, in the manner and at the place designated in the Series AA Redemption Notice, and thereupon the Series AA Mandatory Redemption Price or Series AA Optional Redemption Price, as applicable, for such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof. In the event less than all of the shares of Series AA Preferred Stock represented by a certificate are redeemed, a new certificate representing the unredeemed shares of Series AA Preferred Stock shall promptly be issued to such holder.

7.5 Rights Subsequent to Redemption. If the Series AA Redemption Notice shall have been duly given, and if on the applicable Mandatory Redemption Date or Optional Redemption Date, the Series AA Mandatory Redemption Price or Series AA Optional Redemption Price, as applicable, payable upon redemption of the shares of Series AA Preferred Stock to be redeemed on such redemption date is paid or tendered for payment or deposited with an independent payment agent so as to be available therefor in a timely manner, then notwithstanding that the certificates evidencing any of the shares of Series AA Preferred Stock so called for redemption shall not have been surrendered, dividends with respect to such shares of Series AA Preferred Stock shall cease to accrue after such Mandatory Redemption Date or Optional Redemption Date, as applicable, and terminate all rights with respect to such shares shall forthwith after the applicable Mandatory Redemption Date or Optional Redemption Date terminates, except only the right of the holders to receive the Series AA Mandatory Redemption

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Price or Series AA Optional Redemption Price, as applicable, without interest upon surrender of their certificate or certificates therefore (subject to applicable escheat laws).

8. Redeemed or Otherwise Acquired Shares. Any shares of Series AA Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Series AA Preferred Stock following redemption.

9. Transfer Restrictions on Series AA Preferred Stock. The Series AA Preferred Stock may not be transferred, except in accordance with (a) the redemption or Series AA Conversion Rights contained in this Charter; or (b) in accordance with the Amended and Restated Investor Rights Agreement (Series AA Preferred Stock), dated as of June 24, 2010, among the initial purchasers of the Series AA Preferred Stock, the holders of the Common Stock listed therein and Vaccinogen DE, as may be amended from time to time.

10. Waiver. Any of the rights, powers, preferences and other terms of the Series AA Preferred Stock set forth herein may be waived on behalf of all holders of Series AA Preferred Stock by the affirmative written consent or vote of the holders of at least a majority of the shares of Series AA Preferred Stock then outstanding.

11. Notices. Any notice required or permitted by the provisions of this Article SIXTH to be given to a holder of shares of Series AA Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the MGCL, and shall be deemed sent upon such mailing or electronic transmission.

C. SERIES B PREFERRED STOCK PREFERRED STOCK

35,000,000 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated "**Series B Preferred Stock**" with the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. The Series B Preferred Stock will be junior in liquidation preference to (i) the Series AA Preferred Stock and (ii) any series of stock issued in the future by the Corporation at a price reflecting a pre-money valuation of the Corporation greater than One-Hundred-Eighty Million Dollars (\$180,000,000) (together with the Series AA Preferred Stock, "Senior Preferred Stock"), but will be senior in liquidation preference to Common Stock and any stock that is not Senior Preferred Stock. Unless otherwise indicated, references to "Sections" or "Subsections" in this Part C of this Article SIXTH refer to sections and subsections of Part C of this Article SIXTH.

1. Dividends.

1.1 Definition. The "**Series B Original Issue Price**" shall mean \$9.0797 per share, as and subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock.

1.2 Series B Accruing Dividends. Dividends shall accrue on each share of Series B Preferred Stock from the date of issuance of such share at the rate per annum of 7% times the Series B Original Issue Price (the "**Series B Accruing Dividends**"). Series B Accruing

Dividends shall accrue from day to day from the date each share of Series B Preferred Stock has been issued, whether or not declared, and shall be cumulative. Any Series B Accruing Dividends that have accrued between January 1 and December 31 of each year shall be payable on the 15th day following the end of each calendar year (each such accrual time period, a “**Series B Dividend Period**”), but only when, as, and if authorized by the Board of Directors and declared by the Corporation.

1.3 Payments to Holders of Series B Preferred Stock. The Corporation may, in lieu of paying all or any portion on any Series B Accruing Dividends in cash, issue to each holder of Series B Preferred Stock additional shares of Series B Preferred Stock, based on the following formula: (1) the amount of Series B Accruing Dividends payable to such holder that will be paid in Series B Preferred Stock; divided by (2) the Series B Original Issue Price (a “**Series B PIK Dividend**”). No fractional shares of Series B Preferred Stock shall be issued as a dividend, but the Corporation shall pay cash equal to the fractional share of Series B Preferred Stock that such holder would have received, multiplied by the Series B Original Issue Price.

1.4 Limit on Common Stock Dividends. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Series AA Preferred Stock (whether Series AA PIK Dividends or cash), on shares of any other class of Senior Preferred Stock and on shares of Common Stock payable in shares of Common Stock) unless the holders of the Series B Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series B Preferred Stock in an amount at least equal to the aggregate Series B Accruing Dividends for all completed Series B Dividend Periods, which have not been previously paid in accordance with Section 1.2 and 1.3.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Payments to Holders of Series B Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, the holders of shares of Series B Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders after payment of the Series AA Liquidation Amount and after payment of the liquidation amount owed to any other Senior Preferred Stock, but before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) the Series B Original Issue Price, plus any dividends accrued but unpaid thereon (whether or not declared), on all outstanding shares Series B Preferred Stock or (ii) such amount per share as would have been payable had all shares of Series B Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution or winding up (the amount payable pursuant to this sentence is hereinafter referred to as the “**Series B Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series B Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1, the holders of shares of Series B Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.2 Payments to Holders of Common Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, after the payment of all preferential amounts required to be paid to the holders of shares of Senior Stock, the remaining assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of shares of Common Stock pro rata based on the number of shares held by each such holder.

2.3 Deemed Liquidation Events.

2.3.1 **[RESERVED]**

2.3.2 Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referenced in Subsection 2.3.1(a)(i) of Article Sixth, Part B unless the Merger Agreement provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1, 2.2 and 2.3.2(c) of this Part C and Subsections 2.1 and 2.2 of Part B of this Article SIXTH.

(b) In the event of a Deemed Liquidation Event referred to in Subsection 2.3.1(a)(ii) or 2.3.1(b) of Article Sixth, Part B, and, if the Corporation does not effect a dissolution of the Corporation under the MGCL, the Corporation shall use the Available Proceeds, to the extent legally available therefore and subject to the rights of the holders of the Series AA Preferred Stock and other Senior Preferred Stock, on the 150th day after such Deemed Liquidation Event, to redeem all outstanding shares of Series B Preferred Stock at a price per share equal to the Series B Liquidation Amount. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Series B Available Proceeds are not sufficient to redeem all outstanding shares of Series B Preferred Stock, the Corporation shall redeem a pro rata portion of each holder's shares of Series B Preferred Stock to the fullest extent of such Series B Available Proceeds, based on the respective amounts which would otherwise be payable in respect of the shares to be redeemed if the Series B Available Proceeds were sufficient to redeem all such shares, and shall redeem the remaining shares to have been redeemed as soon as practicable after the Corporation has funds legally available therefor.

(c) Notwithstanding Section 2.3.2(b), in the event that a Deemed Liquidation Event does not result in a Change of Control, the holders of the Common Stock, Series AA Preferred Stock and the Series B Preferred Stock, voting together as a class, may determine that such event is not a Deemed Liquidation Event by a vote or with consent within 10 days of notice from the Corporation of such Deemed Liquidation Event.

(d) Notwithstanding anything to the contrary herein and in lieu of any other amounts due and payable on the Series B Preferred Stock, in the event of a Deemed Liquidation Event that results in a Change of Control that occurs on or prior to December 24, 2011, the Corporation shall pay fifty percent (50%) of the Available Proceeds, on a pro-rata basis, to the holders of the Series B Preferred Stock, and the remaining portion of the Available Proceeds (the "**Remaining Available Proceeds**") shall be used to redeem outstanding shares of the Company's capital stock as provided for in Subsection 2.3.2(b) and in Subsection 2.3.2(b) of Part B of this Article SIXTH (with the term "**Remaining Available Proceeds**" replacing the term

“Available Proceeds”); provided, however, that in the event that the Remaining Available Proceeds are not sufficient to redeem all outstanding shares of Series AA Preferred Stock pursuant to Subsection 2.3.2(b) of Part B of this Article SIXTH, then the amount paid to the holders of the Series B Preferred Stock under this Subsection 2.3.2(c) shall be reduced to the minimum extent necessary to redeem the outstanding shares of Series AA Preferred Stock to the same extent that such shares would have been redeemed if this Subsection 2.3.2(c) did not apply. The rights of the holders of the Series B Preferred Stock set forth in this Section 2.3.2(c) shall not be affected in the event of a Recapitalization Event (as defined in Article FOURTEENTH), such that the rights of the shares of common stock issued to the holders of the Series B Preferred Stock in a Recapitalization Event shall vary from the rights of any other holder of common stock and entitle to such holders in the aggregate to receive payment of Available Proceeds pursuant to this Section 2.3.2(c) in the event of a Deemed Liquidation Event that results in a Change of Control that occurs on or prior to December 24, 2011.

(e) The provisions of Subsections 6.2 through 6.4 shall apply, with such necessary changes in the details thereof as are necessitated by the context, to the redemption of the Series B Preferred Stock pursuant to this Subsection 2.3.2(b) or Subsection 2.3.2(c). Prior to the distribution or redemption provided for in this Subsection 2.3.2(b) or Subsection 2.3.2(c), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event, to pay the Series AA Liquidation Amount and the liquidation amount due any other holders of Senior Preferred Stock or in the ordinary course of business.

2.3.3 Amount Deemed Paid or Distributed. The amount deemed paid or distributed to the holders of capital stock of the Corporation upon any such merger, consolidation, sale, transfer, exclusive license, other disposition or redemption shall be the cash or the value of the property, rights or securities paid or distributed to the holders of shares Common Stock, the holders of shares of Series AA Preferred Stock, the holders of shares of Series B Preferred Stock and the holders of any other outstanding class or series of stock by the Corporation or the acquiring person, firm or other entity. The value of such property, rights or securities shall be determined in good faith by the Board of Directors and allocated in accordance with this Section 2.

2.3.4 Allocation of Escrow. In the event of a Deemed Liquidation Event pursuant to Subsection 2.3.1(a)(i) of Part B of this Article SIXTH, if any portion of the consideration payable to the stockholders of the Corporation is placed into escrow and/or is payable to the stockholders of the Corporation subject to contingencies, the Merger Agreement shall provide that (a) the portion of such consideration that is not placed in escrow and not subject to any contingencies (the “**Initial Consideration**”) shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1, 2.2, and 2.3.2(c) of this Part C and Subsections 2.1 and 2.2 of Part B of this Article SIXTH as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event and (b) any additional consideration which becomes payable to the stockholders of the Corporation upon release from escrow or satisfaction of contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1, 2.2 and 2.3.2(c) of this Part C and Subsections 2.1 and 2.2 of Part B of this Article SIXTH after taking into account the previous payment of the Initial Consideration as part of the same transaction.

3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Series B Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Series B Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of the Charter, holders of Series B Preferred Stock shall vote together with the holders of Common Stock as a single class.

3.2 Election of Directors. The holders of record of the shares of Series B Preferred Stock, exclusively and as a separate class, shall be entitled to elect such number of directors so that the holders of the Series B Preferred Stock may elect 20% of the entire Board of Directors; provided that any fractional number shall be rounded down to the nearest whole number and that the holders of the Series B Preferred Stock shall be entitled to elect at least one director. Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the holders of a majority of the outstanding Series B Preferred Stock, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of Series B Preferred Stock fail to elect a director to fill the directorship pursuant to the first sentence of this Subsection 3.2, then the directorship not so filled shall remain vacant until such time as the holders of the Series B Preferred Stock elect such director. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Series AA Preferred Stock and Series B Preferred Stock), exclusively and voting together as a single class, shall be entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Subsection 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote (or written consent in lieu of a meeting) of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Subsection 3.2. The rights of the holders of the Series B Preferred Stock under the first sentence of this Subsection 3.2 shall terminate on the first date following the date of the original issuance of any Shares of Series B Preferred Stock on which there are issued and outstanding less than half of the maximum number of shares of Series B Preferred Stock as were outstanding at any time (the "**Series B Termination Date**").

3.3 Series B Preferred Consent. Any action that (i) results in any amendment, alteration, or repeal of any provision of the Charter or the Bylaws of the Corporation (including any filing of Articles Supplementary), that alters or changes the voting or other powers, preferences, or other special rights, privileges or restrictions of the Series B Preferred Stock so as to affect it adversely, or (ii) approves or results in the payment of any dividend (in cash, stock or other property) to any series of Preferred Stock in a manner disproportionate to the Series B Preferred Stock, or (iii) results in the issuance of any series of stock (other than Senior Preferred Stock) by the Corporation that has more favorable rights, preferences, or privileges than the Series B Preferred Stock, or (iv) results in the issuance of any Senior Preferred Stock that has more favorable rights, preferences, or privileges (other than more favorable preferences in

liquidation or payment of dividends) than the Series B Preferred Stock, shall require the approval of the holders of a majority of the Series B Preferred Stock. For clarity, Subsection 3.3(i) above is not intended to provide any holder of Series B Preferred Stock with any control or blocking rights in connection with any sale or issuance of capital stock or convertible securities, a Deemed Liquidation Event, or an amendment to the Corporation's Charter or Bylaws if the rights of such holder are no more adversely and disproportionately affected than the rights of holders of other series of Preferred Stock.

4. Optional Conversion.

The holders of the Series B Preferred Stock shall have Series B Conversion Rights as follows (the "**Series B Conversion Rights**"):

4.1 Right to Convert.

4.1.1 Conversion Ratio. Each share of Series B Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Series B Original Issue Price by the Series B Conversion Price (as defined below) in effect at the time of conversion. The "**Series B Conversion Price**" shall initially be equal to \$9.0797. Such initial Series B Conversion Price, and the rate at which shares of Series B Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

4.1.2 Termination of Series B Conversion Rights. In the event of a notice of redemption of any shares of Series B Preferred Stock pursuant to Section 6, the Series B Conversion Rights of the shares designated for redemption shall terminate at the close of business on the last full day preceding the date fixed for redemption, unless the redemption price is not fully paid on such redemption date, in which case the Series B Conversion Rights for such shares shall continue until such price is paid in full. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Series B Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Series B Preferred Stock.

4.2 Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Series B Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Series B Preferred Stock that the holder is converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Series B Preferred Stock to voluntarily convert shares of Series B Preferred Stock into shares of Common Stock, such holder shall surrender the certificate or certificates for such shares of Series B Preferred

Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Series B Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent), together with written notice that such holder elects to convert all or any number of the shares of the Series B Preferred Stock represented by such certificate or certificates and, if applicable, any event on which such conversion is contingent. Such notice shall state such holder's name or the names of the nominees in which such holder wishes the certificate or certificates for shares of Common Stock to be issued. If required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such certificates (or lost certificate affidavit and agreement) and notice shall be the time of conversion (the "**Series B Conversion Time**"), and the shares of Common Stock issuable upon conversion of the shares represented by such certificate shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Series B Conversion Time, (i) issue and deliver to such holder of Series B Preferred Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Series B Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Series B Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when the Series B Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Series B Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Series B Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series B Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to the Charter. Before taking any action which would cause an adjustment reducing the Series B Conversion Price below the then par value of the shares of Common Stock issuable upon conversion of the Series B Preferred Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and nonassessable shares of Common Stock at such adjusted Series B Conversion Price.

4.3.3 Effect of Conversion. All shares of Series B Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Series B Conversion Time, except only the right of the holders thereof to receive shares of

Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Subsection 4.2 and to receive payment of any dividends accrued but unpaid thereon. Any shares of Series B Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series B Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Series B Conversion Price shall be made for any declared but unpaid dividends on the Series B Preferred Stock surrendered for conversion or on the Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Series B Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Series B Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 **[RESERVED].**

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the issuance of Series B Preferred Stock (the "**Series B Original Issuance Date**") effect a subdivision of the outstanding Common Stock, the Series B Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Series B Original Issue Date combine the outstanding shares of Common Stock, the Series B Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this subsection shall become effective immediately upon the effectiveness of the subdivision or combination.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series B Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the Series B Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Series B Conversion Price then in effect by a fraction:

- (1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and
- (2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing, (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Series B Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Series B Conversion Price shall be adjusted pursuant to this subsection 4.6(2)(a) as of the time of actual payment of such dividends or distributions; and (b) that no such adjustment shall be made if the holders of Series B Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of Series B Preferred Stock had been converted into Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series B Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property (other than cash), then and in each such event provision shall be made so that the holders of the Series B Preferred Stock shall receive upon conversion thereof, in addition to the number of shares of Common Stock receivable thereupon, the kind and amount of securities of the Corporation or property which they would have been entitled to receive had the Series B Preferred Stock been converted into Common Stock on the date of such event and had they thereafter, during the period from the date of such event to and including the conversion date, retained such securities receivable by them as aforesaid during such period, giving application to all adjustments called for during such period under this paragraph with respect to the rights of the holders of the Series B Preferred Stock; provided, however, that no such provision shall be made if the holders of Series B Preferred Stock receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or property in an amount equal to the amount of such securities or property as they would have received if all outstanding shares of Series B Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Subsection 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Series B Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Subsections 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Series B

Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one share of Series B Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the Series B Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Series B Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Series B Preferred Stock.

4.9 Series B Qualified Public Offering. A Public Offering in which (a) shares of Common Stock are sold at a price of at least the Series B Original Issue Price, plus any dividends accrued but unpaid thereon (whether or not declared), per share, and (b) the Corporation receives \$75,000,000 of gross proceeds to the Corporation is a “**Series B Qualified Public Offering.**”

4.10 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Series B Conversion Price pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than 30 days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Series B Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the Series B Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Series B Preferred Stock (but in any event not later than 20 days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the Series B Conversion Price then in effect, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of Series B Preferred Stock.

4.11 Issuance of Additional Series B Preferred. In the event that the Corporation is required by Section 4.2 of the Series B Investors’ Rights Agreement to issue additional Series B Preferred Stock, the Corporation shall issue to the holders of the Series B Preferred Stock, in the aggregate, additional shares of Series B Preferred Stock in an amount necessary to cause the holders of Series B Preferred Stock to own, in the aggregate, and following any other anti-dilution adjustments triggered by such issuance of Series B Preferred Stock, including the adjustment of the Series AA Conversion Price pursuant to Section 4.10 of Part B hereof, shares of Series B Preferred Stock convertible into such percentage of the outstanding Common Stock on a fully-diluted and as-converted basis, as specified in the Series B Investors’ Rights Agreement. For the avoidance of doubt, the issuance of Series B Preferred Stock under this Section 4.11 and any other anti-dilution adjustments triggered by such issuance of Series B Preferred Stock, including the adjustment of the Series AA Conversion Price pursuant to Section 4.10 of Part B hereof, shall be performed in a concerted manner such that, after such issuance and adjustment(s), the final allocation of outstanding Common Stock on a

fully-diluted and as-converted basis is consistent with the intended effects of such issuance and adjustment(s).

4.12 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Series B Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(a) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event; or

(b) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Series B Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Series B Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Series B Preferred Stock and the Common Stock. Such notice shall be sent at least 10 days prior to the record date or effective date for the event specified in such notice.

5. Mandatory Conversion.

5.1 Trigger Events. Upon either (a) the closing of a Series B Qualified Public Offering; or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of at least a majority of the then outstanding shares of Series B Preferred Stock (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**Mandatory Series B Conversion Time**”), (i) all outstanding shares of Series B Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate and (ii) such shares may not be reissued by the Corporation.

5.2 Procedural Requirements. All holders of record of shares of Series B Preferred Stock shall be sent written notice of the Mandatory Series B Conversion Time and the place designated for mandatory conversion of all such shares of Series B Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Series B Conversion Time. Upon receipt of such notice, each holder of shares of Series B Preferred Stock shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate

affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Series B Preferred Stock converted pursuant to Section 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Series B Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender the certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of their certificate or certificates (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.2. As soon as practicable after the Mandatory Series B Conversion Time and the surrender of the certificate or certificates (or lost certificate affidavit and agreement) for Series B Preferred Stock, the Corporation shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof, together with cash as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Series B Preferred Stock converted. Such converted Series B Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series B Preferred Stock accordingly.

6. Redemption.

6.1 Mandatory Redemption. On or after the Series AA Fifth Anniversary Date, the Corporation shall, upon the request of the holders of at least a majority of the then outstanding shares of Series B Preferred Stock, redeem all outstanding shares of Series B Preferred Stock, out of funds lawfully available therefor, at a price equal to the Series B Original Issue Price per share, plus all accrued but unpaid dividends thereon (whether or not declared) (the "**Series B Mandatory Redemption Price**"). The redemption shall occur not more than 120 days after the request and the date of such redemption shall be referred to as a "**Series B Mandatory Redemption Date.**" On the Series B Mandatory Redemption Date, the Corporation shall redeem the outstanding shares of Series B Preferred Stock. If the Corporation does not have sufficient funds legally available to redeem on any Series B Mandatory Redemption Date all shares of Series B Preferred Stock to be redeemed Series B Preferred Stock on such Series B Mandatory Redemption Date, the Corporation shall redeem a pro rata portion of each holder's redeemable shares of such capital stock out of funds legally available therefor, based on the respective amounts which would otherwise be payable in respect of the shares to be redeemed if the legally available funds were sufficient to redeem all such shares, and shall redeem the remaining shares to have been redeemed as soon as practicable after the Corporation has funds legally available therefore.

6.2 Optional Redemption. At any time, shares of Series B Preferred Stock may be redeemed by the Corporation, at its election, out of funds lawfully available therefor at a price equal to the Series B Original Issue Price per share, plus all accrued but unpaid dividends

thereon (whether or not declared) and, if such redemption is prior to the Series AA Fifth Anniversary Date, plus all dividends that would accrue on the Series B Preferred Stock through the Series AA Fifth Anniversary Date (the “**Series B Optional Redemption Price**”). The date of any such redemption shall be referred to as a “**Series B Optional Redemption Date.**” If the Corporation does not redeem all outstanding shares of Series B Preferred Stock on any Series B Optional Redemption Date, the Corporation may redeem a pro rata portion of each holder’s redeemable shares of such capital stock. Nothing in this Section 6 shall be deemed to limit the Corporation’s power to repurchase shares of Series B Preferred Stock in a negotiated transaction with one or more stockholders.

6.3 Series B Redemption. The Corporation shall send written notice of the mandatory or optional redemption (the “**Series B Redemption**”) to each holder of record of Series B Preferred Stock not less than 30 days prior to a Series B Mandatory Redemption Date or Series B Optional Redemption Date, as applicable. Each Series B Redemption shall state:

(a) the number of shares of Series B Preferred Stock held by the holder that the Corporation shall redeem on the Series B Mandatory Redemption Date or Series B Optional Redemption Date, as applicable, specified in the Series B Redemption;

(b) the Series B Mandatory Redemption Date or Series B Optional Redemption Date, as applicable, and the Series B Mandatory Redemption Price or the Series B Optional Redemption Price, as applicable;

(c) the date upon which the holder’s right to convert such shares terminates (as determined in accordance with Subsection 4.1); and

(d) that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Series B Preferred Stock to be redeemed.

6.4 Surrender of Certificates; Payment. On or before the Series B Mandatory Redemption Date or Series B Optional Redemption Date, as applicable, each holder of shares of Series B Preferred Stock to be redeemed on such date, unless such holder has exercised his, her or its right to convert such shares as provided in Section 4, shall surrender the certificate or certificates representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation, in the manner and at the place designated in the Series B Redemption, and thereupon the Series B Mandatory Redemption Price or Series B Optional Redemption Price, as applicable, for such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof. In the event less than all of the shares of Series B Preferred Stock represented by a certificate are redeemed, a new certificate representing the unredeemed shares of Series B Preferred Stock shall promptly be issued to such holder.

6.5 Rights Subsequent to Redemption. If the Series B Redemption shall have been duly given, and if on the applicable Series B Mandatory Redemption Date or Series B Optional Redemption Date, the Series B Mandatory Redemption Price or Series B Optional Redemption Price, as applicable, payable upon redemption of the shares of Series B Preferred

Stock to be redeemed on such redemption date is paid or tendered for payment or deposited with an independent payment agent so as to be available therefor in a timely manner, then notwithstanding that the certificates evidencing any of the shares of Series B Preferred Stock so called for redemption shall not have been surrendered, dividends with respect to such shares of Series B Preferred Stock shall cease to accrue after such Series B Mandatory Redemption Date or Series B Optional Redemption Date, as applicable, and terminate all rights with respect to such shares shall forthwith after the applicable Series B Mandatory Redemption Date or Series B Optional Redemption Date terminates, except only the right of the holders to receive the Series B Mandatory Redemption Price or Series B Optional Redemption Price, as applicable, without interest upon surrender of their certificate or certificates therefore (subject to applicable escheat laws).

7. Redeemed or Otherwise Acquired Shares. Any shares of Series B Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Series B Preferred Stock following redemption.

8. Transfer Restrictions on Series B Preferred Stock. The Series B Preferred Stock may not be transferred, except in accordance with (a) the redemption or Series B Conversion Rights contained in this Charter; or (b) in accordance with the Series B Investors' Rights Agreement.

9. Waiver. Any of the rights, powers, preferences and other terms of the Series B Preferred Stock set forth herein may be waived on behalf of all holders of Series B Preferred Stock by the affirmative written consent or vote of the holders of at least a majority of the shares of Series B Preferred Stock then outstanding.

10. Notices. Any notice required or permitted by the provisions of this Article SIXTH to be given to a holder of shares of Series B Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the MGCL, and shall be deemed sent upon such mailing or electronic transmission.

D. Classification of Shares of Capital Stock

1. Power to Issue, Classify and Reclassify. The Board of Directors may authorize the issuance from time to time of shares of stock of the Corporation of any class or series, whether now or hereafter authorized, or securities or rights convertible into shares of its stock of any class or series, whether now or hereafter authorized, for such consideration as the Board of Directors may deem advisable (or without consideration in the case of a stock split or stock dividend), subject to such restrictions or limitations, if any, as may be set forth in the Charter or the Bylaws of the Corporation. The Board of Directors, with the approval of a majority of the entire Board and without any action by the stockholders of the Corporation, may amend the Charter from time to time to increase or decrease the aggregate number of shares of stock or the number of shares of stock of any class or series that the Corporation has authority to issue. The Board of Directors may reclassify any unissued shares of Common Stock from time to time in one or more classes or series of stock. The Board of Directors may classify any unissued shares

of Preferred Stock and reclassify any previously classified but unissued shares of Preferred Stock of any series from time to time, in one or more classes or series of stock.

2. Terms of Classified Shares. Prior to issuance of classified or reclassified shares of any class or series, the Board of Directors by resolution shall: (a) designate that class or series to distinguish it from all other classes and series of stock of the Corporation; (b) specify the number of shares to be included in the class or series; (c) set or change, subject to the express terms of any class or series of stock of the Corporation outstanding at the time, the preferences, conversion or other rights, voting powers, restrictions, limitations as to dividends or other distributions, qualifications and terms and conditions of redemption for each class or series; and (d) cause the Corporation to file Articles of Amendment or Articles Supplementary with the State Department of Assessments and Taxation of Maryland.

SEVENTH: The Corporation reserves the right from time to time to make any amendment to its Charter, now or hereafter authorized by law, including any amendment altering the terms or contract rights, as expressly set forth in the Charter, of any shares of outstanding stock subject to any such amendment being approved in accordance with the MGCL and the Charter. All rights and powers conferred by the Charter on stockholders, directors and officers are granted subject to this reservation

EIGHTH: Subject to any additional vote required by the Charter or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

NINTH: The business and affairs of the Corporation shall be managed under the direction of the Board of Directors. The number of directors of the Corporation initially shall be one, which number may be increased or decreased only by the Board of Directors pursuant to the Bylaws of the Corporation, but shall never be less than the minimum number required by the MGCL. The name of the director who shall serve until the first annual meeting of stockholders and until his successor is duly elected and qualifies is Michael L. Kranda. This director may increase the number of directors and may fill any vacancy, whether resulting from an increase in the number of directors or otherwise, on the Board of Directors occurring before the first annual meeting of stockholders in the manner provided in the Bylaws of the Corporation.

TENTH: Until the Series AA Termination Date and Series B Termination Date, the number of directors of the Corporation shall not exceed nine and, after such time, the number of directors shall be determined in the manner set forth in the Bylaws of the Corporation.

ELEVENTH: Any action required or permitted to be taken at any meeting of stockholders may be taken without a meeting if a consent in writing or by electronic transmission of stockholders entitled to cast not less than the minimum number of votes that would be necessary to authorize or take the action at a meeting of stockholders is delivered to the Corporation in accordance with the MGCL. The Corporation shall give notice of any action taken by less than unanimous consent to each stockholder not later than ten days after the effective time of such action. Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

TWELFTH: Meetings of stockholders may be held within or without the State of Maryland, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Maryland at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

THIRTEENTH: Notwithstanding any provision of law permitting or requiring any action to be taken or approved by the affirmative vote of the holders of shares entitled to cast a greater number of votes, any such action shall be effective and valid if declared advisable by the Board of Directors and taken or approved by the affirmative vote of holders of shares entitled to cast a majority of all the votes entitled to be cast on the matter.

FOURTEENTH: In the event that the Board of Directors approves a liquidation and/or dissolution and submits it for consideration by the stockholders, a majority of the outstanding shares of Series AA Preferred Stock, Series B Preferred Stock and the Common Stock, may vote to approve that all shares of outstanding capital stock of the Corporation be converted into common stock. Each outstanding share of Series AA Preferred Stock and Series B Preferred Stock shall convert into such number of shares of Common Stock equal in value (as determined in good faith by the Board of Directors) to the amount of cash or other consideration such share of Series AA Preferred Stock and Series B Preferred Stock, as applicable, would have been entitled to receive in accordance with Part 2 and Part 3 of Article Sixth of the charter based on such shares' liquidation preference or rights upon a liquidation. The outstanding shares of Common Stock would be diluted to the extent necessary to insure that the holders of Series AA Stock and Series B Stock receive the appropriate number of shares of Common Stock. Such a redemption pursuant to this Article Thirteen shall be a "**Recapitalization Event.**"

FIFTEENTH: To the maximum extent that Maryland law in effect from time to time permits limitation of the liability of directors and officers of a corporation, no present or former director or officer of the Corporation shall be liable to the Corporation or its stockholders for money damages. Neither the amendment nor repeal of this Article IX, nor the adoption or amendment of any other provision of the Charter or Bylaws inconsistent with this Article IX, shall apply to or affect in any respect the applicability of the preceding sentence with respect to any act or failure to act which occurred prior to such amendment, repeal or adoption..

SIXTEENTH: The Corporation shall have the power, to the maximum extent permitted by Maryland law in effect from time to time, to obligate itself to indemnify, and to pay or reimburse reasonable expenses in advance of final disposition of a proceeding to, (a) any individual who is a present or former director or officer of the Corporation or (b) any individual who, while a director or officer of the Corporation and at the request of the Corporation, serves or has served as a director, officer, partner or trustee of another corporation, real estate investment trust, partnership, joint venture, trust, employee benefit plan or any other enterprise from and against any claim or liability to which such person may become subject or which such person may incur by reason of his or her service in such capacity. The Corporation shall have the power, with the approval of the Board of Directors, to provide such indemnification and advancement of expenses to a person who served a predecessor of the Corporation in any of the capacities described in (a) or (b) above and to any employee or agent of the Corporation or a predecessor of the Corporation.

IN WITNESS WHEREOF, I have signed these Articles of Incorporation and
acknowledge the same to be my act on this 23rd day of November, 2010.

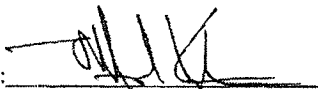
By: 
Michael L. Kranda

EXHIBIT 2.2

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

State of Delaware
Secretary of State
Division of Corporations
Delivered 01:48 PM 11/23/2010
FILED 01:48 PM 11/23/2010
SRV 101116465 - 4344213 FILE

CERTIFICATE OF MERGER

VACCINOGEN, INC.
(a Delaware corporation)

WITH AND INTO

VACCINOGEN 1, INC.
(a Maryland corporation)

Pursuant to Title 8, Section 252 of the General Corporation Law of the State of Delaware, the undersigned corporation executed the following Certificate of Merger:

FIRST: The name of the surviving corporation is Vaccinogen 1, Inc., a Maryland corporation (the "Surviving Corporation").

SECOND: The name of the corporation being merged with and into the Surviving Corporation is Vaccinogen, Inc., which was incorporated under the laws of Delaware (the "Merging Corporation").

THIRD: The Agreement and Plan of Merger among the Surviving Corporation and the Merging Corporation, dated as of November 23, 2010 (the "Agreement of Merger"), setting forth the terms of the merger of the Merging Corporation with and into the Surviving Corporation (the "Merger"), has been approved, adopted, certified, executed and acknowledged by each of the constituent corporations pursuant to Title 8, Section 252 of the General Corporation Law of the State of Delaware.

FOURTH: The name of the Surviving Corporation is Vaccinogen 1, Inc.

FIFTH: The Merger is to become effective upon filing of this Certificate of Merger.

SIXTH: The executed Agreement of Merger is on file at 5300 Westview Drive, Suite 406, Frederick, MD 21703, a principal place of business of the Surviving Corporation.

SEVENTH: A copy of the Agreement of Merger will be furnished by the Surviving Corporation on request, without cost, to any stockholder of any constituent corporation.

EIGHTH: The Surviving Corporation agrees that it may be served with process in the State of Delaware in any proceeding for enforcement of any obligation of the Surviving Corporation arising from the Merger, including any suit or other proceeding to enforce the rights of any stockholders as determined in appraisal proceedings pursuant to the provisions of Section 262 of the Delaware General Corporation laws, and irrevocably appoints the Secretary of State of Delaware as its agent to accept services of process in any such suit or proceeding. The Secretary of State shall mail any such process to the surviving corporation at 5300 Westview Drive, Suite 406, Frederick, MD 21703.

- Signature page follows -

IN WITNESS WHEREOF, the Surviving Corporation has caused this Certificate of Merger to be signed by an authorized officer, as of the 23rd day of November, 2010.

VACCINOGEN I, INC.

By: 

Name: Michael L. Kranda

Title: President

EXHIBIT 2.3

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

VACCINOGEN, INC.

ARTICLES OF AMENDMENT AND RESTATEMENT

FIRST: Vaccinogen, Inc., a Maryland corporation (the "Corporation"), desires to amend and restate its charter as currently in effect and as hereinafter amended.

SECOND: The following provisions are all the provisions of the charter currently in effect and as hereinafter amended:

ARTICLE I
INCORPORATOR

The undersigned, Michael L. Kranda, whose address is 5300 Westview Drive, Suite 406, Frederick, MD 21703, being at least 18 years of age, does hereby form a corporation under the general laws of the State of Maryland.

ARTICLE II
NAME

The name of the corporation (the "Corporation") is:
Vaccinogen, Inc.

ARTICLE III
PURPOSE

The purposes for which the Corporation is formed are to engage in any lawful act or activity for which corporations may be organized under the general laws of the State of Maryland as now or hereafter in force.

ARTICLE IV
PRINCIPAL OFFICE IN STATE AND RESIDENT AGENT

The address of the principal office of the Corporation in the State of Maryland is Vaccinogen, Inc., 5300 Westview Drive, Suite 406, Frederick, Maryland 21703. The name of the resident agent of the Corporation in the State of Maryland is The Corporation Trust Incorporated,

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STATE OF MARYLAND

I hereby certify that this is a true and complete copy of the 16 page document on file in this office. DATED: 8/1/12

STATE DEPARTMENT OF ASSESSMENTS AND TAXATION:

BY: [Signature], Custodian
This stamp replaces our previous certification system. Effective: 6/95

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whose post address is 351 West Camden, Baltimore, Maryland 21201. The resident agent is a Maryland corporation.

ARTICLE V

PROVISIONS FOR DEFINING, LIMITING AND REGULATING CERTAIN POWERS OF THE CORPORATION AND OF THE STOCKHOLDERS AND DIRECTORS

Section 5.1 Number of Directors. The business and affairs of the Corporation shall be managed under the direction of the Board of Directors. The number of directors of the Corporation initially shall be five, which number may be increased or decreased only by the Board of Directors pursuant to the Bylaws, but shall never be less than the minimum number required by the Maryland General Corporation Law (the "MGCL"). The names of the directors who shall serve until the next annual meeting of stockholders and until their successors are duly elected and qualify are:

Michael G. Hanna

John Nicolis

Daniel Kane

Daniel Fitzgerald

Alan Cohen

These directors may increase or decrease the number of directors and may fill any vacancy, whether resulting from an increase in the number of directors or otherwise, on the Board of Directors in the manner provided in the Bylaws.

Section 5.2 Extraordinary Actions. Notwithstanding any provision of law permitting or requiring any action to be taken or approved by the affirmative vote of the holders of shares entitled to cast a greater number of votes, any such action shall be effective and valid if

declared advisable by the Board of Directors and taken or approved by the affirmative vote of holders of shares entitled to cast a majority of all the votes entitled to be cast on the matter.

Section 5.3 Authorization by Board of Stock Issuance. The Board of Directors may authorize the issuance from time to time of shares of stock of the Corporation of any class or series, whether now or hereafter authorized, or securities or rights convertible into shares of its stock of any class or series, whether now or hereafter authorized, for such consideration as the Board of Directors may deem advisable (or without consideration in the case of a stock split or stock dividend), subject to such restrictions or limitations, if any, as may be set forth in the charter (the "Charter") or the Bylaws.

Section 5.4 Preemptive and Appraisal Rights. Except as may be provided by the Board of Directors in setting the terms of classified or reclassified shares of stock pursuant to Section 6.5 or as may otherwise be provided by a contract approved by the Board of Directors, no holder of shares of stock of the Corporation shall, as such holder, have any preemptive right to purchase or subscribe for any additional shares of stock of the Corporation or any other security of the Corporation which it may issue or sell. Holders of shares of stock shall not be entitled to exercise any rights of an objecting stockholder provided for under Title 3, Subtitle 2 of the MGCL or any successor statute unless the Board of Directors, upon the affirmative vote of a majority of the Board of Directors, shall determine that such rights apply, with respect to all or any classes or series of stock, to one or more transactions occurring after the date of such determination in connection with which holders of such shares would otherwise be entitled to exercise such rights. Notwithstanding the foregoing, in the event the Corporation is subject to the Maryland Control Share Acquisition Act, holders of shares of stock shall be entitled to

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exercise rights of an objecting stockholder under Section 3-708(a) of the Maryland General Corporation Law.

Section 5.5 Indemnification. The Corporation shall have the power, to the maximum extent permitted by Maryland law in effect from time to time, to obligate itself to indemnify, and to pay or reimburse reasonable expenses in advance of final disposition of a proceeding to, (a) any individual who is a present or former director or officer of the Corporation or (b) any individual who, while a director or officer of the Corporation and at the request of the Corporation, serves or has served as a director, officer, partner or trustee of another corporation, real estate investment trust, partnership, joint venture, trust, employee benefit plan or any other enterprise from and against any claim or liability to which such person may become subject or which such person may incur by reason of his or her service in such capacity. The Corporation shall have the power, with the approval of the Board of Directors, to provide such indemnification and advancement of expenses to a person who served a predecessor of the Corporation in any of the capacities described in (a) or (b) above and to any employee or agent of the Corporation or a predecessor of the Corporation.

Section 5.6 Determinations by Board. The determination as to any of the following matters, made in good faith by or pursuant to the direction of the Board of Directors consistent with the Charter, shall be final and conclusive and shall be binding upon the Corporation and every holder of shares of its stock: the amount of the net income of the Corporation for any period and the amount of assets at any time legally available for the payment of dividends, redemption of its stock or the payment of other distributions on its stock; the amount of paid-in surplus, net assets, other surplus, annual or other cash flow, net profit, net assets in excess of capital, undivided profits or excess of profits over losses on sales of assets; the

amount, purpose, time of creation, increase or decrease, alteration or cancellation of any reserves or charges and the propriety thereof (whether or not any obligation or liability for which such reserves or charges shall have been created shall have been paid or discharged); any interpretation of the terms, preferences, conversion or other rights, voting powers or rights, restrictions, limitations as to dividends or distributions, qualifications or terms or conditions of redemption of any class or series of stock of the Corporation; the fair value, or any sale, bid or asked price to be applied in determining the fair value, of any asset owned or held by the Corporation or of any shares of stock of the Corporation; the number of shares of stock of any class of the Corporation; any matter relating to the acquisition, holding and disposition of any assets by the Corporation; or any other matter relating to the business and affairs of the Corporation or required or permitted by applicable law, the Charter or Bylaws or otherwise to be determined by the Board of Directors.

Section 5.8 Removal of Directors. Subject to the rights of holders of one or more classes or series stock to elect or remove one or more directors, any director, or the entire Board of Directors, may be removed from office at any time, with or without cause, by the affirmative vote of a majority of the votes cast on the matter.

ARTICLE VI
STOCK

Section 6.1 Conversion of Preferred Stock. Immediately upon the acceptance of these Articles of Amendment and Restatement for record (the "Effective Time") by the State Department of Assessments and Taxation of Maryland, (i) subject to the provisions of this Section 6.1, each share of Series AA Preferred Stock, \$.0001 par value per share, of the Corporation, which was issued and outstanding immediately prior to the Effective Time shall be

reclassified as and changed into 1.6507 shares of the Corporation's Common Stock (as defined herein) (the "Series AA Conversion"); and (ii) each share of Series B Preferred Stock, \$.0001 par value per share, of the Corporation, which was issued and outstanding immediately prior to the Effective Time, shall be reclassified as and changed into one share of the Corporation's Common Stock. No fractional shares shall be issued in connection with the Series AA Conversion. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as of the Effective Time as determined in good faith by the Board of Directors. Whether or not fractional shares would be issuable in accordance with the Series AA Conversion shall be determined on the basis of the total number of shares of Series AA Preferred Stock that the holder is changing into Common Stock and the aggregate number of shares of Common Stock issuable upon such change.

Section 6.2 Authorized Shares. The Corporation has authority to issue 250,000,000 shares of stock, consisting of 200,000,000 shares of Common Stock, \$.0001 par value per share ("Common Stock"), and 50,000,000 shares of Preferred Stock, \$.0001 par value per share ("Preferred Stock"). The aggregate par value of all authorized shares of stock having par value is \$25,000. If shares of one class of stock are classified or reclassified into shares of another class of stock pursuant to Section 6.3, 6.4, or 6.5 of this Article VI, the number of authorized shares of the former class shall be automatically decreased and the number of shares of the latter class shall be automatically increased, in each case by the number of shares so classified or reclassified, so that the aggregate number of shares of stock of all classes that the Corporation has authority to issue shall not be more than the total number of shares of stock set forth in the first sentence of this paragraph. The Board of Directors, with the approval of a

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majority of the entire Board and without any action by the stockholders of the Corporation, may amend the Charter from time to time to increase or decrease the aggregate number of shares of stock or the number of shares of stock of any class or series that the Corporation has authority to issue.

Section 6.3 Common Stock. Subject to the provisions of Article VII and except as may otherwise be specified in the Charter, each share of Common Stock shall entitle the holder thereof to one vote. The Board of Directors may reclassify any unissued shares of Common Stock from time to time into one or more classes or series of stock.

Section 6.4 Preferred Stock. The Board of Directors may classify any unissued shares of Preferred Stock and reclassify any previously classified but unissued shares of Preferred Stock of any series from time to time, into one or more classes or series of stock.

Section 6.5 Classified or Reclassified Shares. Prior to issuance of classified or reclassified shares of any class or series, the Board of Directors by resolution shall: (a) designate that class or series to distinguish it from all other classes and series of stock of the Corporation; (b) specify the number of shares to be included in the class or series; (c) set or change, subject to the express terms of any class or series of stock of the Corporation outstanding at the time, the preferences, conversion or other rights, voting powers, restrictions, limitations as to dividends or other distributions, qualifications and terms and conditions of redemption for each class or series; and (d) cause the Corporation to file articles supplementary with the State Department of Assessments and Taxation of Maryland. Any of the terms of any class or series of stock set or changed pursuant to clause (c) of this Section 6.5 may be made dependent upon facts or events ascertainable outside the Charter (including determinations by the Board of Directors or other facts or events within the control of the Corporation) and may vary among holders thereof,

provided that the manner in which such facts, events or variations shall operate upon the terms of such class or series of stock is clearly and expressly set forth in the articles supplementary or other Charter document.

Section 6.6 Stockholders' Consent in Lieu of Meeting. Any action required or permitted to be taken at any meeting of the stockholders may be taken without a meeting by consent, in writing or by electronic transmission, in any manner permitted by the MGCL and set forth in the Bylaws.

Section 6.7 Charter and Bylaws. The rights of all stockholders and the terms of all stock are subject to the provisions of the Charter and the Bylaws.

ARTICLE VII

RESTRICTION ON TRANSFER AND OWNERSHIP OF SHARES

Section 7.1 Definitions. For the purpose of this Article VII, the following terms shall have the following meanings:

Excepted Holder. The term "Excepted Holder" shall mean a stockholder of the Corporation for whom an Excepted Holder Transfer Limit is created by the Board of Directors pursuant to Section 7.5.

Excepted Holder Transfer Limit. The term "Excepted Holder Transfer Limit" with respect to a particular Excepted Holder shall mean the percentage limit established by the Board of Directors for such Excepted Holder pursuant to Section 7.5.

Transfer Limit. The term "Transfer Limit," with respect to any stockholder, shall mean 5%, or such other percentage determined by the Board of Directors in accordance with Section 7.6, of the aggregate of (1) the total number of shares of the Corporation's stock held of

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record by such person as of the close of business on the Initial Date; and (2) the total number of shares of the Corporation's stock issuable pursuant to warrants held by such stockholder as of the close of business on the Initial Date. For purposes of determining the number of shares or warrants held by any stockholder in calculating such stockholder's Transfer Limit, such stockholder shall be deemed to hold all of the shares of stock and warrants held by each other person (such stockholder's "Transferors") who held any of such shares or warrants after the Initial Date.

Section 7.2 Transfer Restrictions. During the period from the effective time of the Articles of Amendment and Restatement first setting forth in the charter of the Corporation this Section 7.1 (the "Initial Date"), until the date that is one hundred eighty (180) days following the effectiveness of the first Form S-1 filed by the Corporation with the Securities and Exchange Commission, or such earlier date as may be determined by the Board of Directors, except as otherwise provided in Section 7.3, (a) no share of the Corporation's stock may be transferred or disposed of by any stockholder other than an Excepted Holder without the prior written consent of the Board of Directors of the Corporation if and to the extent that such transfer or other disposition would result in the transfer or disposition, other than pursuant to Section 7.3, by such stockholder of shares of the Corporation's stock in excess of the Transfer Limit and (b) no share of the Corporation's stock may be transferred or disposed of by any Excepted Holder without the prior written consent of the Board of Directors of the Corporation if and to the extent that such transfer or other disposition would result in the transfer or disposition, other than pursuant to Section 7.3, by such Excepted Holder of shares of the Corporation's stock in excess of such Excepted Holder's Excepted Holder Transfer Limit. For purposes of this Section 7.2, a stockholder (including any Excepted Holder) shall be deemed to have transferred or disposed of

all of the shares disposed of by such stockholder's Transferors and by all of the direct and indirect transferees of such Transferors. Any purported or attempted transfer of shares of the Corporation's stock in violation of this Section 7.2 shall be void *ab initio*, and the intended transferee shall acquire no right, title or interest in such shares.

Section 7.3 Exceptions from Transfer Restrictions. The restriction on transfer set forth in Section 7.2 shall not apply to (a) dispositions by gift, will, or by the laws of descent and distribution, or otherwise to a stockholder's parents, siblings, spouse, children, or grandchildren, (b) a trust for the benefit of a stockholder's parents, siblings, spouse, children, or grandchildren, (c) a partnership, the general partner of which is the transferring stockholder or such stockholder's parents, siblings, spouse, children, or grandchildren, or a corporation or limited liability company, a majority of whose outstanding equity securities is owned of record or beneficially by the transferring stockholder or by any of the foregoing or (d) any transfer or disposition of shares originally acquired from the Corporation after the Initial Date.

Section 7.4 Transfers Void. The corporation shall not record any transfer or issuance of any shares on its stock transfer books unless the transfer or issuance is in strict compliance with all provisions of the Charter, including this Section 7.4. In the event a stockholder desires to transfer shares of the Corporation's stock, the stockholder must furnish to the Corporation such evidence of the stockholder's compliance with this Section 7.4 as may be reasonably required by the Board of Directors of the Corporation. If the Board of Directors of the Corporation or any duly authorized committee thereof shall at any time determine in good faith that a transfer of the Corporation's stock has taken place that results in a violation of Section 7.2 or that a person intends to transfer or has attempted to transfer any shares of the Corporation's stock in violation of Section 7.2 (whether or not such violation is intended), the

Board of Directors or a committee thereof shall take such action as it deems advisable to refuse to give effect to or to prevent such transfer, including, without limitation, causing the Corporation to redeem the shares so transferred, refusing to give effect to such transfer on the books of the Corporation or instituting proceedings to enjoin such transfer or other event; provided, however, that any transfer or attempted transfer or other event in violation of Section 7.2 shall be void ab initio as provided above irrespective of any action (or non-action) by the Board of Directors or a committee thereof.

Section 7.5. Excepted Holder Limits.

7.5.1 The Board of Directors of the Corporation, in its sole discretion, may exempt (prospectively or retroactively) a stockholder from the Transfer Limit and may establish or increase an Excepted Holder Transfer Limit for such stockholder. The Board of Directors may impose such conditions or restrictions as it deems appropriate in connection with granting such exception or creating any such Excepted Holder Transfer Limit.

7.5.2 The Board of Directors may only reduce an Excepted Holder Transfer Limit for an Excepted Holder: (a) with the written consent of such Excepted Holder at any time, or (b) pursuant to the terms and conditions of any agreements and undertakings entered into with such Excepted Holder in connection with the establishment of the Excepted Holder Transfer Limit for that Excepted Holder. No Excepted Holder Transfer Limit may be reduced to a percentage that is less than the Transfer Limit.

Section 7.6 Increase or Decrease in Transfer Limit. The Board of Directors may from time to time increase or decrease the Transfer Limit; provided, however, that no decreased Transfer Limit may be less than the Transfer Limit in effect on the Initial Date.

Section 7.7 Legend. There will be endorsed upon each stock certificate representing any shares subject to this Article VII a statement in substantially the following form:

THE SALE, TRANSFER, HYPOTHECATION, ENCUMBRANCE, OR DISPOSITION OF THE SHARES REPRESENTED BY THIS CERTIFICATE IS RESTRICTED BY THE PROVISIONS OF THE CHARTER OF THE CORPORATION. SUBJECT TO CERTAIN FURTHER RESTRICTIONS AND EXCEPT AS EXPRESSLY PROVIDED IN THE CORPORATION'S CHARTER, UNTIL THE DATE THAT IS 180 DAYS AFTER THE EFFECTIVENESS OF THE FIRST FORM S-1 FILED BY THE CORPORATION WITH THE SECURITIES AND EXCHANGE COMMISSION, OR SUCH EARLIER DATE AS MAY BE DETERMINED BY THE BOARD OF DIRECTORS, NO SHARE OF THE CORPORATION'S STOCK MAY BE TRANSFERRED OR DISPOSED OF BY ANY STOCKHOLDER WITHOUT THE PRIOR WRITTEN CONSENT OF THE BOARD OF DIRECTORS OF THE CORPORATION IF AND TO THE EXTENT THAT SUCH TRANSFER OR OTHER DISPOSITION WOULD RESULT IN THE TRANSFER OR DISPOSITION BY SUCH STOCKHOLDER, SUCH STOCKHOLDER'S DIRECT AND INDIRECT TRANSFERORS, AND ANY SUCH TRANSFERORS' DIRECT AND INDIRECT TRANSFEREES, IN THE AGGREGATE, OF MORE THAN FIVE PERCENT (5%) OF THE TOTAL NUMBER OF SHARES OF THE CORPORATION'S STOCK AND THE TOTAL NUMBER OF SHARES OF THE CORPORATION'S STOCK ISSUABLE PURSUANT TO WARRANTS HELD OF RECORD BY THE STOCKHOLDER AND SUCH STOCKHOLDER'S DIRECT AND INDIRECT TRANSFERORS AS OF THE CLOSE OF BUSINESS ON THE INITIAL DATE. ATTEMPTED TRANSFERS IN VIOLATION OF THE RESTRICTIONS DESCRIBED ABOVE WILL BE VOID AB INITIO. A COPY OF THE CHARTER OF THE CORPORATION, INCLUDING THE RESTRICTIONS ON TRANSFER OF THE CORPORATION'S STOCK, WILL BE FURNISHED TO EACH HOLDER OF THE CORPORATION'S STOCK ON REQUEST AND WITHOUT CHARGE. REQUESTS FOR SUCH A COPY MAY BE DIRECTED TO THE SECRETARY OF THE CORPORATION AT ITS PRINCIPAL OFFICE.

ARTICLE VIII

AMENDMENTS

The Corporation reserves the right from time to time to make any amendment to its Charter, now or hereafter authorized by law, including any amendment altering the terms or

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contract rights, as expressly set forth in the Charter, of any shares of outstanding stock. All rights and powers conferred by the Charter on stockholders, directors and officers are granted subject to this reservation. Except for those amendments permitted to be made without stockholder approval under Maryland law or by specific provision in the Charter, any amendment to the Charter shall be valid only if declared advisable by the Board of Directors and approved by the affirmative vote of a majority of all the votes entitled to be cast on the matter.

ARTICLE IX

LIMITATION OF LIABILITY

To the maximum extent that Maryland law in effect from time to time permits limitation of the liability of directors and officers of a corporation, no present or former director or officer of the Corporation shall be liable to the Corporation or its stockholders for money damages. Neither the amendment nor repeal of this Article IX, nor the adoption or amendment of any other provision of the Charter or Bylaws inconsistent with this Article IX, shall apply to or affect in any respect the applicability of the preceding sentence with respect to any act or failure to act which occurred prior to such amendment, repeal or adoption.

THIRD: The amendment to and restatement of the charter as hereinabove set forth have been duly advised by the Board of Directors and approved by the stockholders of the Corporation as required by law.

FOURTH: The current address of the principal office of the Corporation is as set forth in Article IV of the foregoing amendment and restatement of the charter.

FIFTH: The name and address of the Corporation's current resident agent is as set forth in Article IV of the foregoing amendment and restatement of the charter.

SIXTH: The number of directors of the Corporation and the names of those currently in office are as set forth in Article V of the foregoing amendment and restatement of the charter.

SEVENTH: The total number of shares of stock which the Corporation had authority to issue immediately prior to this amendment and restatement was 125,000,000, consisting of 75,000,000 shares of Common Stock, \$.0001 par value per share and 50,000,000 shares of Preferred Stock, \$.0001 par value per share. The aggregate par value of all shares of stock having par value was \$12,500.

EIGHTH: The total number of shares of stock which the Corporation has authority to issue pursuant to the foregoing amendment and restatement of the charter is 250,000,000, consisting of 200,000,000 shares of Common Stock, \$.0001 par value per share, and 50,000,000 shares of Preferred Stock, \$.0001 par value per share. The aggregate par value of all authorized shares of stock having par value is \$25,000.

NINTH: The undersigned Chairman of the Board acknowledges these Articles of Amendment and Restatement to be the corporate act of the Corporation and as to all matters or facts required to be verified under oath, the undersigned Chairman of the Board acknowledges that, to the best of his knowledge, information and belief, these matters and facts are true in all material respects and that this statement is made under the penalties for perjury.

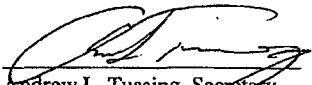
- Signature Page Follows -

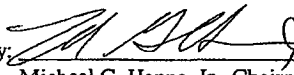
220

IN WITNESS WHEREOF, the Corporation has caused these Articles of Amendment and Restatement to be signed in its name and on its behalf by its Chairman of the Board and attested to by its Secretary on this 15th day of August, 2012.

ATTEST:

VACCINOGEN, INC.


Andrew L. Tussing, Secretary

By:  (SEAL)
Michael G. Hanna, Jr., Chairman
of the Board

lee

CORPORATE CHARTER APPROVAL SHEET

**** EXPEDITED SERVICE** ** KEEP WITH DOCUMENT ****

DOCUMENT CODE 13 BUSINESS CODE 13
W-13848726

Close _____ Stock _____ Nonstock _____

P.A. _____ Religious _____

Merging (Transferor) _____

Surviving (Transferee) _____

FEES REMITTED

Base Fee:	_____	<u>100</u>
Org. & Cap. Fee:	_____	<u>20</u>
Expedite Fee:	_____	<u>70</u>
Penalty:	_____	
State Recordation Tax:	_____	
State Transfer Tax:	_____	
<u>1</u> Certified Copies	_____	
Copy Fee:	_____	<u>35</u>
Certificates	_____	
Certificate of Status Fee:	_____	
Personal Property Filings:	_____	
Mail Processing Fee:	_____	
Other:	_____	
TOTAL FEES:	_____	<u>225</u>

Credit Card _____ Check Cash _____

_____ Documents on _____ Checks

Approved By: W13

Keyed By: _____

COMMENT(S):

Affix Barcode Label Here

Affix Barcode Label Here

New Name _____

- _____ Change of Name
- _____ Change of Principal Office
- _____ Change of Resident Agent
- _____ Change of Resident Agent Address
- _____ Resignation of Resident Agent
- _____ Designation of Resident Agent and Resident Agent's Address
- _____ Change of Business Code

_____ Adoption of Assumed Name

_____ Other Change(s)

Code 063

Attention: Andrea Cohen

Mail: Name and Address

Stamp Work Order and Customer Number HERE

CERTIFIED COPY MADE

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EXHIBIT 2.4

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

VACCINOGEN 1, INC.

BYLAWS

ARTICLE I

OFFICES

1.1. **PRINCIPAL OFFICE.** The principal office of the corporation shall be located in Frederick, Maryland or such other place as the Board of Directors may designate.

1.2. **ADDITIONAL OFFICES.** The corporation may also have offices at any other place or places, both within and without the State of Maryland, which the board of directors determines from time to time or the business of the corporation requires.

ARTICLE II

MEETINGS OF STOCKHOLDERS

2.1. **PLACE.** All meetings of stockholders shall be held at any place, within or without the State of Maryland, stated in the notice of the meeting. Notwithstanding the foregoing, the board of directors may, in its sole discretion, determine that the meeting shall not be held at any place, but shall be held solely by means of remote communication, subject to such guidelines and procedures as the board of directors may adopt, as permitted by then applicable law.

2.2. **ANNUAL MEETING.** The annual meeting of stockholders for the election of directors and the transaction of such other business as may properly come before the meeting shall be held on such date and at such hour and place as the board of directors or an officer designated by the board of directors may determine. If the annual meeting is not held on the date designated, the board of directors shall cause the meeting to be held as soon thereafter as convenient.

2.3. **SPECIAL MEETINGS.** The president or board of directors may call special meetings of the stockholders. Special meetings of stockholders shall also be called by the secretary upon the written request of the holders of shares entitled to cast not less than a majority of all the votes entitled to be cast at the meeting. The request shall state the purpose of the meeting and the matters proposed to be acted on at the meeting. The secretary shall inform those stockholders of the reasonably estimated cost of preparing and mailing notice of the meeting and, upon payment to the corporation of the costs, the secretary shall give notice to each stockholder entitled to notice of the meeting.

2.4. **REMOTE COMMUNICATION.** For the purposes of these bylaws, if authorized by the board of directors in its sole discretion, and subject to such guidelines and procedures as the board of directors may adopt, stockholders and proxyholders not physically present at a meeting of the stockholders may, by means of remote communication, participate in a meeting of stockholders and be deemed present in person and vote at a meeting of stockholders whether such meeting is to be held at a designated place or solely by means of remote

communication; provided that (i) the corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder or proxyholder, (ii) the corporation shall implement reasonable measures to provide such stockholders and proxyholders a reasonable opportunity to participate in the meeting and to vote on matters submitted to the stockholders, including an opportunity to hear the proceedings of the meeting substantially concurrently with such proceedings, and (iii) if any stockholder or proxyholder votes or takes other action at the meeting by means of remote communication, a record of such vote or other action shall be maintained by the corporation.

2.5. NOTICE. Not less than 10 nor more than 90 days before each meeting of stockholders, the secretary shall give to each stockholder entitled to vote at the meeting and to each stockholder not entitled to vote who is entitled to notice of the meeting, written or printed notice stating the time and place of the meeting, the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, and, in the case of a special meeting or as otherwise may be required by statute, the purpose for which the meeting is called, either by certified or registered mail, postage prepaid, return receipt requested, overnight delivery, electronic mail, facsimile, or presenting it to the stockholder personally. If mailed, the notice shall be deemed to be given when deposited in the United States mail addressed to the stockholder at the stockholder's post office address as it appears on the records of the corporation, with postage prepaid. If given by overnight delivery, notice shall be deemed given when properly addressed and deposited with the United States Postal Service or when deposited with a reputable international overnight courier service, as the case may be. If given by electronic mail, the notice shall be deemed to be given when directed to the stockholder's electronic mail address that appears on the corporation's records. If given by facsimile, the notice shall be deemed to be given when transmitted to the stockholder at the stockholder's facsimile number that appears on the corporation's records, if any, provided that confirmation of the transmission is received. In case of the death, absence, incapacity or refusal of the secretary, a person designated either by the president or the board of directors may give such notice.

An affidavit of the secretary or an assistant secretary or of the transfer agent or other agent of the corporation that the notice has been given by electronic mail shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

2.6. SCOPE OF NOTICE. No business shall be transacted at a special meeting of stockholders except that specifically designated in the notice. Any business of the corporation may be transacted at the annual meeting without being specifically designated in the notice, except business that is required by statute to be stated in the notice.

2.7. QUORUM. At any meeting of stockholders, the presence in person or by proxy of stockholders entitled to cast a majority of all the votes entitled to be cast at the meeting shall constitute a quorum; but this section shall not affect any requirement under any statute or the charter for the vote necessary for the adoption of any measure. If, however, a quorum is not present at any meeting of the stockholders, the stockholders entitled to vote at the meeting, present in person or by proxy, shall have power to adjourn the meeting from time to time without notice other than announcement at the meeting of the time and place of the adjourned meeting until a quorum is present; provided, however, that if the adjournment is for more than 30 days, or

if after adjournment, a new record date is fixed for the adjourned meeting, notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. At an adjourned meeting at which a quorum is present, any business may be transacted which might have been transacted at the originally scheduled meeting.

2.8. VOTING. A plurality of all the votes cast at a meeting of stockholders duly called and at which a quorum is present shall be sufficient to elect a director. Each share of stock may be voted for as many individuals as there are directors to be elected and for whose election the share is entitled to be voted. A majority of the votes cast at a meeting of stockholders duly called and at which a quorum is present shall be sufficient to approve any other matter which may properly come before the meeting, unless more than a majority of the votes cast is required by statute or by the charter of the corporation. Unless otherwise provided in the charter, each outstanding share of stock, regardless of class, shall be entitled to one vote on each matter submitted to a vote at a meeting of stockholders.

2.9. PROXIES. A stockholder may vote the shares of stock owned of record by that stockholder, either in person or by proxy executed in writing by the stockholder or by a duly authorized attorney in fact. A proxy shall be filed with the secretary of the corporation before or at the time of the meeting. No proxy shall be valid after eleven months from the date of its execution, unless otherwise provided in the proxy.

2.10. VOTING OF SHARES BY CERTAIN HOLDERS. Shares registered in the name of another corporation, if entitled to be voted, may be voted by the president, a vice president or a proxy appointed by the president or a vice president of the other corporation, unless some other person who has been appointed to vote the shares pursuant to a bylaw or a resolution of the board of directors of the other corporation presents a certified copy of the bylaw or resolution, in which case that person may vote the shares. Any fiduciary may vote shares registered in the name of that fiduciary, either in person or by proxy.

Shares of its own stock belonging to the corporation or to another corporation, if a majority of the shares entitled to vote in the election of directors of that other corporation is held, directly or indirectly, by the corporation shall not be voted at any meeting and shall not be counted in determining the total number of outstanding shares entitled to be voted at any given time, unless they are held by it in a fiduciary capacity, in which case they may be voted and shall be counted in determining the total number of outstanding shares at any given time.

2.11. INSPECTORS. In advance of any meeting of stockholders, the chairman of the meeting shall appoint one or more persons as inspectors for the meeting. The inspectors shall ascertain and report the number of shares outstanding and the voting power of each, the number of shares represented at the meeting based upon their determination of the validity and effect of proxies and ballots, and shall count all votes and ballots, determine and retain for a reasonable time a record of the disposition of any challenges made to any determination made by the inspectors, certify their determination of the number of shares represented at the meeting and their count of all votes and ballots, and perform all other acts that are proper to conduct the election and voting with impartiality and fairness to all stockholders.

Each report of the inspector or inspectors shall be in writing and signed by the inspector or by a majority of them if there is more than one inspector acting at the meeting. If there is more than one inspector, the report of a majority shall be the report of the inspectors. The report of the inspector or inspectors shall be prima facie evidence of the number of shares represented at the meeting and the results of the voting.

2.12. WRITTEN CONSENT OF STOCKHOLDERS. Any action required or permitted to be taken at a meeting of stockholders may be taken without a meeting if a consent in writing, setting forth the action, is signed by the holders of outstanding shares having at least the minimum number of votes that would be necessary to authorize or take action at a meeting at which all shares entitled to vote on the matter were present and voted, and the consent is delivered to the corporation. Notice of the taking of corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing not later than ten days after the effective time of such action.

2.13. VOTING BY BALLOT. Voting on any question or in any election may be viva voce unless the presiding officer orders or any stockholder demands that voting be by ballot.

2.14. CONDUCT OF MEETING. The board of directors may adopt such rules, regulations and procedures for the conduct of the meeting of stockholders as it shall deem appropriate. Except to the extent inconsistent with such rules and regulations as adopted by the board of directors, the chairman of the meeting shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the board of directors or prescribed by the chairman of the meeting, may include, without limitation, (i) the establishment of an agenda or order of business for the meeting, (ii) rules and procedures for maintaining order at the meeting and the safety of those present, (iii) limitations on attendance at or participation in the meeting to stockholders of record of the corporation, their duly authorized and constituted proxies or such other persons as the chairman of the meeting shall determine, (iv) restrictions on entry to the meeting after the time fixed for the commencement thereof, and (v) limitations on the time allotted to questions or comments by participants. Unless and to the extent determined by the board of directors or the chairman of the meeting, meetings of stockholders shall not be required to be held in accordance with the rules of parliamentary procedure or Robert's Rules of Order. In the event of any dispute over the conduct of the meeting, the corporation shall follow the procedures set forth in the *ABA Handbook for the Conduct of Shareholders' Meetings*.

ARTICLE III

DIRECTORS

3.1. GENERAL POWERS. The business and affairs of the corporation shall be managed under the direction of its board of directors.

3.2. NUMBER, TENURE AND QUALIFICATIONS. The board of directors shall consist of such number of members as may be determined from time to time by resolution

of the board of directors which number shall not be less than five. At any regular meeting or at any special meeting called for that purpose, a majority of the entire board of directors may establish, increase or decrease the number of directors. The tenure of office of a director shall not be affected by any decrease in the number of directors. Each director shall hold office until the next annual meeting of stockholders and until the director's successor is elected and qualified or until the director's earlier resignation or removal.

3.3. ANNUAL AND REGULAR MEETINGS. An annual meeting of the board of directors shall be held immediately after and at the same place as the annual meeting of stockholders, no notice other than this bylaw being necessary. The board of directors may provide, by resolution, the time and place, either within or without the State of Maryland, for the holding of regular meetings of the board of directors without notice other than that resolution.

3.4. SPECIAL MEETINGS. Special meetings of the board of directors may be called by or at the request of the president or by a majority of the directors then in office. The person or persons authorized to call special meetings of the board of directors may fix any place, either within or without the State of Maryland, as the place for holding any special meeting of the board of directors called by them.

3.5. NOTICE. Notice of any special meeting shall be in writing and shall be delivered personally or sent by facsimile, electronic mail, overnight delivery, or certified or registered mail, postage prepaid, return receipt requested, to each director at the director's business or residence address. Notice that is personally delivered, sent by facsimile, or sent by electronic mail shall be given at least two days before the meeting. Notice sent by overnight delivery shall be given at least three days before the meeting. Notice sent by certified or registered mail shall be given at least five days before the meeting. If given by overnight delivery, notice shall be deemed given when properly addressed and deposited with the United States Postal Service or when deposited with a reputable international overnight courier service, as the case may be. If given by facsimile, notice shall be deemed given when transmitted to the director at the director's facsimile number that appears on the corporation's records, if any, provided that confirmation of the transmission is received. If given by electronic mail, notice shall be deemed given when directed to the director's electronic mail address that appears on the corporation's records. Neither the business to be transacted at, nor the purpose of, any annual, regular or special meeting of the board of directors need be specified in the notice unless specifically required by statute or by these bylaws.

3.6. QUORUM. A majority of the entire board of directors shall constitute a quorum for transaction of business at any meeting of the board of directors.

The directors present at a meeting which has been duly called and convened may continue to transact business until adjournment, notwithstanding the withdrawal of enough directors to leave less than a quorum.

3.7. VOTING. The action of the majority of the directors present at a meeting at which a quorum is present shall be the action of the board of directors, unless the concurrence of a greater proportion is required for the action under the corporation's charter or applicable statute.

3.8. MEETINGS BY REMOTE COMMUNICATION. Members of the board of directors may participate in a meeting by any means of remote communication that allows for all persons participating in the meeting to hear each other at the same time. Participation in a meeting by these means shall constitute presence in person at the meeting.

3.9. WRITTEN CONSENT OF DIRECTORS. Any action required or permitted to be taken at any meeting of the board of directors may be taken without a meeting, if a consent in writing or by electronic transmission to the action is given by each director and is filed with the minutes of proceedings of the board of directors.

3.10. VACANCIES. Unless and until filled by the stockholders, any vacancy in the board of directors, however occurring, other than a vacancy resulting from an increase in the number of directors, may be filled by vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director. Any vacancy in the number of directors created by an increase in the number of directors may be filled by a majority vote of the entire board of directors. A director elected to fill a vacancy shall be elected for the unexpired term of his predecessor in office, and a director chosen to fill a position resulting from an increase in the number of directors shall hold office until the next annual meeting of stockholders and until his successor is elected and qualified, or until his earlier death, resignation or removal.

3.11. COMPENSATION. Directors shall not receive any stated salary for their services as directors but, by resolution of the board of directors, a fixed sum and expenses of attendance, if any, may be allowed to directors for attendance at each annual, regular or special meeting of the board of directors or of any committee of the board of directors; but nothing contained in these bylaws shall be construed to preclude any director from serving the corporation in any other capacity and receiving compensation for those services.

3.12. REMOVAL OF DIRECTORS. The stockholders may, at any time, remove any director, with or without cause, by the affirmative vote of a majority of all the votes entitled to be cast on the matter and may elect a successor to fill any resulting vacancy for the balance of the term of the removed director.

ARTICLE IV

COMMITTEES

4.1. NUMBER, TENURE AND QUALIFICATIONS. The board of directors may appoint from among its members an executive committee and other committees, composed of one or more directors, to serve at the pleasure of the board of directors.

4.2. POWERS. The board of directors may delegate to committees appointed under Section 4.1 of this Article any of the powers of the board of directors, except as prohibited by law.

4.3. MEETINGS. In the event of absence or disqualification of any member of any committee, the members of that committee present at any meeting, whether or not they constitute a quorum, may unanimously appoint a director to act in the place of the absent or disqualified member.

4.4. MEETINGS BY REMOTE COMMUNICATION. Members of a committee of the board of directors may participate in a meeting by any means of remote communication that allows for all persons participating in the meeting to hear each other at the same time. Participation in a meeting by these means shall constitute presence in person at the meeting.

4.5. WRITTEN CONSENT OF COMMITTEES. Any action required or permitted to be taken at any meeting of a committee of the board of directors may be taken without a meeting, if a consent in writing to the action is signed by each member of the committee and the written consent is filed with the minutes of proceedings of the committee.

ARTICLE V

OFFICERS

5.1. GENERAL PROVISIONS. The officers of the corporation may consist of a chairman of the board, a vice chairman of the board, chief executive officer, chief operating officer, chief financial officer, chief scientific officer, a president, one or more vice presidents, a treasurer, one or more assistant treasurers, a secretary, and one or more assistant secretaries. The officers of the corporation shall be elected annually by the board of directors at the first meeting of the board of directors held after each annual meeting of stockholders. If the election of officers shall not be held at the meeting, the election shall be held as soon thereafter as may be convenient. Each officer shall hold office until the officer's successor is elected and qualified or until the officer's death, resignation or removal in the manner hereinafter provided. Any two or more offices except president and vice president may be held by the same person. In its discretion, the board of directors may leave unfilled any office except that of president, treasurer or secretary. Election of an officer or agent shall not of itself create contract rights between the corporation and that officer or agent.

5.2. REMOVAL AND RESIGNATION. Any officer or agent of the corporation may be removed by the board of directors if in its judgment the best interests of the corporation would be served thereby, but the removal shall be without prejudice to the contract rights, if any, of the person so removed. Any officer of the corporation may resign at any time by giving written notice of the resignation to the board of directors, the chairman of the board, the chief executive officer, the president or the secretary. Any resignation shall take effect at the time specified therein or, if the time when it shall become effective is not specified therein, immediately upon its receipt. The acceptance of a resignation shall not be necessary to make it effective unless otherwise stated in the resignation.

5.3. VACANCIES. A vacancy in any office may be filled by the board of directors for the balance of the term. Each such successor shall hold office for the unexpired term of their predecessor and until a successor is elected and qualified, or until the earlier death, resignation or removal of their successor.

5.4. CHAIRMAN AND VICE CHAIRMAN OF THE BOARD. The chairman of the board shall preside over the meetings of the board of directors and of the stockholders. In the absence of the chairman of the board, the vice chairman of the board shall preside at those

meetings. The chairman of the board and the vice chairman of the board shall, respectively, perform all other duties assigned by the board of directors.

5.5. CHIEF EXECUTIVE OFFICER. The board of directors may designate a chief executive officer from among the elected officers. The chief executive officer shall in general supervise and control all of the business and affairs of the corporation. The chief executive officer shall also have responsibility for implementing the policies of the corporation, as determined by the board of directors, and for administering the corporation's business and affairs.

5.6. CHIEF OPERATING OFFICER. The board of directors may designate a chief operating officer from among the elected officers. That officer will have the responsibility and duties as set forth by the board of directors or the chief executive officer.

5.7. CHIEF FINANCIAL OFFICER. The board of directors may designate a chief financial officer from among the elected officers. That officer will have the responsibilities and duties as set forth by the board of directors or the chief executive officer.

5.8. CHIEF SCIENTIFIC OFFICER. The board of directors may designate a chief scientific officer from among the elected officers. That officer will have the responsibilities and duties as set forth by the board of directors or the chief executive officer.

5.9. PRESIDENT. Unless the president is not a member of the board of directors, in the absence of both the chairman and vice chairman of the board, the president shall preside at all meetings of the board of directors and of the stockholders. If a chief executive officer has not been designated by the board of directors, the president shall be the chief executive officer and shall be ex officio a member of all committees that may, from time to time, be constituted by the board of directors. The president may execute any deed, mortgage, bond, contract or other instrument which the board of directors has authorized to be executed, except in cases where execution shall be expressly delegated by the board of directors or by these bylaws to some other officer or agent of the corporation or shall be required by law to be otherwise executed; and in general shall perform all duties incident to the office of president and any other duties prescribed by the board of directors from time to time.

5.10. VICE PRESIDENTS. In the absence of the president or in the event of a vacancy in that office, the vice president (or if there is more than one vice president, the vice presidents in the order designated at the time of their election or, in the absence of any designation, then in the order of their election) shall perform the duties of the chief executive officer or the president and when so acting shall have all the powers of and be subject to all the restrictions upon the president; and shall perform all other duties assigned from time to time by the chief executive officer or the president or by the board of directors. The board of directors may designate one or more vice presidents as executive vice president or as vice president for particular areas of responsibility.

5.11. SECRETARY. The secretary shall (a) keep the minutes of the proceedings of the stockholders, the board of directors and committees of the board of directors in one or more books provided for that purpose; (b) see that all notices are duly given in

accordance with the provisions of these bylaws or as required by law; (c) be custodian of the corporate records and of the seal of the corporation; (d) keep a register of the post office address, telephone number, facsimile number, and electronic mail address of each stockholder, which shall be furnished to the secretary by the stockholder; (e) keep a register of the post office address, telephone number, facsimile number, and electronic mail address of each member of the board of directors, which shall be furnished to the secretary by each member of the board of directors; (f) have general charge of the stock transfer books of the corporation; and (g) in general perform all other duties assigned from time to time by the president or by the board of directors.

5.12. TREASURER. The treasurer shall have the custody of the corporate funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the corporation and shall deposit all moneys and other valuable effects in the name and to the credit of the corporation in those depositories designated by the board of directors.

The treasurer shall disburse the funds of the corporation as may be ordered by the board of directors, taking proper vouchers for the disbursements, and shall render to the president and board of directors, at the regular meetings of the board of directors or whenever they may require it, an account of all transactions as treasurer and of the financial condition of the corporation.

If required by the board of directors, the treasurer shall give the corporation a bond in an amount and with a surety or sureties which are satisfactory to the board of directors for the faithful performance of the duties of this office and for the restoration to the corporation, in case of the treasurer's death, resignation, retirement or removal from office, of all books, papers, vouchers, moneys and other property of whatever kind in the treasurer's possession or control belonging to the corporation.

5.13. ASSISTANT SECRETARIES AND ASSISTANT TREASURERS. The assistant secretaries and assistant treasurers, in general, shall perform the duties assigned to them by the secretary or treasurer, respectively, or by the president or the board of directors. The assistant treasurers shall, if required by the board of directors, give bonds for the faithful performance of their duties in amounts and with a surety or sureties which are satisfactory to the board of directors.

5.14. SALARIES. The salaries of the officers shall be fixed from time to time by the board of directors, and no officer shall be prevented from receiving such salary by reason of the fact that that officer is also a director of the corporation.

ARTICLE VI

CONTRACTS, LOANS, CHECKS AND DEPOSITS

6.1. CONTRACTS. The board of directors may authorize any officer or agent to enter into any contract or to execute and deliver any instrument in the name of and on behalf of the corporation. The authority may be general or confined to specific instances.

6.2. CHECKS AND DRAFTS. All checks, drafts or other orders for the payment of money, notes or other evidences of indebtedness issued in the name of the corporation shall be signed by the officer or officers, agent or agents of the corporation and in the manner determined from time to time by the board of directors or an officer authorized by the board of directors.

6.3. DEPOSITS. All funds of the corporation not otherwise employed shall be deposited from time to time to the credit of the corporation in banks, trust companies or other depositories designated by the board of directors.

ARTICLE VII

SHARES OF STOCK

7.1. CERTIFICATES OF STOCK. Each stockholder shall be entitled to a certificate or certificates which shall represent and certify the number of shares of each class of stock held by that stockholder in the corporation. Each certificate shall be signed by the president or a vice president and countersigned by the secretary or an assistant secretary or the treasurer or an assistant treasurer and may be sealed with the corporate seal. The signatures may be either manual or facsimile. Certificates shall be consecutively numbered; and if the corporation shall, from time to time, issue several classes of stock, each class may have its own number series. A certificate is valid and may be issued whether or not an officer who signed it is still an officer when it is issued. Each certificate representing stock which is restricted as to its transferability or voting powers, which is preferred or limited as to its dividends or as to its share of the assets upon liquidation or which is redeemable at the option of the corporation, shall have a statement of such restriction, limitation, preference or redemption provision, or a summary, plainly stated on the certificate. In lieu of such statement or summary, the corporation may set forth upon the face or back of the certificate a statement that the corporation will furnish to any stockholder, upon request and without charge, a full statement of such information.

7.2. FRACTIONAL SHARES. The corporation may, but shall not be required to, issue fractions of a share. If the corporation does not issue fractions of a share, it shall (i) arrange for the disposition of fractional interests by those entitled thereto, (ii) pay in cash the fair value of fractions of a share as of the time when those entitled to receive such fractions are determined, or (iii) issue scrip or warrants in registered or bearer form, which shall entitle the holder to receive a certificate for a full share upon the surrender of such scrip or warrants aggregating a full share. A certificate for a fractional share shall, but scrip or warrants shall not, unless otherwise provided therein, entitle the holder to exercise voting rights, to receive dividends thereon, and to participate in any of the assets of the corporation in the event of liquidation. The board of directors may cause scrip or warrants to be issued subject to the conditions that they shall become void if not exchanged for certificates representing full shares before a specified date, or subject to the conditions that the shares for which scrip or warrants are exchangeable may be sold by the corporation and the proceeds thereof distributed to the holders of scrip or warrants, or subject to any other conditions that the board of directors may impose.

7.3. TRANSFERS OF STOCK. Upon surrender to the corporation or the transfer agent of the corporation of a certificate of stock duly endorsed or accompanied by proper

evidence of succession, assignment or authority to transfer, the corporation shall issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books.

The corporation shall be entitled to treat the holder of record of any share or shares of stock as the holder in fact and, accordingly, shall not be bound to recognize any equitable or other claim to or interest in the share on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of the State of Maryland.

7.4. LOST CERTIFICATE. The board of directors may direct a new certificate or uncertificated shares to be issued in place of any certificate previously issued by the corporation alleged to have been lost, stolen or destroyed upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed. When authorizing the issuance of a new certificate or uncertificated shares, the board of directors may, in its discretion and as a condition precedent to the issuance, require the owner of the lost, stolen or destroyed certificate or the owner's legal representative to advertise the same in such manner as it shall require and/or to give bond, with sufficient surety, to the corporation to indemnify it against any loss or claim which may arise as a result of the issuance of a new certificate or uncertificated shares.

7.5. RECORD DATE. The board of directors may fix a record date for the determination of stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment, or to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution, or allotment of any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action. Such date, in any case, shall not be prior to the close of business on the day the record date is fixed and shall be not more than 90 days and, in the case of a meeting of stockholders, not less than ten days, before the date on which the meeting or particular action requiring such determination of stockholders of record is to be held or taken. If no record date is fixed the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders is the later of the close of business on the day on which notice is mailed or the thirtieth day before the meeting. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; except if the meeting is adjourned or postponed to a date more than 120 days after the record date originally fixed for the meeting, in which case the board of directors may fix a new record date for the adjourned meeting.

7.6. STOCK LEDGER. The corporation shall maintain at its principal office or at the office of its counsel, accountants or transfer agent, an original or duplicate stock ledger containing the name and address of each stockholder and the number of shares of stock of each class held by each stockholder.

ARTICLE VIII

ACCOUNTING YEAR

Except as from time to time otherwise designated by the board of directors, the accounting year of the corporation shall begin on the first day of January in each year and end on the last day of December in each year.

ARTICLE IX

DIVIDENDS

9.1. DECLARATION. Dividends and other distributions upon the shares of stock of the corporation may be authorized by the board of directors and declared by the corporation, subject to the provisions of law and the charter. Dividends and other distributions may be paid in cash, property or shares of the corporation, subject to the provisions of law and the charter.

9.2. CONTINGENCIES. Before payment of any dividends or other distributions, there may be set aside out of any funds of the corporation available for dividends or other distributions the sum or sums which the board of directors from time to time, in its absolute discretion, deems proper as a reserve fund for contingencies, for equalizing dividends or other distributions, for repairing or maintaining any property of the corporation or for any other purpose the board of directors determines to be in the best interests of the corporation. The board of directors may modify or abolish any reserve in the manner in which it was created.

ARTICLE X

SEAL

10.1. SEAL. The corporate seal shall have inscribed thereon the name of the corporation, the year of its organization and the words "Incorporated Maryland." The board of directors may authorize one or more duplicate seals and provide for the custody thereof.

10.2. AFFIXING SEAL. Whenever the corporation is required to place its corporate seal to a document, it shall be sufficient to meet the requirements of any law, rule or regulation relating to a corporate seal to place the word "(SEAL)" adjacent to the signature of the person authorized to execute the document on behalf of the corporation.

ARTICLE XI

INDEMNIFICATION

To the maximum extent permitted by Maryland law in effect from time to time, the corporation shall indemnify and, without requiring a preliminary determination of the ultimate entitlement to indemnification, shall pay or reimburse reasonable expenses in advance of final disposition of a proceeding to (a) any individual who is a present or former director or officer of the corporation and who is made or threatened to be made a party to the proceeding by

reason of his or her service in that capacity or (b) any individual who, while a director or officer of the corporation and at the request of the corporation, serves or has served as a director, officer, partner, trustee, member or manager of another corporation, real estate investment trust, limited liability company, partnership, joint venture, trust, employee benefit plan or other enterprise and who is made or threatened to be made a party to the proceeding by reason of his or her service in that capacity. The rights to indemnification and advance of expenses provided by the charter of the corporation and these bylaws shall vest immediately upon election of a director or officer. The corporation may, with the approval of its board of directors, provide such indemnification and advance for expenses to an individual who served a predecessor of the corporation in any of the capacities described in (a) or (b) above and to any employee or agent of the corporation or a predecessor of the corporation. The indemnification and payment or reimbursement of expenses provided in these bylaws shall not be deemed exclusive of or limit in any way other rights to which any person seeking indemnification or payment or reimbursement of expenses may be or may become entitled under any bylaw, resolution, insurance, agreement or otherwise.

Neither the amendment nor repeal of this Section, nor the adoption or amendment of any other provision of the bylaws or charter of the corporation inconsistent with this Section, shall apply to or affect in any respect the applicability of the preceding paragraph with respect to any act or failure to act which occurred prior to that amendment, repeal or adoption.

ARTICLE XII

WAIVER OF NOTICE

Whenever any notice is required to be given pursuant to the charter or bylaws of the corporation or pursuant to applicable law, a waiver of notice in writing, signed by the person or persons entitled to the notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of the notice. Neither the business to be transacted at nor the purpose of any meeting need be set forth in the waiver of notice, unless specifically required by statute. A person's attendance at any meeting shall constitute a waiver of notice of the meeting, except where the person attends the meeting for the express purpose of objecting to the transaction of any business on the ground that the meeting is not lawfully called or convened.

ARTICLE XIII

GENERAL PROVISIONS

13.1. VOTING OF SECURITIES. Except as the board of directors may otherwise designate, the president may waive notice of, and act as, or appoint any person or persons to act as, proxy or attorney-in-fact for this corporation (with or without power of substitution) at, any meeting of stockholders or shareholders of any other corporation or entity, the securities of which may be held by this corporation.

13.2. EVIDENCE OF AUTHORITY. A certificate by the secretary, or an assistant secretary, as to any action taken by the stockholders, the board of directors, a committee or any officer or representative of the corporation shall as to all persons who rely on the certificate in good faith be conclusive evidence of such action.

13.3. SEVERABILITY. Any determination that any provision of these bylaws is for any reason inapplicable, illegal or ineffective shall not affect or invalidate any other provision of these bylaws.

13.4. PRONOUNS. All pronouns used in these bylaws shall be deemed to refer to the masculine, feminine or neuter, singular or plural, as the identity of the person or persons may require.

ARTICLE XIV

AMENDMENT OF BYLAWS

14.1. BY DIRECTORS. The board of directors shall have the power to adopt, alter or repeal any bylaws of the corporation and to make new bylaws, except that the board of directors shall not alter or repeal this Section or any bylaws made by the stockholders.

14.2. BY STOCKHOLDERS. The stockholders shall have the power to adopt, alter or repeal any bylaws of the corporation and to make new bylaws.

EXHIBIT 3.1

VACCI NOGEN, INC. – FORM 1-A Regulation A Offering Statement

INVESTORS' RIGHTS AGREEMENT

THIS INVESTORS' RIGHTS AGREEMENT is made effective as of the 24th day of June, 2010, by and among Vaccinogen, Inc., a Delaware corporation (the "**Company**"); each of the investors listed on Schedule A hereto, each of which is referred to in this Agreement as an "**Investor**"; and the Key Holders (as defined below).

RECITALS

WHEREAS, the Company and the Investors are parties to the Stock Exchange Agreement of even date herewith (the "**Purchase Agreement**") and the Company and Intracel are parties to the Asset Transfer Agreement of even date herewith (the "**Asset Transfer Agreement**"); and

WHEREAS, in order to induce the Company and the Investors to enter into the Purchase Agreement and the Asset Transfer Agreement, the Investors, the Key Holders, and the Company hereby agree that this Agreement shall govern certain rights of the Investors, the Company and the Key Holders as set forth in this Agreement;

NOW, THEREFORE, the parties hereby agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person.

1.2 "**Capital Stock**" means (a) shares of Common Stock and Series B Preferred Stock (whether now outstanding or hereafter issued in any context), (b) shares of Common Stock issued or issuable upon conversion of Series B Preferred Stock and (c) shares of Common Stock issued or issuable upon exercise or conversion, as applicable, of stock options, warrants or other convertible securities of the Company, in each case now owned or subsequently acquired by any Key Holder, any Investor, or their respective successors or permitted transferees or assigns. For purposes of the number of shares of Capital Stock held by an Investor or Key Holder (or any other calculation based thereon), all shares of convertible securities (including Series B Preferred Stock and Series AA Preferred Stock) shall be deemed to have been converted into Common Stock at the then-applicable conversion ratio.

1.3 "**Common Stock**" means shares of the Company's common stock, par value \$.0001 per share.

1.4 "**Convertible Securities**" shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

1.5 “**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.6 “**Holder**” means any holder of Series B Securities who is a party to this Agreement.

1.7 “**Intracel**” means Intracel Holdings Corporation, a Delaware corporation.

1.8 “**IPO**” means the Company’s first underwritten public offering of its Common Stock under the Securities Act.

1.9 “**Key Holder**” means the persons named on Schedule B hereto, each person to whom the rights of a Key Holder are assigned pursuant to Section 6.1 and any one of them, as the context may require.

1.10 “**License Agreement**” means that certain License Agreement made effective October 10, 2007 by and between the Intracel and the Company, as amended by the Amendment to License Agreement, of even date herewith.

1.11 “**Liquidity Event**” shall mean (i) an Qualified Public Offering, (ii) a “Deemed Liquidation Event” as such term is defined in the Company’s Certificate of Incorporation.

1.12 “**Option**” shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

1.13 “**Person**” means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.14 “**Preferred Stock**” means shares of the Series AA Preferred Stock and the Series B Preferred Stock.

1.15 “**Proposed Key Holder Transfer**” means any assignment, sale, offer to sell, pledge, mortgage, hypothecation, encumbrance, disposition of or any other like transfer or encumbering of any Transfer Stock (or any interest therein) proposed by any of the Key Holders.

1.16 “**Proposed Transfer Notice**” means written notice from a Key Holder setting forth the terms and conditions of a Proposed Key Holder Transfer.

1.17 “**Prospective Transferee**” means any person to whom a Key Holder proposes to make a Proposed Key Holder Transfer.

1.18 “**Qualified Public Offering**” shall have the meaning given to such term in the Restated Certificate.

1.19 “**Registration Rights Agreement**” means that certain Registration Rights Agreement by and among the Company and the Investors of even date herewith.

1.20 “**Restated Certificate**” means the Third Amended and Restated Certificate of Incorporation of the Company on file with the Secretary of State of the State of Delaware as of the date hereof.

1.21 “**Restricted Securities**” means the securities of the Company required to bear the legend set forth in Section 2 hereof.

1.22 “**SEC**” means the Securities and Exchange Commission.

1.23 “**SEC Rule 144**” means Rule 144 promulgated by the SEC under the Securities Act.

1.24 “**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.25 “**Series B Securities**” means (i) the Common Stock issuable or issued upon conversion of the Series B Preferred Stock; and (ii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clause (i) above; excluding in all cases, however, any securities (i) sold by a Person to the public either pursuant to a registration statement or Rule 144 or (ii) sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Section 6.1.

1.26 “**Series AA Preferred Stock**” means shares of the Company’s Series AA Preferred Stock, par value \$.0001 per share.

1.27 “**Series B Preferred Stock**” means shares of the Company’s Series B Preferred Stock, par value \$.0001 per share.

1.29 “**Shares**” means any securities of the Company the holders of which are entitled to vote for members of the Company’s Board of Directors, including without limitation, all shares of Common Stock and Series B Preferred Stock by whatever name called, now owned or subsequently acquired by an Investor, however acquired, whether through stock splits, stock dividends, reclassifications, recapitalizations, similar events or otherwise.

1.30 “**Transfer Stock**” means shares of Capital Stock owned by a Key Holder, or issued to a Key Holder after the date hereof (including, without limitation, in connection with any stock split, stock dividend, recapitalization, reorganization, or the like), but does not include any shares of Series B Preferred Stock or Common Stock issued or issuable upon conversion of Series B Preferred Stock.

2. Restrictions on Transfer.

(a) The Series B Preferred Stock and the Series B Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, unless (i) there is then in effect a registration statement under the Securities Act covering such proposed

disposition and such disposition is made in accordance with such registration statement or (ii) the transferring Holder complies with the conditions specified in Section 2(c), which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transferee of the Series B Preferred Stock and the Series B Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement and the Registration Rights Agreement. After its IPO, the Company will not require any bona fide third party transferee pursuant to Rule 144 to be bound by the terms of this Agreement if the shares so transferred do not remain Registrable Securities hereunder following such transfer.

(b) Each certificate or instrument representing (i) the Series B Preferred Stock, (ii) the Series B Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Section 2(c)) be stamped or otherwise imprinted with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Section 2.

(c) The holder of each certificate representing Restricted Securities, by acceptance thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the

Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144 or (y) in any transaction in which such Holder distributes Restricted Securities (1) to an Affiliate of such Holder for no consideration or (2) in the case of a Holder that is a natural person, to such persons' spouse, child (natural or adopted), or any lineal descendant of such person (or his or her spouse) (all of the foregoing collectively referred to as "family members"), or any other relative approved by the Board of Directors of the Company, or any custodian or trustee of any trust, partnership or limited liability company for the benefit of, or the ownership interests of which are owned wholly by, such Holder or any such family members, for no consideration and made for bona fide estate planning purposes, either during such persons lifetime or on death by will or intestacy; provided that each transferee agrees in writing to be subject to the terms of this Section 2 and provided that such distribution does not require the Company to have greater than two hundred and fifty (250) stockholders or require the Company to register pursuant to the Securities Act or the Securities Exchange Act of 1934, as amended. Each certificate or instrument evidencing the Restricted Securities transferred as above provided shall bear, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Section 2(b), except that such certificate shall not bear such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

(d) The Company shall be obligated to reissue promptly unlegended certificates at the request of any holder of Series B Securities if the Company has completed its IPO and the holder has obtained an opinion of counsel (which counsel may be counsel to the Company) reasonably acceptable to the Company to the effect that the securities proposed to be disposed of may lawfully be so disposed of without registration, qualification and legend, *provided that* the second legend listed above shall be removed only at such time as the holder of such certificate is no longer subject to any restrictions hereunder.

(e) Any legend endorsed on an instrument pursuant to applicable state securities laws and the stop-transfer instructions with respect to such securities shall be removed upon receipt by the Company of an order of the appropriate blue sky authority authorizing such removal.

3. Confidentiality. The Investors agrees to keep confidential and not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any information obtained from the Company (including notice of the Company's intention to file a registration statement) that the Company identifies as confidential, unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Section 3 by the Investor), (b) is or has been independently developed or conceived by the Investor without use of the Company's confidential information, or (c) is or has been made known or disclosed to the Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that the Investor may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any Affiliate, partner, member, stockholder, or wholly

owned subsidiary of the Investor in the ordinary course of business, provided that the Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information and provided, further that any such Affiliate is not a competitor of the Company; or (iii) as may otherwise be required by law, provided that the Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure.

4. Stock Awards; Milestones; Additional Series B Stock.

4.1 Stock Awards. Until the closing of a Qualified IPO, the Company will issue to the Investors in the same proportions provided for in the Purchase Agreement additional shares of Series B Preferred Stock in an amount necessary to cause the Investors to have been issued shares equal to twenty percent (20%) of the total outstanding equity ownership of the Company on a fully-diluted and as-converted basis; provided, however, for purposes of measuring such twenty percent (20%) ownership, any Series AA Preferred Stock issued as a Series AA PIK Dividend (as defined in the Restated Certificate) shall not be included as outstanding equity of the Company. This Section 4.1 shall terminate and be of no further force and effect upon the award of stock in accordance with Section 4.2 or 4.3 below.

4.2 Milestones. If the Company does not meet any one of the milestones listed below (the "**Milestones**"), the Company will issue shares of the Series B Preferred Stock to the Investors in the same proportions provided for in the Purchase Agreement in the amount necessary to cause the Investors to have been issued shares equal to fifty percent (50%) of the total outstanding equity ownership of the Company on a fully-diluted and as-converted basis (the "**Milestone Dilution**"), and each reference to "twenty percent (20%)" in Section 4.1 shall be automatically amended to read "fifty percent (50%)" (or any other Milestone Dilution that applies pursuant to Section 4.2(d)); provided, however, for purposes of measuring such fifty percent (50%) ownership or other ownership interest, any Series AA Preferred Stock issued as a Series AA PIK Dividend (as defined in the Restated Certificate) shall not be included as outstanding equity of the Company. The Milestones are as follows:

(a) No later than the five (5) month anniversary of the date hereof, the Company shall recruit a Chief Executive Officer with senior executive-level experience in the biotechnology or pharmaceutical industry who is reasonably acceptable to Goldman Sachs or another financial adviser of national recognition (i.e., one of the "bulge bracket" firms);

(b) No later than the six (6) month anniversary of the date hereof, enrollment and randomization of the first patient in a phase 3 clinical trial of OncoVax for stage II colon cancer;

(c) No later than the six (6) month anniversary of the date hereof, receive Thirty-Five Million Dollars (\$35,000,000) in bona fide equity financing (the "**Milestone Financing**"); and

(d) No later than the fifteen (15) month anniversary of the date hereof, the Company shall achieve a Liquidity Event; provided, however, that if (i) Goldman Sachs or another investment bank of national recognition (i.e., one of the "bulge bracket" firms) provides

a written statement that they believe that delaying an initial public offering of the Company's stock past such fifteen (15) month anniversary is necessary because of market conditions, and (ii) none of the other Milestones have been missed by the Company, the Milestone Dilution shall be 30% (not 50%), and will increase by five percentage points each month thereafter, until it moves back to 50%.

For the avoidance of doubt, in calculating the amount of funds received toward the Milestone Financing, any and all funds received in exchange for the Series AA Preferred Stock and any money committed and/or held in escrow to acquire the Series AA Preferred Stock shall be included towards the Milestone Financing amount; but any funds received to date in exchange for Common Stock of the Company or Series A Preferred Stock of the Company (which series has now all been converted to Common Stock of the Company), shall not be included when calculating the amount received toward such Milestone Financing amount.

4.3 Additional Series B Stock. Following the issuance of Series B Preferred Stock to the Investors pursuant to the Purchase Agreement, Company shall not issue any shares of Series B Preferred Stock that would increase the total number of outstanding shares of Series B Preferred Stock, except as provided in this Section 4 and except for any Series B PIK Dividend (as defined in the Restated Certificate) and as otherwise provided for in the Restated Certificate.

4.4 Additional Series AA Stock. Following the receipt by the Company of not more than Thirty-Five Million Dollars (\$35,000,000) in consideration for Series AA Preferred Stock, the Company shall not issue any shares of Series AA Preferred Stock that would increase the total number of outstanding shares of Series AA Preferred Stock, except for any Series AA PIK Dividends (as defined in the Restated Certificate) and as otherwise provided in the Restated Certificate.

4.5 Termination. This Section 4 shall automatically terminate upon the earlier of (a) immediately prior to the consummation of a Qualified Public Offering and (b) the consummation of a Deemed Liquidation Event (as such term is defined in the Restated Certificate).

5. Drag-Along Right.

5.1 Definitions. A "Sale of the Company" shall mean either: (a) a transaction or series of related transactions in which a Person, or a group of related Persons, acquires from stockholders of the Company shares representing more than fifty percent (50%) of the outstanding voting power of the Company (a "Stock Sale"); or (b) a transaction that qualifies as a "Deemed Liquidation Event" as such term is defined in the Restated Certificate.

5.2 Actions to be Taken. In the event that (i) the holders of at least a majority of the shares of Common Stock then issued or issuable upon conversion of the shares of Series AA Preferred Stock and the Series B Preferred Stock (the "Selling Investors") and (ii) the Board of Directors approve a Sale of the Company in writing, specifying that this Section 5 shall apply to such transaction, then the Investors hereby agree:

(a) if such transaction requires stockholder approval, with respect to all Shares that the Investors own or over which the Investors otherwise exercises voting power,

to vote (in person, by proxy or by action by written consent, as applicable) all Shares in favor of, and adopt, such Sale of the Company (together with any related amendment to the Restated Certificate required in order to implement such Sale of the Company) and to vote in opposition to any and all other proposals that could delay or impair the ability of the Company to consummate such Sale of the Company;

(b) if such transaction is a Stock Sale, to sell the same proportion of shares of capital stock of the Company beneficially held by the Investors as is being sold by the Selling Investors to the Person to whom the Selling Investors propose to sell their Shares, and, except as permitted in Section 5.3 below, on the same terms and conditions as the Selling Investors;

(c) to execute and deliver all related documentation and take such other action in support of the Sale of the Company as shall reasonably be requested by the Company or the Selling Investors in order to carry out the terms and provisions of this Section 5, including without limitation executing and delivering instruments of conveyance and transfer, and any purchase agreement, merger agreement, indemnity agreement, escrow agreement, consent, waiver, governmental filing, share certificates duly endorsed for transfer (free and clear of impermissible liens, claims and encumbrances) and any similar or related documents;

(d) not to deposit, and to cause their Affiliates not to deposit, except as provided in this Agreement, any Shares of the Company owned by such party or Affiliate in a voting trust or subject any Shares to any arrangement or agreement with respect to the voting of such Shares, unless specifically requested to do so by the acquiror in connection with the Sale of the Company;

(e) to refrain from exercising any dissenters' rights or rights of appraisal under applicable law at any time with respect to such Sale of the Company; and

(f) if the consideration to be paid in exchange for the Shares pursuant to this Section 5 includes any securities and due receipt thereof by any Investor would require under applicable law (x) the registration or qualification of such securities or of any person as a broker or dealer or agent with respect to such securities or (y) the provision to any Investor of any information other than such information as a prudent issuer would generally furnish in an offering made solely to "accredited investors" as defined in Regulation D promulgated under the Securities Act of 1933, as amended, the Company may cause to be paid to any Investor in lieu thereof, against surrender of the Shares which would have otherwise been sold by the Investor, an amount in cash equal to the fair value (as determined in good faith by the Company) of the securities which the Investor would otherwise receive as of the date of the issuance of such securities in exchange for the Shares.

5.3 Exceptions. Notwithstanding the foregoing, the Investors will not be required to comply with Section 5.2 above in connection with any proposed Sale of the Company (the "**Proposed Sale**") unless:

(a) the Investors shall not be liable for the inaccuracy of any representation or warranty made by any other Person in connection with the Proposed Sale, other

than the Company (except to the extent that funds may be paid out of an escrow established to cover breach of representations, warranties and covenants of the Company as well as breach by any stockholder of any of identical representations, warranties and covenants provided by all stockholders);

(b) liability shall be limited to the Investors' applicable share (determined based on the respective proceeds payable to the Investor in connection with such Proposed Sale in accordance with the provisions of the Restated Certificate) of a negotiated aggregate indemnification amount that applies equally to all Investors but that in no event exceeds the amount of consideration otherwise payable to such Investor in connection with such Proposed Sale, except with respect to claims related to fraud by such Investor, the liability for which need not be limited as to such Investor;

(c) upon the consummation of the Proposed Sale, each holder of each class or series of the Company's stock will receive the same form of consideration for their shares of such class or series as is received by other holders in respect of their shares of such same class or series of stock and if any holders of any capital stock of the Company are given an option as to the form and amount of consideration to be received as a result of the Proposed Sale, all holders of such capital stock will be given the same option.

5.4 Restrictions on Sales of Control of the Company. No Investors or Key Holders shall be a party to any Stock Sale unless all holders of Preferred Stock are allowed to participate in such transaction and the consideration received pursuant to such transaction is allocated among the parties thereto in the manner specified in the Restated Certificate (as if such transaction were a Deemed Liquidation Event), unless the holders of at least a majority of the Series B Preferred Stock elect otherwise by written notice given to the Company at least 10 days prior to the effective date of any such transaction or series of related transactions.

5.5 Termination. This Section 5 shall automatically terminate upon the earlier of (a) immediately prior to the consummation of a Qualified Public Offering and (b) the consummation of a Deemed Liquidation Event (as such term is defined in the Restated Certificate).

6. Co-Sale Right and Exempt Transfers.

6.1 Co-Sale Right.

(a) Exercise of Right. If any Transfer Stock subject to a Proposed Key Holder Transfer is to be sold to a Prospective Transferee, each respective Investor may elect to exercise its Right of Co-Sale and participate on a pro rata basis in the Proposed Key Holder Transfer as set forth in Section 6.1(b) below and otherwise on the same terms and conditions specified in the Proposed Transfer Notice (provided that if an Investor wishes to sell Series B Preferred Stock, the price set forth in the Proposed Transfer Notice shall be appropriately adjusted based on the conversion ratio of the Series B Preferred Stock into Common Stock) (the "**Right of Co-Sale**"). Each Investor who desires to exercise its Right of Co-Sale must give the selling Key Holder(s) written notice to that effect within fifteen (15) days after receipt of the

Proposed Transfer Notice and upon giving such notice such Investor shall be deemed to have effectively exercised the Right of Co-Sale.

(b) Shares Includable. Each Investor who timely exercises such Investor's Right of Co-Sale by delivering the written notice provided for above in Section 6.1(a) may include in the Proposed Key Holder Transfer all or any part of such Investor's Capital Stock equal to the product obtained by multiplying (i) the aggregate number of shares of Transfer Stock subject to the Proposed Key Holder Transfer by (ii) a fraction, the numerator of which is the number of shares of Capital Stock owned by such Investor immediately before consummation of the Proposed Key Holder Transfer and the denominator of which is the total number of shares of Capital Stock owned, in the aggregate, by all Investors immediately prior to the consummation of the Proposed Key Holder Transfer, plus the number of shares of Transfer Stock held by the Key Holders. To the extent one or more of the Investors exercise such right of participation in accordance with the terms and conditions set forth herein, the number of shares of Transfer Stock that the selling Key Holder(s) may sell in the Proposed Key Holder Transfer shall be correspondingly reduced.

(c) Delivery of Certificates. Each Investor shall effect its participation in the Proposed Key Holder Transfer by delivering to the transferring Key Holder(s), no later than fifteen (15) days after such Investor's exercise of the Right of Co-Sale, one or more stock certificates, properly endorsed for transfer to the Prospective Transferee, representing:

(i) the number of shares of Common Stock that such Investor elects to include in the Proposed Key Holder Transfer; or

(ii) the number of shares of Series B Preferred Stock that is at such time convertible into the number of shares of Common Stock that such Investor elects to include in the Proposed Key Holder Transfer; provided, however, that if the Prospective Transferee objects to the delivery of Series B Preferred Stock in lieu of Common Stock, such Investor shall first convert the Series B Preferred Stock into Common Stock and deliver Common Stock as provided above. The Company agrees to make any such conversion concurrent with and contingent upon the actual transfer of such shares to the Prospective Transferee.

(d) Purchase Agreement. The parties hereby agree that the terms and conditions of any sale pursuant to this Section 6.1 will be memorialized in, and governed by, a written purchase and sale agreement with customary terms and provisions for such a transaction and the parties further covenant and agree to enter into such an agreement as a condition precedent to any sale or other transfer pursuant to this Section 6.1.

(e) Deliveries. Each stock certificate an Investor delivers to the selling Key Holder(s) pursuant to Section 6.1(c) above will be transferred to the Prospective Transferee against payment therefor in consummation of the sale of the Transfer Stock pursuant to the terms and conditions specified in the Proposed Transfer Notice and the purchase and sale agreement, and the selling Key Holder(s) shall concurrently therewith remit or direct payment to each Investor the portion of the sale proceeds to which such Investor is entitled by reason of its participation in such sale. If any Prospective Transferee refuse(s) to purchase securities subject

to the Right of Co-Sale from any Investor exercising its Right of Co-Sale hereunder, no Key Holder may sell any Transfer Stock to such Prospective Transferee unless and until, simultaneously with such sale, such Key Holder purchases all securities subject to the Right of Co-Sale from such Investor on the same terms and conditions (including the proposed purchase price) as set forth in the Proposed Transfer Notice.

(f) Additional Compliance. If any Proposed Key Holder Transfer is not consummated within sixty (60) days after receipt of the Proposed Transfer Notice by the Company, the Key Holders proposing the Proposed Key Holder Transfer may not sell any Transfer Stock unless they first comply in full with each provision of this Section 6. The exercise or election not to exercise any right by any Investor hereunder shall not adversely affect its right to participate in any other sales of Transfer Stock subject to this Section 6.2.

6.2 Exempt Transfer.

(a) Exempted Transfers. Notwithstanding the foregoing or anything to the contrary herein, the provisions of Sections 6.1 shall not apply: (a) in the case of a Key Holder that is an entity, upon a transfer by such Key Holder to its stockholders, members, partners or other equity holders, (b) to a repurchase of Transfer Stock from a Key Holder by the Company at a price no greater than that originally paid by such Key Holder for such Transfer Stock and pursuant to an agreement containing vesting and/or repurchase provisions approved by a majority of the Board of Directors, or (c) in the case of a Key Holder that is a natural person, upon a transfer of Transfer Stock by such Key Holder made for bona fide estate planning purposes, either during his or her lifetime or on death by will or intestacy to his or her spouse, child (natural or adopted), or any other direct lineal descendant of such Key Holder (or his or her spouse) (all of the foregoing collectively referred to as "family members"), or any other relative approved by the Board of Directors of the Company, or any custodian or trustee of any trust, partnership or limited liability company for the benefit of, or the ownership interests of which are owned wholly by, such Key Holder or any such family members; provided that in the case of clause(s) (a) or (c), such shares of Transfer Stock shall at all times remain subject to the terms and restrictions set forth in this Agreement and such transferee shall, as a condition to such issuance, deliver a counterpart signature page to this Agreement as confirmation that such transferee shall be bound by all the terms and conditions of this Agreement as a Key Holder (but only with respect to the securities so transferred to the transferee), including the obligations of a Key Holder with respect to Proposed Key Holder Transfers of such Transfer Stock pursuant to Section 6.

(b) Exempted Offerings. Notwithstanding the foregoing or anything to the contrary herein, the provisions of Section 6 shall not apply to the sale of any Transfer Stock (a) to the public in an offering pursuant to an effective registration statement under the Securities Act of 1933, as amended or (b) pursuant to a Deemed Liquidation Event (as defined in the Restated Certificate).

(c) Prohibited Transferees. Notwithstanding the foregoing, no Key Holder shall transfer any Transfer Stock to (a) any entity which, in the determination of the Company's Board of Directors, directly or indirectly competes with the Company or (b) any customer, distributor or supplier of the Company, if the Company's Board of Directors should

determine that such transfer would result in such customer, distributor or supplier receiving information that would place the Company at a competitive disadvantage with respect to such customer, distributor or supplier.

6.3 Termination. This Section 6 shall automatically terminate upon the earlier of (a) immediately prior to the consummation of a Qualified Public Offering and (b) the consummation of a Deemed Liquidation Event (as such term is defined in the Restated Certificate).

7. Miscellaneous.

7.1 Assignment of Rights.

(a) The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and permitted assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

(b) Any successor or permitted assignee of any Key Holder, including any Prospective Transferee who purchases shares of Transfer Stock in accordance with the terms hereof, shall deliver to the Company and the Investor, as a condition to any transfer or assignment, a counterpart signature page hereto pursuant to which such successor or permitted assignee shall confirm their agreement to be subject to and bound by all of the provisions set forth in this Agreement that were applicable to the predecessor or assignor of such successor or permitted assignee.

(c) The rights of the Investor hereunder are not assignable without the Company's written consent (which shall not be unreasonably withheld, delayed or conditioned), except by an Investor to any Affiliate or to any permitted transferee of the Series B Preferred Stock and/or the Series B Securities, it being acknowledged and agreed that any such assignment, including an assignment contemplated by the preceding clauses shall be subject to and conditioned upon any such assignee's delivery to the Company and the Investor of a counterpart signature page hereto pursuant to which such assignee shall confirm their agreement to be subject to and bound by all of the provisions set forth in this Agreement that were applicable to the assignor of such assignee.

(d) Except in connection with an assignment by the Company by operation of law to the acquirer of the Company, the rights and obligations of the Company hereunder may not be assigned under any circumstances.

7.2 Governing Law. This Agreement and any controversy arising out of or relating to this Agreement shall be governed by and construed in accordance with the General Corporation Law of the State of Delaware as to matters within the scope thereof, and as to all other matters shall be governed by and construed in accordance with the internal laws of State of Delaware, without regard to conflict of law principles that would result in the application of any law other than the law of the State of Delaware.

7.3 Counterparts; Facsimile. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Agreement may also be executed and delivered by facsimile signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

7.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

7.5 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A or Schedule B (as applicable) hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Section 6.5. If notice is given to the Company, a copy shall also be sent to Bryson L. Cook, Venable LLP, 750 E. Pratt Street, Baltimore, Maryland 21202.

7.6 Amendments and Waivers. This Agreement may be amended, modified or terminated (other than pursuant to Section 6.3 above) and the observance of any term hereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only by a written instrument executed by (a) the Company, (b) the Key Holders holding a majority of the shares of Transfer Stock then held by all of the Key Holders, and (c) the holders of a majority of the shares of Common Stock issued or issuable upon conversion of the then outstanding shares of Series B Preferred Stock held by the Investor(s) (voting as a single class and on an as-converted basis). Any amendment, modification, termination or waiver so effected shall be binding upon the Company, the Investor(s), the Key Holders and all of their respective successors and permitted assigns whether or not such party, assignee or other shareholder entered into or approved such amendment, modification, termination or waiver. Notwithstanding the foregoing, (i) this Agreement may not be amended, modified or terminated and the observance of any term hereunder may not be waived with respect to any Investor or Key Holder without the written consent of such Investor or Key Holder unless such amendment, modification, termination or waiver applies to all Investors and Key Holders, respectively, and (ii) the consent of the Key Holders shall not be required for any amendment, modification, termination or waiver if such amendment, modification, termination or waiver does not apply to the Key Holders.

7.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement,

and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

7.8 Entire Agreement. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.


7.9 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the federal and state courts located within the geographic boundaries of the United States District Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the federal and state courts located within the geographic boundaries of the United States District Court for the District of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

7.10 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

VACCINOGEN, INC.

By: 
Name: Michael G. Hanna, Jr.
Title: President and Chief Executive Officer

INVESTORS:

INTRACEL HOLDINGS CORPORATION

By: _____
Name: Daniel Kane
Title: Chairman of the Board of Directors

DANIEL FITZGERALD:

Name: Daniel Fitzgerald

INTRACEL INVESTMENT LLC:

By: _____
Name: _____
Title: _____

DUBLIND PARTNERS:

By: _____
Name: _____
Title: _____

[SIGNATURE PAGE TO SERIES B INVESTOR RIGHTS AGREEMENT]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

VACCINOGEN, INC.

By: _____
Name: Michael G. Hanna, Jr.
Title: President and Chief Executive Officer

INVESTORS:

INTRACEL HOLDINGS CORPORATION

By: *Daniel Kane*
Name: Daniel Kane
Title: Chairman of the Board of Directors

DANIEL FITZGERALD:

Name: Daniel Fitzgerald

INTRACEL INVESTMENT LLC:

By: *Daniel Kane*
Name: Daniel Kane
Title: managing member

DUBLIND PARTNERS:

By: _____
Name:
Title:

[SIGNATURE PAGE TO SERIES B INVESTOR RIGHTS AGREEMENT]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

VACCINOGEN, INC.

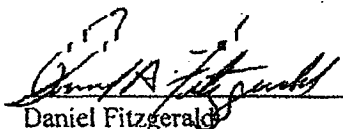
By: _____
Name: Michael G. Hanna, Jr.
Title: President and Chief Executive Officer

INVESTORS:

INTRACEL HOLDINGS CORPORATION

By: _____
Name: Daniel Kinn
Title: Chairman of the Board of Directors

DANIEL FITZGERALD.


Name: Daniel Fitzgerald

INTRACEL INVESTMENT LLC:

By: _____
Name:
Title:

DUBLIND PARTNERS:

By: _____
Name:
Title:

[SIGNATURE PAGE TO SERIES B INVESTOR RIGHTS AGREEMENT]

K. SCHMIDT:

Name: *Kenneth J. Schmidt*

ALLIANCE EQUITIES:

By: _____
Name: _____
Title: _____

CHARLES LINDSAY:

Name: Charles Lindsay

CURTIS PARTNERSHIP:

By: _____
Name: _____
Title: _____

CHARLES DUBROFF:

By: _____
Name: Charles Dubroff

3V SOURCEONE:

By: _____
Name: _____
Title: _____

[SIGNATURE PAGE TO SERIES B INVESTOR RIGHT'S AGREEMENT]

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K. SCHMIDT:

Name: _____

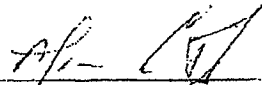
ALLIANCE EQUITIES:

By: _____
Name:
Title:

CHARLES LINDSAY:

Name: Charles Lindsay

CURTIS PARTNERSHIP:

By:  _____
Name: Alan Curtis
Title: Managing General Partner

CHARLES DUBROFF:

By: _____
Name: Charles Dubroff

3V SOURCEONE:

By: _____
Name:
Title:

[SIGNATURE PAGE TO SERIES B INVESTOR RIGHTS AGREEMENT]

K. SCHMIDT:

Name: _____

ALLIANCE EQUITIES:

By: _____
Name:
Title:

CHARLES LINDSAY:

Name: Charles Lindsay

CURTIS PARTNERSHIP:

By: _____
Name:
Title:

CHARLES DUBROFF:



By: _____
Name: Charles Dubroff

3V. SOURCEONE:

By: _____
Name:
Title:

[SIGNATURE PAGE TO SERIES B INVESTOR RIGHTS AGREEMENT]

ALAN COHEN:

By: _____
Name: Alan Cohen

DANIEL KANE

By: *Daniel Kane*
Name: Daniel Kane

ALBERT NASSI

By: _____
Name: Albert Nassi

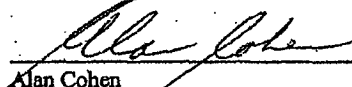
SQ VENTURES:

By: _____
Name: _____
Title: _____

CHRIS HUBER:

By: _____
Name: Chris Huber

ALAN COHEN:

By: 
Name: Alan Cohen

DANIEL KANE

By: _____
Name: Daniel Kane

ALBERT NASSI

By: _____
Name: Albert Nassi

SQ VENTURES:

By: _____
Name: _____
Title: _____

CHRIS HUBER:

By: _____
Name: Chris Huber

[SIGNATURE PAGE TO SERIES B INVESTOR RIGHTS AGREEMENT]

ALAN COHEN:

By: _____
Name: Alan Cohen

DANIEL KANE

By: _____
Name: Daniel Kane

ALBERT NASSI

By: _____
Name: Albert Nassi

SQ. VENTURES:

By: *D. L. Seidenberg*
Name: DAVID L SEIDENBERG
Title: MANAGING MEMBER

CHRIS HUBER:

By: _____
Name: Chris Huber


ALAN COHEN:

By: _____
Name: Alan Cohen

DANIEL KANE

By: _____
Name: Daniel Kane

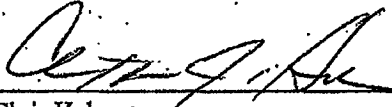
ALBERT NASSI

By: 
Name: Albert Nassi

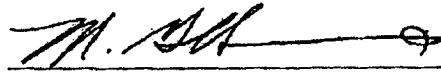
SQ VENTURES:

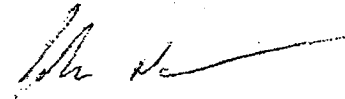
By: _____
Name: _____
Title _____

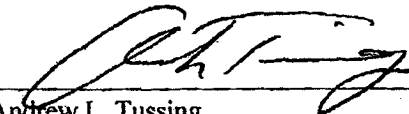
CHRIS HUBER:

By: 
Name: Chris Huber

KEY HOLDERS:

Signature: 
Name: Michael G. Hanna, Jr.

Signature: 
Name: John Nicolis

Signature: 
Name: Andrew L. Tussing

[SIGNATURE PAGE TO SERIES B INVESTOR RIGHTS AGREEMENT]

SCHEDULE A

Investors

<u>Name, Address, Email and Fax</u>
Intracel Holdings Corporation 550 Highland Street Frederick, Maryland 21701 Attention: Daniel Kane Fax: _____ Email: DKane@NassiGroup.com
Daniel Fitzgerald Email:
Dublind Partners Email:
[K. Schmidt] Email:
Alliance Equities Email:
Charles Linsay Email:
Cutis Partnership Email:

Charles Dubroff
Email:
3V Sourceone
Email:
Alan Cohen
Email:
Daniel Kane
Email:
Albert Nassi
Email:
SQ Ventures
Email:
Chris Huber
Email:

SCHEDULE B
Key Holders

Name	Address	E-Mail	Fax
Michael G. and Barbarra H. Hanna	39572 North Cotton Patch Hill Road Bethany Beach, DE 19930	mghannajr@vaccinogeninc.com	301 631 2970
John Nicolis	20 Lascelles Avenue Unit 1 Toorak Melbourne, Australia 3142	John.nicolis@optimaljapan.com	011 61 2 8239 3333
Andrew L. Tussing	10212 Little Brick House Ct. Ellicott City, MD 21042	atussing@vaccinogeninc.com	301 631 2970

EXHIBIT 3.2

VACCI NOGEN, INC. – FORM 1-A Regulation A Offering Statement

THIS NOTE HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY STATE SECURITIES LAWS, AND MAY NOT BE TRANSFERRED UNLESS THE COMPANY HAS RECEIVED A WRITTEN OPINION FROM COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE COMPANY STATING THAT SUCH TRANSFER IS BEING MADE IN COMPLIANCE WITH ALL APPLICABLE FEDERAL AND STATE SECURITIES LAWS.

**FOURTH AMENDED AND RESTATED
PROMISSORY NOTE**

Frederick, Maryland
May 31, 2013

\$1,800,000.00
Due: July 31, 2013

For value received, the undersigned, Vaccinogen, Inc., a Maryland corporation ("**Maker**"), promises to pay to the order of The Abell Foundation, Inc., a Maryland corporation ("**Payee**"), at such place as the holder of this Note may from time to time designate the principal sum of One Million Eight Hundred Thousand Dollars (\$1,800,000.00), together with the interest thereon at the rate hereinafter specified and any and all other sums which may be due and owing to the holder of this Note in accordance with the following terms:

1. Note Issuance. This non-negotiable promissory note (this "**Note**") is issued pursuant to the Note and Warrant Purchase Agreement dated as of October 26, 2011, between Maker and Payee, as amended by that certain Amendment No. 1 to Note and Warrant Purchase Agreement February 16, 2012, between Maker and Payee, as further amended by that certain Amendment No. 2 to Note and Warrant Purchase Agreement dated January 16, 2013, by and between Maker and Payee, as further amended by that certain Amendment No. 3 to Note and Warrant Purchase Agreement dated April 18, 2013, by and between Maker and Payee, and as further amended by that certain Amendment No. 4 to Note and Warrant Purchase Agreement dated as of the date hereof by and between Maker and Payee (as amended, and as the same may be further amended, supplemented or otherwise modified from time to time, the "**Note and Warrant Purchase Agreement**"), and Payee is subject to the terms and entitled to the benefits of this Note and the Note and Warrant Purchase Agreement and may enforce the agreements of Maker contained herein and therein and exercise the remedies provided for hereby and thereby or otherwise available in respect hereto and thereto. Capitalized terms used herein without definition have the meaning assigned thereto in the Note and Warrant Purchase Agreement.

2. Payment; Interest Rate. Subject to the further provisions of this Section 2 and of Section 4, the principal amount under this Note shall be due and payable on July 31, 2013 (the "**Maturity Date**"). Simple interest shall accrue from and after the date of this Note on the principal amount outstanding from time to time at a rate of eight percent (8%) per annum and, together with all accrued interest under the Existing Note (as hereinafter defined), shall be due and payable on the Maturity Date. Notwithstanding the foregoing, to the extent necessary to repay the principal amount of this Note in full and all accrued interest thereon, this Note shall

be paid concurrently with the closing of each issuance or sale of additional shares of capital stock, or securities directly or indirectly convertible or exchangeable for capital stock, of the Company (each an "Equity Issuance") occurring after May 28, 2013 in an amount equal to (a) twenty percent (20%) of the next \$3,778,771 of gross proceeds of such Equity Issuance(s), (b) twenty-five percent (25%) of the next \$6,000,000 of gross proceeds of such Equity Issuance(s), and (c) one hundred percent (100%) of the net proceeds of all Equity Issuance(s) thereafter.

3. Calculation of Interest. Interest on this Note shall be calculated on the basis of a 360 day per year factor applied to the actual days on which there exists an unpaid principal balance due under this Note.

4. Application of Payments. All payments made hereunder shall be applied first to late penalties, costs of collection or other sums owing the holder, then to accrued interest (including accrued interest under the Existing Note) and last to payment of the principal amount of this Note.

5. Prepayment. Maker may prepay this Note in whole or in part at any time or from time to time without penalty or additional interest, provided that payments are applied as provided in Section 4 above. Amounts repaid hereunder may not be reborrowed.

6. Use of Proceeds. The purpose of this Note is to fund the working capital needs of Maker, and, by its execution and delivery of this Note, Maker covenants and agrees that the proceeds of this Note shall be used solely for such purpose. Without limitation of the foregoing, no proceeds of this Note will be used to purchase or carry any margin stock (within the meaning of Regulation U issued by the Board of Governors of the Federal Reserve System) or to extend credit to others for the purpose of purchasing or carrying any margin stock.

7. Events of Default. The occurrence of any one or more of the following events (the "Events of Default") shall constitute an Event of Default hereunder:

(a) any failure by Maker to pay any principal, interest or other amount due under this Note at or prior to the time when it is due and payable;

(b) any failure of Maker to duly perform, comply with or observe any of the other terms, conditions or covenants contained in this Note or in any of the other Transaction Documents, if such failure remains uncured for a period of five (5) business days after written notice of such failure is delivered by Payee;

(c) any representation or warranty made by Maker herein or in any of the other Transaction Documents or in connection therewith, or any information provided by or on behalf of Maker pursuant hereto or pursuant to any of the other Transaction Documents or in connection therewith, being or becoming false, misleading, incomplete or incorrect in any material respect;

(d) Maker (i) defaults in any payment of principal of or interest on any of its Debt (as defined below) (other than this Note), beyond the period of grace, if any, provided

in the instrument or promissory note under which such Debt was created; or (ii) defaults in the observance or performance of any other agreement or condition relating to any such Debt or contained in any instrument or agreement relating thereto, or any other event occurs or condition exists, the effect of which default or other event or condition is to cause, or to permit the holder(s) of such Debt to cause, with the giving of notice if required, such Debt to become due prior to its stated maturity;

(e) any judgment against Maker or any attachment or levy against the property of Maker with respect to a claim remains unpaid, unstayed, on appeal, undischarged, unbonded or undismissed for a period of thirty (30) days;

(f) Maker generally does not pay its debts as such debts become due, or admits in writing its inability to pay its debts generally; or a petition for relief in a bankruptcy court is filed by Maker; or Maker applies for, consents to or acquiesces in the appointment of a trustee, custodian or receiver for Maker or any of its assets or property or makes a general assignment for the benefit of its creditors or, in the absence of such application, consent or acquiescence, a trustee, custodian or receiver is appointed for Maker or for a substantial part of its assets or property and is not discharged within thirty (30) days hereafter; or any bankruptcy, reorganization, debt arrangement or other proceeding or case under any bankruptcy or insolvency law or any dissolution or liquidation proceeding is instituted against Maker and if instituted against Maker is consented to or acquiesced in by Maker or remains undismissed for sixty (60) days thereafter; or Maker takes any action to authorize any of the actions described in this subsection; or

(g) any demand by a holder of any of the Current Payables (as defined below) to make payment in excess of \$30,000 on any Current Payable which remains unsatisfied by Maker for a period of ten (10) days.

"Debt" of any person means, without duplication, (a) all indebtedness of such person for borrowed money, (b) all obligations of such person to pay the deferred purchase price of property or services, except trade accounts payable arising in the ordinary course of business, (c) all obligations of such person evidenced by notes, bonds, debentures or other similar instruments, (d) all obligations of such person created or arising under any conditional sale or other title retention agreement or arrangement with respect to property acquired by such person, (e) all obligations of such person as lessee under leases that have been or should be, in accordance with generally accepted accounting principles, recorded as capital leases, (f) all obligations, contingent or otherwise, of such person in respect of acceptances, letters of credit or similar extensions of credit, (g) all Debt of others guaranteed directly or indirectly in any manner by such person, and (h) all Debt of others secured by a lien or other encumbrance on any asset of such person, whether or not such person has assumed or become liable for the payment of such Debt. Notwithstanding the foregoing, the term **"Debt"** shall not include payables of the Maker which are outstanding prior to the date of this Note (whether or not past due) (the **"Current Payables"**) including, but not limited to, the amounts owing to Organon Teknika Corporation and Organon BioSciences International B.V. (and their successors) pursuant to that certain letter agreement dated October 31, 2007.

8. Default Interest Rate. Upon the occurrence of an Event of Default until this Note is paid in full, the interest rate applicable to the then outstanding balance shall be increased to ten percent (10%) upon written notice to Maker by Payee of such Event of Default.

9. Rights and Remedies. If any one or more Events of Default shall occur, then in each and every such case, Payee at its option may at any time thereafter exercise and/or enforce any or all of the following rights and remedies:

(a) declare upon notice to Maker all of the amounts payable hereunder to be immediately due and payable, whereupon same shall become due and payable, together with accrued and unpaid interest thereon and all other sums due hereunder, immediately without presentment, demand or protest, all of which Maker hereby waives, provided that upon the occurrence of an Event of Default described in Section 7(f), all amounts shall automatically be and become due and payable immediately without any declaration; and

(b) bring suit for payment and exercise any other rights and remedies available to Payee pursuant to this Note, any of the other Transaction Documents or applicable law.

CONFESSION OF JUDGMENT. IF THIS NOTE IS NOT PAID WHEN DUE, MAKER HEREBY IRREVOCABLY AUTHORIZES AND EMPOWERS PAYEE, BY ITS ATTORNEY, OR BY THE PRONOTHARY OR CLERK OF ANY COURT OF RECORD IN THE STATE OF MARYLAND OR IN ANY JURISDICTION WHERE PERMITTED BY LAW TO BE MAKER'S TRUE AND LAWFUL ATTORNEY-IN-FACT, AND IN MAKER'S NAME AND STEAD, TO APPEAR FOR MAKER AND CONFESS AND ENTER JUDGMENT AGAINST IT IN FAVOR OF PAYEE IN ANY JURISDICTION IN WHICH MAKER OR ANY OF ITS PROPERTY IS LOCATED FOR: (i) THE ENTIRE UNPAID PRINCIPAL AMOUNT OF THIS NOTE THEN REMAINING UNPAID, (ii) INTEREST THEREON THEN ACCRUED AND UNPAID, (iii) ATTORNEYS' FEES IN THE AMOUNT OF \$10,000, AND (iv) COURT COSTS, WITH OR WITHOUT DECLARATION, WITHOUT STAY OF EXECUTION AND WITH RELEASE OF ALL ERRORS AND THE RIGHT TO ISSUE EXECUTION FORTHWITH, AND FOR DOING SO THIS NOTE OR A COPY VERIFIED BY AFFIDAVIT SHALL BE A SUFFICIENT WARRANT. MAKER HEREBY WAIVES AND RELEASES ALL RELIEF FROM ANY AND ALL APPRAISEMENT, STAY OR EXEMPTION LAW OF ANY STATE NOW IN FORCE OR HEREAFTER ENACTED. THIS AUTHORITY AND POWER SHALL NOT BE EXHAUSTED BY THE EXERCISE THEREOF, AND SHALL CONTINUE UNTIL THE OBLIGATIONS ARE FULLY PAID, PERFORMED, DISCHARGED AND SATISFIED. IT IS THE INTENTION OF THE PARTIES HERETO THAT THE PROVISIONS OF THIS NOTE RELATING TO THE PAYMENT OF ATTORNEYS FEES SHALL NOT MERGE INTO ANY JUDGMENT ENTERED IN CONNECTION HERewith, AND PAYEE SHALL RETAIN THE RIGHT TO RECOVER FROM MAKER FEES INCURRED IN THE COLLECTION HEREOF WHICH ARE INCURRED AFTER THE ENTRY OF FINAL JUDGMENT ON THIS NOTE. Notwithstanding the amount of attorneys' fees for which judgment may be confessed hereunder, by its acceptance hereof Payee agrees to use reasonable efforts to retain counsel who will charge Payee only for time and expenses at standard hourly rates, and Payee will not enforce the

attorney's fee portion of any confessed judgment for an amount in excess of the actual fees and expenses charged to Payee by its counsel in connection with confessing judgment against Maker and collecting on such judgment. (This provision shall not limit the obligation of Maker to pay all reasonable attorneys' fees incurred by Payee in connection with this Note.)

Each right, power and remedy of Payee specified herein or available at law or in equity or by statute shall be cumulative and concurrent and shall be in addition to every other right, power or remedy provided for in this Note or available at law or in equity and the exercise or beginning of the exercise by Payee of any one or more of such rights, powers or remedies shall not preclude the simultaneous or later exercise by Payee of any or all other rights, powers or remedies.

10. Costs of Collection. If at any time the indebtedness evidenced by this Note is collected through legal proceedings or this Note is placed in the hands of an attorney or attorneys for collection, Maker hereby agrees to pay all costs and expenses (including attorneys' fees) incurred by the holder of this Note in enforcing its rights and collecting or attempting to collect all amounts due hereunder and under any related documents.

11. Extensions or Modifications. Maker agrees that the maturity of this Note or any payment due hereunder may be extended by Payee at any time or from time to time, this Note may be modified by Payee, and any defaults hereunder may be waived by Payee without releasing, discharging or affecting the liability of Maker. No modification or waiver of any provision of this Note, and no consent by Payee to any failure of Maker to comply with any provision of this Note, shall in any event be effective unless the same shall be in writing signed by Payee.

12. Choice of Law; Jurisdiction; Severability. This Note shall be governed, construed and enforced in strict accordance with the laws of the State of Maryland, without reference to principles of conflict of laws. Maker agrees that any suit, action or proceeding instituted by Payee with respect to any of the obligations of Maker hereunder may be brought in any State or federal court located in the State of Maryland (in addition to such other courts in which jurisdiction and venue may be appropriate), and Maker consents to the in personam jurisdiction of such courts. If any provision of this Note shall for any reason be invalid or unenforceable, such invalidity or unenforceability shall not affect any other provision.

13. Waiver of Defenses. In the event the holder of this Note transfers this Note for value, Maker agrees that none of such subsequent holders of this Note shall be subject to any claims or defenses which Maker may have against the prior holder, all of which are waived as to the subsequent holders and all subsequent holders shall have the rights of a holder in due course with respect to Maker even though the subsequent holder might not qualify under applicable law absent this paragraph as a holder in due course.

14. Waivers. Maker hereby waives (a) presentment, protest and demand and notice of protest, demand, dishonor and nonpayment of this Note; (b) all claims and causes of action of Maker against Payee for punitive, exemplary or other non-compensatory damages; and

(c) diligence in the enforcement or collection of all of the obligations of Maker hereunder. EACH OF PAYEE AND MAKER AGREES THAT ANY ACTION, SUIT OR PROCEEDING INVOLVING ANY CLAIM, COUNTERCLAIM OR CROSS-CLAIM ARISING OUT OF OR IN ANY WAY RELATING, DIRECTLY OR INDIRECTLY, TO ANY OF THE OBLIGATIONS OF MAKER HEREUNDER SHALL BE TRIED BY A COURT AND NOT BY A JURY, EACH OF PAYEE AND MAKER HEREBY WAIVING ANY RIGHT TO TRIAL BY JURY IN ANY SUCH ACTION, SUIT OR PROCEEDING AND HEREBY AGREEING THAT THIS WAIVER OF TRIAL BY JURY IS A MATERIAL ASPECT OF THEIR AGREEMENTS.

15. No Waiver; No assignment. The delay or failure of any holder to exercise its rights hereunder shall not be deemed a waiver thereof. No waiver of any rights of holder shall be effective unless in writing and signed by the holder and any waiver of any right shall not apply to any other right or to such right in any subsequent event or circumstance not specifically included in such waiver. Maker may not assign its rights or obligations under this Note.


16. Headings. The headings used in this Note are used for convenience only and are not to be considered in construing or interpreting this Note.

17. Replacement Note. This Note is given pursuant to the terms of that certain Amendment No. 4 to Note and Warrant Purchase Agreement of even date herewith by and between Maker and Payee in replacement of the "Note" as defined in the Note and Warrant Purchase Agreement immediately prior to the date hereof (the "**Existing Note**"). The execution of this Note and the replacement of the Existing Note hereby shall not constitute or act as a novation, satisfaction or extinguishment of the indebtedness evidenced by the Existing Note, and all accrued and unpaid interest under the Existing Note shall be due and payable on the Maturity Date unless required to be paid prior thereto pursuant to the terms hereof. This Note shall for all purposes be the "Note" as defined in the Note and Warrant Purchase Agreement and in that certain Security Agreement dated October 26, 2011, by and between Maker and Payee (the "Security Agreement"), the terms of which are incorporated herein and made a part hereof as if fully set forth herein. This Note is one of the "Transaction Documents" as defined in the Note and Warrant Purchase Agreement, and the obligations of Maker hereunder are part of the "Obligations" as defined in the Security Agreement.

[THE NEXT PAGE IS THE SIGNATURE PAGE]

IN WITNESS WHEREOF, Maker has caused this Note to be executed on its behalf by its duly authorized officer as of the day and year first above written.

VACCINOGEN, INC.

By: 
Name: Michael G. Hanna, Jr., Ph.D.
Title: Chairman and Chief Executive Officer

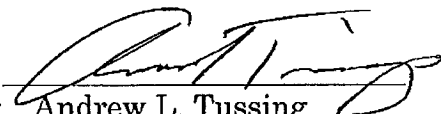
By: 
Name: Andrew L. Tussing
Title: President and Chief Operating Officer

EXHIBIT 3.3

VACCI NOGEN, INC. – FORM 1-A Regulation A Offering Statement

THIS WARRANT AND THE SECURITIES ISSUABLE UPON EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY STATE SECURITIES LAWS, AND MAY NOT BE TRANSFERRED UNLESS THE COMPANY HAS RECEIVED A WRITTEN OPINION FROM COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE COMPANY STATING THAT SUCH TRANSFER IS BEING MADE IN COMPLIANCE WITH ALL APPLICABLE FEDERAL AND STATE SECURITIES LAWS.

**VACCINOGEN, INC.
COMMON STOCK PURCHASE WARRANT**

This Common Stock Purchase Warrant (this "**Warrant**") is issued as of this ___ day of _____, 201__, by Vaccinogen Inc., a Maryland corporation (the "**Company**"), to The Abell Foundation, Inc., a Maryland corporation or permitted successors or assigns (the "**Holder**").

1. Issuance of Warrant; Term; Price.

1.1 Issuance. Pursuant to the terms of the Note and Warrant Purchase Agreement, dated as of October 26, 2011, between the Company and the Holder (as the same has been and hereafter may be amended, supplemented or otherwise modified from time to time, the "**Note and Warrant Purchase Agreement**"), the Holder has made a loan to the Company evidenced by the Company's Second Amended and Restated Promissory Note in the maximum principal amount of One Million Eight Hundred Thousand Dollars (\$1,800,000), dated as of April __, 2013 (the "**Note**"). In consideration of the issuance of the Note, the receipt and sufficiency of which are hereby acknowledged, the Company hereby grants to Holder the right to purchase, at any time and from time to time on and after the date hereof until the Expiration Date (as defined below), up to [_____] fully paid and nonassessable shares (the "**Warrant Shares**") of Common Stock of the Company (the "**Common Stock**") on the terms and subject to the conditions set forth below. [Note: the number of Warrant Shares shall be equal to \$1,100,000 divided by eighty-five percent (85%) of the lowest purchase price per share of Common Stock sold in the Company's the Venture Capital Financing (as defined in the Note and Warrant Purchase Agreement).]

1.2 Term. This Warrant shall be exercisable at any time and from time to time in whole or in part from the date hereof to the earlier of: (a) the ten-year anniversary of the date hereof; (b) the sale of all or substantially all of the Company's assets; and (c) any merger or consolidation of the Company in which the Company is not the surviving entity and the shareholders then owing a majority of the outstanding equity interests in the Company no longer own or control a majority of such equity interests (the earlier of such events being the "**Expiration Date**") by delivery to the Company at its principal executive offices of: (i) this Warrant; (ii) the Purchase Form attached hereto as Exhibit A duly completed and executed; and (iii) payment in accordance with Section 1.3 below. The Warrant Shares so purchased shall be issued to the Holder as the record and beneficial owner of such Warrant Shares or to the Holder's transferee as designated on the Purchase Form as of the close of business on the date on which

this Warrant shall have been surrendered and payment made for such Warrant Shares as aforesaid.

1.3. Exercise Price. Subject to adjustment as hereinafter provided, the exercise price (the "**Warrant Price**") per share for which all or any of the Warrant Shares may be purchased pursuant to the terms of this Warrant initially shall be equal to \$_____. [Note: the Warrant Price per share shall equal eighty-five percent (85%) of the lowest price per share of the Common Stock issued in the Venture Capital Financing.] The Warrant Price shall be payable in cash or by certified or official bank check or by the cancellation of any present or future indebtedness from the Company to the Holder hereof in a dollar amount equal to the purchase price of the Common Stock for which the consideration is being given, or by surrendering for cancellation shares of capital stock of the Company which shares have a fair market value equal to the purchase price of Common Stock for which the consideration is being given.

2. Adjustment of Warrant Price, Number and Kind of Shares. The Warrant Price and the number and kind of securities issuable upon the exercise of this Warrant shall be subject to adjustment from time to time and the Company agrees to provide notice upon the happening of certain events as follows.

2.1 Stock Dividends Adjustment. In case at any time and from time to time after the date hereof, the holders of the Common Stock of the Company (or any shares of stock or other securities at the time receivable upon the exercise of this Warrant) shall have received, or, on or after the record date fixed for the determination of eligible stockholders, shall have become entitled to receive, without payment therefor, other additional securities or other property (other than cash) of the Company by way of dividend or distribution, then and in each case, the Holder shall, upon the exercise hereof, be entitled to receive, in addition to the number of Warrant Shares receivable thereupon, and without payment of any additional consideration therefor, the amount of such other or additional securities or other property (other than cash) of the Company which the Holder would hold on the date of such exercise had it been the holder of record of such Warrant Shares on the date hereof and had thereafter, during the period from the date hereof to and including the date of such exercise, retained such Warrant Shares and/or all other additional securities or other property receivable by it as aforesaid during such period, giving effect to all adjustments called for during such period by this Section 2.

2.2 Reclassification or Reorganization Adjustment. In case of any reclassification or change of the outstanding securities of the Company or of any reorganization of the Company (or any other corporation the stock or securities of which are at the time receivable upon the exercise of this Warrant) at any time and from time to time after the date hereof, and the Holder, upon the exercise hereof at any time after the consummation of such reclassification, change or reorganization, shall be entitled to receive, in lieu of the stock or other securities and property receivable upon the exercise hereof prior to such consummation, the stock or other securities or property to which the Holder would have been entitled upon such consummation if such holder had exercised this Warrant immediately prior thereto, all subject to further adjustment as provided in this Section 2.

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2.3 Stock Splits and Reverse Stock Splits. If at any time and from time to time after the date hereof, the Company shall subdivide or otherwise change its outstanding shares of Common Stock into a greater number of shares, the Warrant Price in effect immediately prior to such subdivision shall thereby be proportionately reduced and the number of shares receivable upon exercise of this Warrant shall thereby be proportionately increased; and, conversely, if at any time and from time to time after the date hereof, the outstanding number of shares of Common Stock shall be combined or otherwise changed into a smaller number of shares, the Warrant Price in effect immediately prior to such combination shall thereby be proportionately increased and the number of shares receivable upon exercise of this Warrant shall thereby be proportionately decreased.

2.4 Other Impairment. The Company will not, by amendment of its articles of incorporation or bylaws or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and conditions and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder against impairment.

3. No Fractional Shares. No fractional shares of Common Stock will be issued in connection with any subscription hereunder. In lieu of any fractional shares that would otherwise be issuable, the Company shall pay cash equal to the product of such fraction multiplied by the fair market value of one share of Common Stock on the date of exercise, as determined in good faith by the Company's Board of Directors.

4. No Shareholder Rights. This Warrant as such shall not entitle Holder to any of the rights of a shareholder of the Company until the Holder has exercised this Warrant in accordance with Section 6 hereof.

5. Reservation of Stock. The Company covenants that during the period this Warrant is exercisable, the Company will reserve from its authorized and unissued Common Stock a sufficient number of shares thereof to provide for the issuance of Warrant Shares or other securities upon the exercise of this Warrant. The Company agrees that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for Warrant Shares or other securities upon the exercise of this Warrant.

6. Exercise of Warrant. This Warrant may be exercised by Holder by the surrender of this Warrant at the principal office of the Company, accompanied by notice of and payment in full of the purchase price of the Warrant Shares the Holder elects to purchase hereunder. As a condition to the Holder's exercise of this Warrant, the Holder shall execute any agreement then in effect among the holders of outstanding shares of capital stock of the Company. This Warrant shall be deemed to have been exercised immediately prior to the close of business on the date of its surrender for exercise as provided above, and the person entitled to receive the Warrant Shares or other securities and/or property issuable upon such exercise shall be treated for all purposes as the holder of such Warrant Shares or other securities of record as of the close of business on such date. As promptly as practicable, the Company shall issue and deliver to the

person or persons entitled to receive the same a certificate or certificates for the number of full Warrant Shares or other securities issuable upon such exercise, together with cash in lieu of any fraction of a share as provided above. The Warrant Shares or other securities issuable upon exercise hereof shall, upon their issuance, be fully paid and nonassessable. If this Warrant shall be exercised in part only, the Company shall, at the time of delivery of the certificate representing the Warrant Shares in respect of which this Warrant has been exercised, make a notation on this Warrant stating the Warrant Shares with respect to which this Warrant shall not have been exercised and this Warrant shall then be returned to the Holder.

7. Certificate of Adjustment. Whenever the Warrant Price or number or type of securities issuable upon exercise of this Warrant is adjusted, as herein provided, the Company shall promptly deliver to the record holder of this Warrant a certificate of an officer of the Company setting forth the nature of such adjustment and a brief statement of the facts requiring such adjustment.

8. Notice of Proposed Transfers. This Warrant is transferable by the Holder hereof subject to compliance with this Section 8. Prior to any proposed transfer of this Warrant or the Warrant Shares received on the exercise of this Warrant (the "Securities"), unless there is in effect a registration statement under the Securities Act of 1933, as amended (the "Securities Act"), covering the proposed transfer, the Holder thereof shall give written notice to the Company of such Holder's intention to effect such transfer. Each such notice shall describe the manner and circumstances of the proposed transfer in sufficient detail, and shall, if the Company so requests, be accompanied (except in transactions in compliance with Rule 144) by either: (a) a written opinion of legal counsel who shall be satisfactory to the Company acting reasonably addressed to the Company and satisfactory in form and substance to the Company's counsel acting reasonably, to the effect that the proposed transfer of the Securities may be effected without registration under the Securities Act; or (b) a "no action" letter from the Securities Exchange Commission (the "Commission") to the effect that the transfer of such Securities without registration will not result in a recommendation by the staff of the Commission that action be taken with respect thereto, whereupon the Holder of the Securities shall be entitled to transfer the Securities in accordance with the terms of the notice delivered by the Holder to the Company; provided, however, no such registration statement or opinion of counsel shall be necessary for a transfer by a Holder to any affiliate of such Holder for no consideration, if the transferee agrees in writing to be subject to the terms hereof to the same extent as if such transferee were the original Holder hereunder. Each certificate evidencing the Securities transferred as above provided shall bear the appropriate restrictive legend set forth above, except that such certificate shall not bear such restrictive legend if in the opinion of counsel for the Company acting reasonably such legend is not required in order to establish compliance with any provisions of the Securities Act.

9. Replacement of Warrants. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of the Warrant, and in the case of any such loss, theft or destruction of the Warrant, on delivery of an indemnity agreement or security satisfactory in form and amount to the Company acting reasonably, and reimbursement to the Company of all reasonable expenses incidental thereto, and upon surrender

and cancellation of the Warrant if mutilated, the Company will execute and deliver, in lieu thereof, a new Warrant of like tenor.

10. Dividends and Distributions. So long as any part of this Warrant remains outstanding and unexercised, the Company will, upon the declaration of a cash dividend upon its Common Stock or other distribution to the holders of its Common Stock and at least ten (10) days prior to the record date, notify the Holder hereof of such declaration, which notice will contain, at a minimum, the following information: (a) the date of the declaration of the dividend or distribution; (b) the amount of such dividend or distribution; (c) the record date of such dividend or distribution; and (d) the payment date or distribution date of such dividend or distribution. The Holder shall, upon the exercise hereof, be entitled to receive, in addition to the number of shares of Common Stock receivable thereupon, and without payment of any additional consideration therefor, the amount of such other or additional securities or other property (other than cash) of the Company which such Holder would hold on the date of such exercise had it been the holder of record of such Common Stock on the date hereof and had thereafter, during the period from the date hereof to and including the date of such exercise, retained such shares and/or all other additional securities or other property receivable by it as aforesaid during such period, giving effect to all adjustments pursuant to Section 2.

11. Miscellaneous. This Warrant shall be governed by the laws of the State of Maryland. The headings in this Warrant are for purposes of convenience of reference only, and shall not be deemed to constitute a part hereof. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provisions. All notices and other communications from the Company to the Holder shall be delivered personally or mailed by first class mail, postage prepaid, or by facsimile to the address or facsimile number furnished to the Company in writing by the last Holder who shall have furnished an address and facsimile number to the Company in writing, and if mailed shall be deemed given three days after deposit in the U.S. Mail.

12. Taxes. The Company shall pay all issue taxes and other governmental charges (but not including any income taxes of a Holder) that may be imposed in respect of the issuance or delivery of the Warrant Shares or any portion thereof.

13. Amendment. Any term of this Warrant may be amended with the written consent of the Company and the Holder. Any amendment effected in accordance with this Section 13 shall be binding upon the Holder of this Warrant, each future holder of such Warrant, and the Company.

14. Remedies. In the event of any default or threatened default by the Company in the performance of or observance with any of the terms of this Warrant, it is agreed that remedies at law are not and will not be adequate for the Holder and that such terms may be specifically enforced by a decree for the specific performance of any agreement contained herein or by an injunction against a violation of any of the terms hereof or otherwise.

15. Facsimile Signature. This Warrant may be executed by the Company in facsimile or pdf. form and upon receipt by the Holder of such faxed executed copy of this Warrant, this Warrant shall be binding upon and enforceable against the Company in accordance with its

terms. The Company shall promptly forward to the Holder an original of the facsimile signed copy of this Warrant previously delivered to Holder.

16. Term. The term of this Warrant (the "**Term**"), and the Holder's right to exercise this Warrant, shall terminate immediately upon the close of business (5:00 p.m., Eastern Standard Time) on the ten-year anniversary of the date hereof. Upon termination of the Term, the Holder shall surrender this Warrant to the Company at the Company's principal place of business.

IN WITNESS WHEREOF, the undersigned officer of the Company has executed this Common Stock Purchase Warrant as of the date first above written.

VACCINOGEN, INC.

By: _____
Name: Michael G. Hanna, Jr., Ph.D.
Title: Chairman and Chief Executive Officer

By: _____
Name: Andrew L. Tussing
Title: President and Chief Operating Officer

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**EXHIBIT A
PURCHASE FORM**

The undersigned pursuant to the provisions set forth in the attached Warrant (No. _____) hereby irrevocably elects to purchase _____ shares of Warrant Shares covered by such Warrant and herewith makes payment of _____ representing the full purchase price for such shares of Warrant Shares at the price per share of Warrant Share provided for in such Warrant.

If the shares of Warrant Shares are not to be issued in the name of the undersigned, the shares of Warrant Shares shall be issued in the names of permitted assigns and in the number of units as follows:

Name:

Name:

Address:

Address:

Tax ID #:

Tax ID #:

No. of Units:

No. of Units:

Dated:

Signature:

Print Name:

Address:

EXHIBIT 3.4

VACCI NOGEN, INC. – FORM 1-A Regulation A Offering Statement

UNSECURED PROMISSORY NOTE

Effective April 6, 2012

Name of Investor: _____

Amount of Investment ("Principal Amount"): \$ _____

FOR VALUE RECEIVED, VACCINOGEN, INC., a Maryland corporation ("Borrower"), promises to pay to the order of the investor named above ("Investor"), the Principal Amount set forth above and the Interest Payment (as defined below), pursuant to the terms and conditions of this Unsecured Promissory Note (this "Note").

1. **Related Notes.** This Note is one of several Unsecured Promissory Notes (collectively, the "Related Notes") being issued contemporaneously by Borrower to several investors. The aggregate principal amount of all the Related Notes is \$1,000,000. As used herein, the term "Interest Payment" shall mean an additional amount equal to the Principal Amount. For example, if the Principal Amount of this Note is \$20,000, the Interest Payment would be an additional \$20,000 and the total amount due and payable on the Maturity Date (as defined below) would be \$40,000. As used herein, the term "Maturity Date" shall mean a date, after the date hereof, on which a transaction occurs involving the issuance or sale of additional shares of capital stock, or securities directly or indirectly convertible or exchangeable for capital stock, of Borrower that results in at least \$20,000,000 in gross proceeds to Borrower.

2. **Repayment.** Borrower shall repay the Principal Amount and pay the Interest Payment on the Maturity Date. There is no guarantee that the maturity date will occur and if the Maturity Date does not occur Borrower will have no obligation to repay the Principal Amount to Investor or make the Interest Payment to Investor.

3. **Application and Place of Payments.** All payments made on account of this Note shall be applied first to the payment of any expenses of collection then due hereunder, second to the payment of Interest Payment then due hereunder, and the remainder shall be applied to the unpaid Principal Amount. All payments on account of this Note shall be made in lawful money of the United States of America payable to Investor at Investor's address set forth on the signature page of this Note, or at such other place(s) as Investor may at any time and from time to time designate in writing to Borrower.

4. **REPRESENTATIONS AND WARRANTIES OF INVESTOR AND CERTAIN RISK FACTORS RELATING TO NOTE.** REPRESENTATION AND WARRANTIES OF INVESTOR AND CERTAIN RISK FACTORS RELATING TO THE NOTE ARE SUMMARIZED IN ANNEX A.

5. **Events of Default.** The occurrence of the following event shall constitute an event of default ("Event of Default") under the terms of this Note: the failure of Borrower to make any payment under this Note within fifteen (15) days after the Maturity Date.

6. **No Assignments; Successors and Assigns.** Neither Borrower nor Investor shall assign this Note or any rights hereunder, or delegate any duties hereunder, without the prior written consent of the other party. This Note shall be binding upon, and shall inure to the benefit of, Borrower and Investor and their respective successors and permitted assigns.

7. **WAIVER OF JURY TRIAL.** BORROWER AND INVESTOR WAIVE ALL RIGHT TO TRIAL BY JURY WITH RESPECT TO ANY CLAIM, DEFENSE OR SUIT OF ANY KIND OR NATURE ARISING FROM OR RELATING TO THIS NOTE. BORROWER AND INVESTOR

ACKNOWLEDGE THAT THIS IS A WAIVER OF A LEGAL RIGHT AND THAT THEY MAKE THIS WAIVER VOLUNTARILY AND KNOWINGLY AFTER CONSULTATION WITH COUNSEL OF THEIR CHOICE.

8. **Business Days.** If any amount due hereunder is due on a date that is not a Business Day (defined below), such amount shall be due and payable in the next Business Day following such date. As used herein, "**Business Day**" means any day except Saturday, Sunday or any day on which banks are authorized or required by law to close in Baltimore, Maryland.

9. **Waiver of Presentment, Etc.** Borrower, for itself and its successors and assigns, hereby waives presentment and demand for payment, protest or notice of protest and nonpayment of this Note. From time to time, without affecting the obligation of Borrower to pay the outstanding Principal Amount of this Note, Investor may, at the option of Investor, extend the time for payment of principal hereof, reduce the payments hereunder, release anyone liable on this Note, accept a renewal of this Note, join in any extension or subordination, or exercise any option or election hereunder. No one or more of such actions shall constitute a novation.

10. **Costs of Collection.** Borrower hereby agrees to pay all costs and expenses (including court costs and reasonable attorneys' fees, whether or not litigation is commenced) incurred by Investor in collecting or attempting to collect or enforce its rights under this Note.

11. **Rights and Remedies Cumulative.** Each right, power and remedy of Investor specified herein or available at law or in equity or by statute shall be cumulative and concurrent and shall be in addition to every other right, power or remedy provided for in this Note or available at law or in equity and the exercise or beginning of the exercise by Investor of any one or more of such rights, powers or remedies shall not preclude the simultaneous or later exercise by Investor of any or all other rights, powers or remedies.

12. **Governing Law; Venue.** This Note and all actions arising out of or in connection with this Note shall be governed by and construed in accordance with the laws of the State of Maryland without regard to principles of conflicts of laws. The parties hereto consent to the exclusive jurisdiction and venue of the state and federal courts sitting in the State of Maryland in any action or judicial proceeding brought to construe, collect or otherwise enforce this Note, and waive any right to challenge or contest such jurisdiction and venue. It is expressly stipulated and agreed that the investment evidenced by this Note is a "commercial loan" as defined in the Commercial Law Article of the Annotated Code of Maryland.

13. **Notices.** Any notices or other communications required or permitted hereunder shall be in writing and sent by hand delivery, by UPS or FedEx next-day service, or by registered or certified mail with return receipt requested, postage prepaid to the appropriate address designated below (or to such other address or addresses as may hereafter be furnished by one party to the other party in compliance herewith):

To Borrower: Vaccinogen, Inc.
5300 Westview Drive, Suite 406
Frederick, Maryland 21703
Attention: Andrew L. Tussing

To Investor: To the address set forth on the signature page of this Note.

14. **Counterparts.** This Note may be executed in counterparts, each of which shall be deemed an original, and all of which shall together constitute one and the same instrument.

IN WITNESS WHEREOF, Borrower has caused this Note to be executed on its behalf by its duly authorized officer as of the day and year first above written.

VACCINOGEN, INC.

By: _____
Name:
Title:

By signing below, Investor hereby acknowledges and agrees with the terms of this Note, including without limitation, the representations and warranties of Investor contained herein.

Print name of Investor

*Signature of Investor, or of an authorized officer of Investor if
Investor is not a natural person*

Address for notices to Investor:

If Investor is not a natural person, complete the following:

Print name of
signatory: _____

Print title of
signatory: _____

ANNEX A
REPRESENTATION AND WARRANTIES OF INVESTOR AND CERTAIN RISK FACTORS
OF INVESTMENT

REPRESENTATIONS AND WARRANTIES OF INVESTOR. INVESTOR HEREBY REPRESENTS AND WARRANTS TO BORROWER AS FOLLOWS:

(a) INVESTOR UNDERSTANDS THAT MAKING THE INVESTMENT DESCRIBED IN THIS NOTE (THE "INVESTMENT") INVOLVES SIGNIFICANT RISKS, INCLUDING WITHOUT LIMITATION, THE RISKS SUMMARIZED IN THE RISK FACTORS INCLUDED BELOW IN THIS ANNEX A.

(b) INVESTOR HAS SUCH KNOWLEDGE AND EXPERIENCE IN FINANCIAL AND BUSINESS MATTERS, INCLUDING BUSINESS EXPERIENCE IN PRIVATE INVESTMENTS, SO AS TO BE CAPABLE OF EVALUATING AND UNDERSTANDING, AND HAS EVALUATED AND UNDERSTOOD, THE MERITS AND RISKS OF MAKING THE INVESTMENT. INVESTOR IS ABLE TO BEAR THE SUBSTANTIAL ECONOMIC RISKS OF MAKING THE INVESTMENT, INCLUDING THE POSSIBILITY THAT BORROWER MAY BE UNABLE TO REPAY THE ENTIRE AMOUNT OF THE INVESTMENT. INVESTOR CAN BEAR THE ECONOMIC RISK OF THIS INVESTMENT AND CAN AFFORD A COMPLETE LOSS OF ITS INVESTMENT.

(c) INVESTOR IS RELYING SOLELY ON INVESTOR'S OWN DECISION, OR THE ADVICE OF INVESTOR'S OWN ADVISERS, WITH RESPECT TO MAKING THE INVESTMENT, AND HAS NEITHER RECEIVED NOR RELIED ON ANY COMMUNICATION FROM BORROWER, ANY AFFILIATE OF BORROWER, OR ANY PERSON ACTING ON BEHALF OF BORROWER OR ANY OF ITS AFFILIATES, REGARDING ANY LEGAL, INVESTMENT OR TAX ADVICE WITH RESPECT TO THE INVESTMENT.

(d) INVESTOR HAS HAD AN OPPORTUNITY TO CONDUCT, AND HAS TO THE EXTENT DESIRED BY INVESTOR CONDUCTED, A FULL DUE DILIGENCE INVESTIGATION OF BORROWER AND BORROWER'S INTENDED USE OF THE PROCEEDS OF THE INVESTMENT. INVESTOR HAS RECEIVED ALL DUE DILIGENCE INFORMATION REQUESTED BY BORROWER IN CONNECTION WITH THE INVESTMENT.

(e) INVESTOR IS ACCEPTING THIS NOTE FOR INVESTOR'S OWN ACCOUNT, FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, ANY PUBLIC OFFERING OR DISTRIBUTION OF THE SAME AND WITHOUT ANY PRESENT INTENTION TO SELL OR OTHERWISE TRANSFER THIS NOTE.

(e) INVESTOR UNDERSTANDS THAT NEITHER THIS NOTE NOR ANY OF THE OTHER RELATED NOTES HAS BEEN, AND WILL NOT BE, REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "33 ACT"), OR THE SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION. INVESTOR UNDERSTANDS THAT THIS NOTE MAY NOT BE RESOLD UNLESS SUBSEQUENTLY REGISTERED UNDER APPLICABLE SECURITIES LAWS OR UNLESS AN EXEMPTION FROM SUCH REGISTRATION IS AVAILABLE.

(f) INVESTOR IS AN ACCREDITED INVESTOR, AS SUCH TERM IS DEFINED IN RULE 501(a) OF REGULATION D PROMULGATED UNDER THE 33 ACT, ON THE BASIS INDICATED IN THE INVESTOR QUESTIONNAIRE ATTACHED HERETO AS ANNEX B.

(g) INVESTOR HAS RECEIVED, READ CAREFULLY AND UNDERSTANDS THE PRIVATE PLACEMENT MEMORANDUM ("PPM") RELATING TO THE CURRENT EQUITY CAPITAL OFFERING THE COMPANY IS UNDERTAKING, A COPY OF WHICH IS ATTACHED HERETO AS ANNEX C. INVESTOR UNDERSTANDS AND ACKNOWLEDGES THAT THE PPM WAS NOT PREPARED TO SUMMARIZE, OR REFERENCE, THIS NOTE AND IS BEING PROVIDED FOR INVESTOR'S REFERENCE TO BETTER UNDERSTAND THE COMPANY AND ITS OTHER CURRENT CAPITAL RAISING ACTIVITIES.

CERTAIN RISK FACTORS OF INVESTMENT

IF WE DO NOT RAISE ADDITIONAL CAPITAL, WE WILL NOT BE ABLE TO REPAY THE NOTE AND YOUR ENTIRE INVESTMENT WILL BE LOST.

Because we have no product revenues and the Note is not secured, the sole source of funds to repay your investment is from the proceeds (if any) of an additional financing. We do not have any committed sources of financing and there is no assurance that additional financing will be made available to us. If no additional financing is made available to us, your entire investment will be lost.

NO COLLATERAL AND NO GUARANTY TO SECURE LOAN

The Note is not secured by any collateral. Vaccinogen is solely responsible for repayment of the Investment, and no other person has agreed to guarantee Vaccinogen's obligations under the Note. As a result, you will have no recourse against any party other than Vaccinogen and if Vaccinogen is unable to raise funds through an additional financing there will be no funds available to make payments under this Note.

WE HAVE A HISTORY OF SIGNIFICANT LOSSES FROM CONTINUING OPERATIONS AND EXPECT TO CONTINUE SUCH LOSSES FOR THE FORESEEABLE FUTURE.

Since our inception, our expenses have substantially exceeded our revenues, resulting in continuing losses and an accumulated deficit. Because we presently have no product revenues and we are committed to continuing our product research, development and commercialization programs, we will continue to experience significant operating losses unless and until we complete the development of OncoVAX and other new products and these products have been clinically tested, approved by the FDA and successfully marketed.

We have devoted our resources to developing a new generation of products but will not be able to market these products until we have completed clinical testing and obtain all necessary governmental approvals. In addition, our products are still in development and testing and cannot be marketed until we have completed clinical testing and obtained necessary governmental approval. Accordingly, our revenue sources are, and will remain, extremely limited until our products are clinically tested, approved by the FDA and successfully marketed. We cannot guarantee that our product will be successfully tested, approved by the FDA or marketed, successfully or otherwise, at any time in the foreseeable future or at all.

IF WE DO NOT RAISE ADDITIONAL CAPITAL, WE WILL NOT BE ABLE TO COMPLETE THE DEVELOPMENT, TESTING AND COMMERCIALIZATION OF OUR TREATMENT SYSTEMS OR CONTINUE AS A GOING CONCERN.

To complete the development and commercialization of our product, we will need to raise substantial amounts of additional capital. We do not have any committed sources of financing and we cannot offer any assurances that additional funding will be available in a timely manner, on acceptable terms or at all.

In the event we cannot raise sufficient capital, we may be required to delay, scale back or eliminate certain aspects of our operations or attempt to obtain funds through unfavorable arrangements with partners or others that may force us to relinquish rights to certain of our technologies, products or potential markets or that could impose onerous financial or other terms. Furthermore, if we cannot fund our ongoing development and other operating requirements we may no longer be able to continue as a going concern.

For additional discussion of our business and the risks associated with an investment in Vaccinogen, please carefully review the PPM attached hereto as Annex C and the "Risk Factors" included therein.

**ANNEX B
ACCREDITED INVESTOR QUESTIONNAIRE**

You represent and warrant to Vaccinogen, Inc., a Maryland corporation (the "Company"), that you come within one of the categories marked below, and that for any category marked, you have truthfully set forth the factual basis or reason you come within that category.

A. Please mark each applicable box:

- a. You are: a bank as defined in Section 3(a)(2) of the Securities Act of 1933, as amended (the "'33 Act") or a savings and loan association or other institution as defined in Section 3(a)(5)(A) of the '33 Act whether acting in its individual or fiduciary capacity; a broker or dealer registered pursuant to section 15 of the Securities Exchange Act of 1934, as amended (the "'34 Act"); an insurance company as defined in section 2(13) of the '33 Act; an investment company registered under the Investment Company Act of 1940 (the "'40 Act") or a business development company as defined in section 2(a)(48) of the '40 Act; a Small Business Investment Company licensed by the U.S. Small Business Administration under section 301(c) or (d) of the Small Business Investment Act of 1958; a plan established and maintained by a state, its political subdivisions, or any agency or instrumentality of a state or its political subdivisions, for the benefit of its employees, and such plan has total assets in excess of \$5,000,000; an employee benefit plan within the meaning of the Employee Retirement Income Security Act of 1974 and the investment decisions are made by a plan fiduciary, as defined in section 3(21) of such act, which is either a bank, savings and loan association, insurance company, or registered investment adviser, or if the employee benefit plan has total assets in excess of \$5,000,000 or, if a self-directed plan, with investment decisions made solely by persons that are accredited investors.

(describe entity)

- b. You are a private business development company as defined in section 202(a)(22) of the Investment Advisers Act of 1940.
- c. You are a natural person (not a partnership, corporation, etc.) whose individual net worth, or joint net worth with your spouse, presently exceeds US\$1,000,000. The term "net worth" means the excess of total assets over total liabilities. In computing net worth, the value of your principal residence and any indebtedness secured by your principal residence may not be included; other than (1) debt secured by your primary residence that exceeds the fair market value of your primary residence, or (2) debt secured by your primary residence that you borrowed within the past 60 days not for the purpose of purchasing your primary residence

- d. You are a natural person who had an individual income in excess of US\$200,000, or joint income with your spouse in excess of US\$300,000 in each of the last two calendar years, and you reasonably expect to reach the same income level in the current calendar year.
- e. You are a director or executive officer of the Company.
- f. You are a corporation, partnership, limited liability company, business trust, or a non-profit organization within the meaning of Section 501(c)(3) of the United States Internal Revenue Code, in each case not formed for the specific purpose of potentially making an investment in connection herewith and with total assets in excess of US\$5,000,000.

(describe entity)

- g. You are a trust (not formed for the specific purpose of potentially making an investment in connection herewith) with total assets in excess of US\$5,000,000, where the purchase is directed by a “sophisticated person” as defined in Rule 506(b)(2)(ii) promulgated under the Securities Act of 1933. Such “sophisticated person” has the knowledge and experience in financial and business matters to capably evaluate the merits and risks of the prospective investment.
- h. You are an entity all the equity owners of which are “accredited investors” within one or more of the above categories.

(describe entity)

- i. You are not a “U.S. Person” as defined in Rule 902 promulgated under the '33 Act.

B. OTHER QUESTIONS

If the subscriber is a partnership, limited liability company, grantor trust or “S” corporation, please mark each applicable box:

- You have assets of substantial value other than your investment in the Company.
- You were not formed for the principal purpose of investing in the Company.

IN WITNESS WHEREOF, the party below has executed this Accredited Investor Questionnaire as of the date provided below.

FOR ENTITIES:

Name of Entity: _____

Signature: _____

By: _____

Title: _____

Date: _____

Primary Business Address: _____

State of Organization: _____

FOR NATURAL PERSON:

Name (PRINT): _____

Signature: _____

Date: _____

State and Country of Residence: _____

EXHIBIT 3.5

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

THIS WARRANT AND THE SHARES ISSUABLE UPON THE EXERCISE OF THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. EXCEPT AS OTHERWISE SET FORTH HEREIN OR IN A SUBSCRIPTION AGREEMENT DATED AS OF _____, 2013, NEITHER THIS WARRANT NOR ANY OF SUCH SHARES MAY BE SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR SUCH SECURITIES UNDER SAID ACT OR, AN OPINION OF COUNSEL, IN FORM, SUBSTANCE AND SCOPE, CUSTOMARY FOR OPINIONS OF COUNSEL IN COMPARABLE TRANSACTIONS, THAT REGISTRATION IS NOT REQUIRED UNDER SUCH ACT OR UNLESS SOLD PURSUANT TO RULE 144 OR REGULATIONS UNDER SUCH ACT. THE WARRANT AND THE SECURITIES ISSUABLE UPON EXERCISE OF THE WARRANT MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT SECURED BY SUCH SECURITIES.

COMMON STOCK PURCHASE WARRANT

VACCINOGEN, INC.

Right to Purchase _____ Shares of Common Stock, par value \$.0001 per share

THIS CERTIFIES THAT, for value received _____ or its registered assigns, is entitled to purchase from Vaccinogen, Inc., a Maryland corporation whose shares of Common Stock (defined below) (the "Company"), at any time or from time to time during the period specified in Paragraph 2 hereof, _____ (_____) fully paid and nonassessable shares of the Company's Common Stock, par value \$.0001 per share (the "Common Stock"), at an exercise price per whole share equal to \$6.05 (the "Exercise Price"). The term "Warrant Shares," as used herein, refers to the shares of Common Stock purchasable hereunder. The Warrant Shares and the Exercise Price are subject to adjustment as provided in Paragraph 4 hereof. The term "Warrants" means this Warrant and the other warrants issued pursuant to that certain Subscription Agreement and described in that certain Amended and Restated Confidential Private Placement Memorandum Supplement, dated April 18, 2013, by and among the Company and the Buyers listed on the execution pages thereto.

This Warrant is subject to the following terms, provisions, and conditions:

I. Manner of Exercise; Issuance of Certificates; Payment for Shares.

(a) **Exercise of Warrants.** Subject to the provisions hereof, this Warrant may be exercised by the holder hereof, in whole or in part, by the surrender of this Warrant, together with a completed exercise agreement in the form attached hereto (the "Exercise Agreement"), to the Company during normal business hours on any business day at the Company's principal executive offices (or such other office or agency of the Company as it may designate by notice to the holder hereof), and (i) upon payment to the Company in cash, by certified or official bank check or by wire transfer for the account of the Company of the Exercise Price for the Warrant Shares specified in the Exercise Agreement or (ii) delivery to the Company of a written notice of an election to effect a "Cashless Exercise" (as defined in paragraph (b) below) for the Warrant Shares specified in the Exercise Agreement. The Warrant Shares so purchased shall be deemed to be issued to the holder hereof or such holder's designee, as the record owner of such shares, as of the close of business on the date on which this Warrant shall have been surrendered, the

completed Exercise Agreement shall have been delivered, and payment shall have been made for such shares as set forth above. Certificates for the Warrant Shares so purchased, representing the aggregate number of shares specified in the Exercise Agreement, shall be delivered to the holder hereof within a reasonable time, not exceeding five (5) business days, after this Warrant shall have been so exercised. The certificates so delivered shall be in such denominations as may be requested by the holder hereof and shall be registered in the name of such holder or such other name as shall be designated by such holder. If this Warrant shall have been exercised only in part, then, unless this Warrant has expired, the Company shall, at its expense, at the time of delivery of such certificates, deliver to the holder a new Warrant representing the number of shares with respect to which this Warrant shall not then have been exercised.

(b) **Cashless Exercise.** Notwithstanding any provision herein to the contrary, if the current Market Price of one share of Common Stock is greater than the Exercise Price (at the date of calculation as set forth below), this Warrant may be exercised by presentation and surrender of this Warrant to the Company at its principal executive offices with a written notice of the holder's intention to effect a cashless exercise, including a calculation of the number of shares of Common Stock (as determined below) to be issued upon such exercise in accordance with the terms hereof (a "Cashless Exercise"). In the event of a Cashless Exercise, in lieu of paying the Exercise Price in cash, the Company shall issue to the holder a number of shares of Common Stock computed using the following formula:

$$X = Y \frac{(A-B)}{A}$$

Where X = the number of shares of Common Stock to be issued to the holder

Y = the number of shares of Common Stock purchasable under the Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being exercised (at the date of such calculation)

A = the Market Price of one share of the Company's Common Stock (at the date of such calculation)

B = Exercise Price (as adjusted to the date of such calculation)

(c) **Maximum Exercise.** Notwithstanding anything in this Warrant to the contrary, in no event shall the holder of this Warrant be entitled to exercise a number of Warrants (or portions thereof) in excess of the number of Warrants (or portions thereof) upon exercise of which the sum of (i) the number of shares of Common Stock beneficially owned by the holder and its affiliates (other than shares of Common Stock which may be deemed beneficially owned through the ownership of the unexercised Warrants and the unexercised or unconverted portion of any other securities of the Company) subject to a limitation on conversion or exercise analogous to the limitation contained herein and (ii) the number of shares of Common Stock issuable upon exercise of the Warrants (or portions thereof) with respect to which the determination described herein is being made, would result in beneficial ownership by the holder and its affiliates of more than 4.99% of the outstanding shares of Common Stock. For purposes of the immediately preceding sentence, beneficial ownership shall be determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended, and Regulation 13D-G

thereunder, except as otherwise provided in clause (i) of the preceding sentence. Notwithstanding anything to the contrary contained herein, the limitation on exercise of this Warrant set forth herein may not be amended without the written consent of the holder hereof and the Company.

2. **Period of Exercise.** This Warrant is exercisable at any time or from time to time on or after the date on which this Warrant is issued and delivered pursuant to the terms of the Subscription Agreement and before 6:00 p.m., New York, New York time on the fifth (5th) anniversary of the date of issuance (the "Exercise Period").

3. **Certain Agreements of the Company.** The Company hereby covenants and agrees as follows:

(a) **Shares to be Fully Paid.** All Warrant Shares will, upon issuance in accordance with the terms of this Warrant, be validly issued, fully paid, and nonassessable and free from all taxes, liens, and charges with respect to the issue thereof.

(b) **Reservation of Shares.** During the Exercise Period, the Company shall at all times have authorized, and reserved for the purpose of issuance upon exercise of this Warrant, a sufficient number of shares of Common Stock to provide for the exercise of this Warrant.

(c) **Certain Actions Prohibited.** The Company will not, by amendment of its charter or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed by it hereunder, but will at all times in good faith assist in the carrying out of all the provisions of this Warrant and in the taking of all such action as may reasonably be requested by the holder of this Warrant in order to protect the exercise privilege of the holder of this Warrant against dilution or other impairment, consistent with the tenor and purpose of this Warrant. Without limiting the generality of the foregoing, the Company (i) will not increase the par value of any shares of Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, and (ii) will take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon the exercise of this Warrant.

(d) **Successors and Assigns.** This Warrant will be binding upon any entity succeeding to the Company by merger, consolidation, or acquisition of all or substantially all the Company's assets.

4. **Antidilution Provisions.** During the Exercise Period, the Exercise Price and the number of Warrant Shares shall be subject to adjustment from time to time as provided in this Paragraph 4. In the event that any adjustment of the Exercise Price as required herein results in a fraction of a cent, such Exercise Price shall be rounded up to the nearest cent.

(a) **Adjustment of Exercise Price and Number of Shares upon Issuance of Common Stock.** Except as otherwise provided in Paragraphs 4(c) and 4(e) hereof, if and whenever on or after the date of issuance of this Warrant, the Company issues or sells, or in accordance with Paragraph 4(b) hereof is deemed to have issued or sold, any shares of Common Stock for no consideration or for a consideration per share (before deduction of reasonable expenses or commissions or underwriting discounts or allowances in connection therewith) less

than the then effective Exercise Price on the date of issuance (a "Dilutive Issuance"), then immediately upon the Dilutive Issuance, the Exercise Price will be reduced to a price determined by multiplying the Exercise Price in effect immediately prior to the Dilutive Issuance by a fraction, (i) the numerator of which is an amount equal to the sum of (x) the number of shares of Common Stock actually outstanding immediately prior to the Dilutive Issuance, plus (y) the quotient of the aggregate consideration, calculated as set forth in Paragraph 4(b) hereof, received by the Company upon such Dilutive Issuance divided by the Exercise Price in effect immediately prior to the Dilutive Issuance, and (ii) the denominator of which is the total number of shares of Common Stock Deemed Outstanding (as defined below) immediately after the Dilutive Issuance.

(b) **Effect on Exercise Price of Certain Events.** For purposes of determining the adjusted Exercise Price under Paragraph 4(a) hereof, the following will be applicable:

(1) **Issuance of Rights or Options.** If the Company in any manner issues or grants any warrants, rights or options, whether or not immediately exercisable, to subscribe for or to purchase Common Stock or other securities convertible into or exchangeable for Common Stock ("Convertible Securities") (such warrants, rights and options to purchase Common Stock or Convertible Securities are hereinafter referred to as "Options") and the price per share for which Common Stock is issuable upon the exercise of such Options is less than the then effective Exercise Price on the date of issuance or grant of such Options, then the maximum total number of shares of Common Stock issuable upon the exercise of all such Options will, as of the date of the issuance or grant of such Options, be deemed to be outstanding and to have been issued and sold by the Company for such price per share. For purposes of the preceding sentence, the "price per share for which Common Stock is issuable upon the exercise of such Options" is determined by dividing (i) the total amount, if any, received or receivable by the Company as consideration for the issuance or granting of all such Options, plus the minimum aggregate amount of additional consideration, if any, payable to the Company upon the exercise of all such Options, plus, in the case of Convertible Securities issuable upon the exercise of such Options, the minimum aggregate amount of additional consideration payable upon the conversion or exchange thereof at the time such Convertible Securities first become convertible or exchangeable, by (ii) the maximum total number of shares of Common Stock issuable upon the exercise of all such Options (assuming full conversion of Convertible Securities, if applicable). No further adjustment to the Exercise Price will be made upon the actual issuance of such Common Stock upon the exercise of such Options or upon the conversion or exchange of Convertible Securities issuable upon exercise of such Options.

(2) **Issuance of Convertible Securities.** If the Company in any manner issues or sells any Convertible Securities, whether or not immediately convertible (other than where the same are issuable upon the exercise of Options) and the price per share for which Common Stock is issuable upon such conversion or exchange is less than the then effective Exercise Price on the date of issuance, then the maximum total number of shares of Common Stock issuable upon the conversion or exchange of all such Convertible Securities will, as of the date of the issuance of such Convertible Securities, be deemed to be outstanding and to have been issued and sold by the Company for such price per share. For the purposes of the preceding sentence, the "price per share for which Common Stock is issuable upon such conversion or exchange" is determined by dividing (i) the total amount, if any, received or receivable by the Company as consideration for the issuance or sale of all such Convertible Securities, plus the

minimum aggregate amount of additional consideration, if any, payable to the Company upon the conversion or exchange thereof at the time such Convertible Securities first become convertible or exchangeable, by (ii) the maximum total number of shares of Common Stock issuable upon the conversion or exchange of all such Convertible Securities. No further adjustment to the Exercise Price will be made upon the actual issuance of such Common Stock upon conversion or exchange of such Convertible Securities.

(3) **Change in Option Price or Conversion Rate.** If there is a change at any time in (i) the amount of additional consideration payable to the Company upon the exercise of any Options; (ii) the amount of additional consideration, if any, payable to the Company upon the conversion or exchange of any Convertible Securities; or (iii) the rate at which any Convertible Securities are convertible into or exchangeable for Common Stock (other than under or by reason of provisions designed to protect against dilution), the Exercise Price in effect at the time of such change will be readjusted to the Exercise Price which would have been in effect at such time had such Options or Convertible Securities still outstanding provided for such changed additional consideration or changed conversion rate, as the case may be, at the time initially granted, issued or sold.

(4) **Treatment of Expired Options and Unexercised Convertible Securities.** If, in any case, the total number of shares of Common Stock issuable upon exercise of any Option or upon conversion or exchange of any Convertible Securities is not, in fact, issued and the rights to exercise such Option or to convert or exchange such Convertible Securities shall have expired or terminated, the Exercise Price then in effect will be readjusted to the Exercise Price which would have been in effect at the time of such expiration or termination had such Option or Convertible Securities, to the extent outstanding immediately prior to such expiration or termination (other than in respect of the actual number of shares of Common Stock issued upon exercise or conversion thereof), never been issued.

(5) **Calculation of Consideration Received.** If any Common Stock, Options or Convertible Securities are issued, granted or sold for cash, the consideration received therefor for purposes of this Warrant will be the amount received by the Company therefor, before deduction of reasonable commissions, underwriting discounts or allowances or other reasonable expenses paid or incurred by the Company in connection with such issuance, grant or sale. In case any Common Stock, Options or Convertible Securities are issued or sold for a consideration part or all of which shall be other than cash, the amount of the consideration other than cash received by the Company will be the fair value of such consideration, except where such consideration consists of securities, in which case the amount of consideration received by the Company will be the Market Price thereof as of the date of receipt. In case any Common Stock, Options or Convertible Securities are issued in connection with any acquisition, merger or consolidation in which the Company is the surviving corporation, the amount of consideration therefor will be deemed to be the fair value of such portion of the net assets and business of the non-surviving corporation as is attributable to such Common Stock, Options or Convertible Securities, as the case may be. The fair value of any consideration other than cash or securities will be determined in good faith by the Board of Directors of the Company.

(6) **Exceptions to Adjustment of Exercise Price.** No adjustment to the Exercise Price will be made (i) upon the exercise of any warrants, options or convertible securities granted, issued and outstanding on the date of issuance of this Warrant; (ii) upon the

grant or exercise of any stock or options which may hereafter be granted or exercised under any employee benefit plan, stock option plan or restricted stock plan of the Company now existing or to be implemented in the future, so long as the issuance of such stock or options is approved by the Board of Directors of the Company or a majority of the members of a committee established for such purpose; (iii) the Company issues or distributes shares of its Common Stock or Convertible Securities in connection with (A) full or partial consideration in connection with a strategic merger, acquisition, consolidation or purchase of substantially all of the securities or assets of a corporation or other entity; (B) strategic license or joint venture agreements, the entering into or acquiring of material contracts in connection with the Company's business as currently being conducted, and other partnering arrangements so long as such issuance are not for the purpose of raising capital and are not issued for services or (C) those certain Investment Agreements dated as of [July 18, 2012] with Kodiak Capital Group, LLC; (iv) upon the issuance of Adjustment Shares (as defined in the Subscription Agreement) or (v) upon the exercise of the Warrants.

(c) **Subdivision or Combination of Common Stock.** If the Company at any time subdivides (by any stock split, stock dividend, recapitalization, reorganization, reclassification or otherwise) the shares of Common Stock acquirable hereunder into a greater number of shares, then, after the date of record for effecting such subdivision, the Exercise Price in effect immediately prior to such subdivision will be proportionately reduced. If the Company at any time combines (by reverse stock split, recapitalization, reorganization, reclassification or otherwise) the shares of Common Stock acquirable hereunder into a smaller number of shares, then, after the date of record for effecting such combination, the Exercise Price in effect immediately prior to such combination will be proportionately increased.

(d) **Consolidation, Merger or Sale.** In case of any consolidation of the Company with, or merger of the Company into any other corporation, or in case of any sale or conveyance of all or substantially all of the assets of the Company other than in connection with a plan of complete liquidation of the Company, then as a condition of such consolidation, merger or sale or conveyance, adequate provision will be made whereby the holder of this Warrant will have the right to acquire and receive upon exercise of this Warrant in lieu of the shares of Common Stock immediately theretofore acquirable upon the exercise of this Warrant, such shares of stock, securities or assets as may be issued or payable with respect to or in exchange for the number of shares of Common Stock immediately theretofore acquirable and receivable upon exercise of this Warrant had such consolidation, merger or sale or conveyance not taken place. In any such case, the Company will make appropriate provision to insure that the provisions of this Paragraph 4 hereof will thereafter be applicable as nearly as may be in relation to any shares of stock or securities thereafter deliverable upon the exercise of this Warrant. The Company will not effect any consolidation, merger or sale or conveyance unless prior to the consummation thereof, the successor corporation (if other than the Company) assumes by written instrument the obligations under this Paragraph 4 and the obligations to deliver to the holder of this Warrant such shares of stock, securities or assets as, in accordance with the foregoing provisions, the holder may be entitled to acquire.

(e) **Distribution of Assets.** In case the Company shall declare or make any distribution of its assets (including cash) to holders of Common Stock as a partial liquidating dividend, by way of return of capital or otherwise, then, after the date of record for determining shareholders entitled to such distribution, but prior to the date of distribution, the holder of this

Warrant shall be entitled upon exercise of this Warrant for the purchase of any or all of the shares of Common Stock subject hereto, to receive the amount of such assets which would have been payable to the holder had such holder been the holder of such shares of Common Stock on the record date for the determination of shareholders entitled to such distribution.

(f) **Notice of Adjustment.** Upon the occurrence of any event which requires any adjustment of the Exercise Price, then, and in each such case, the Company shall give notice thereof to the holder of this Warrant, which notice shall state the Exercise Price resulting from such adjustment and the increase or decrease in the number of Warrant Shares purchasable at such price upon exercise, setting forth in reasonable detail the method of calculation and the facts upon which such calculation is based. Such calculation shall be certified by the Chief Financial Officer of the Company.

(g) **Minimum Adjustment of Exercise Price.** No adjustment of the Exercise Price shall be made in an amount of less than 1% of the Exercise Price in effect at the time such adjustment is otherwise required to be made, but any such lesser adjustment shall be carried forward and shall be made at the time and together with the next subsequent adjustment which, together with any adjustments so carried forward, shall amount to not less than 1% of such Exercise Price.

(h) **No Fractional Shares.** No fractional shares of Common Stock are to be issued upon the exercise of this Warrant, but the Company shall pay a cash adjustment in respect of any fractional share which would otherwise be issuable in an amount equal to the same fraction of the Market Price of a share of Common Stock on the date of such exercise.

(i) **Other Notices.** In case at any time:

(1) the Company shall declare any dividend upon the Common Stock payable in shares of stock of any class or make any other distribution (including dividends or distributions payable in cash out of retained earnings) to the holders of the Common Stock;

(2) the Company shall offer for subscription pro rata to the holders of the Common Stock any additional shares of stock of any class or other rights;

(3) there shall be any capital reorganization of the Company, or reclassification of the Common Stock, or consolidation or merger of the Company with or into, or sale of all or substantially all its assets to, another corporation or entity; or

(4) there shall be a voluntary or involuntary dissolution, liquidation or winding up of the Company;

then, in each such case, the Company shall give to the holder of this Warrant (a) notice of the date on which the books of the Company shall close or a record shall be taken for determining the holders of Common Stock entitled to receive any such dividend, distribution, or subscription rights or for determining the holders of Common Stock entitled to vote in respect of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding-up and (b) in the case of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding-up, notice of the date (or, if not then known, a reasonable approximation thereof by the Company) when the same shall take place. Such notice shall also

specify the date on which the holders of Common Stock shall be entitled to receive such dividend, distribution, or subscription rights or to exchange their Common Stock for stock or other securities or property deliverable upon such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation, or winding-up, as the case may be. Such notice shall be given at least 30 days prior to the record date or the date on which the Company's books are closed in respect thereto. Failure to give any such notice or any defect therein shall not affect the validity of the proceedings referred to in clauses (i), (ii), (iii) and (iv) above.

(j) **Certain Events.** If any event occurs of the type contemplated by the adjustment provisions of this Paragraph 4 but not expressly provided for by such provisions, the Company will give notice of such event as provided in Paragraph 4(g) hereof, and the Company's Board of Directors will make an appropriate adjustment in the Exercise Price and the number of shares of Common Stock acquirable upon exercise of this Warrant so that the rights of the holder shall be neither enhanced nor diminished by such event.

(k) **Certain Definitions.**

(1) **"Common Stock Deemed Outstanding"** shall mean the number of shares of Common Stock actually outstanding (not including shares of Common Stock held in the treasury of the Company), plus (x) pursuant to Paragraph 4(b)(1) hereof, the maximum total number of shares of Common Stock issuable upon the exercise of Options, as of the date of such issuance or grant of such Options, if any, and (y) pursuant to Paragraph 4(b)(2) hereof, the maximum total number of shares of Common Stock issuable upon conversion or exchange of Convertible Securities, as of the date of issuance of such Convertible Securities, if any.

(2) **"Market Price,"** as of any date, (i) means the average of the last reported sale prices for the shares of Common Stock on the OTCBB for the five (5) Trading Days immediately preceding such date as reported by Bloomberg, or (ii) if the OTCBB is not the principal trading market for the shares of Common Stock, the average of the last reported sale prices on the principal trading market for the Common Stock during the same period as reported by Bloomberg, or (iii) if market value cannot be calculated as of such date on any of the foregoing bases, the Market Price shall be the fair market value as reasonably determined in good faith by (a) the Board of Directors of the Company or, at the option of a majority-in-interest of the holders of the outstanding Warrants by (b) an independent investment bank of nationally recognized standing in the valuation of businesses similar to the business of the corporation. The manner of determining the Market Price of the Common Stock set forth in the foregoing definition shall apply with respect to any other security in respect of which a determination as to market value must be made hereunder.

(3) **"Common Stock,"** for purposes of this Paragraph 4, includes the Common Stock, par value \$.0001 per share, and any additional class of stock of the Company having no preference as to dividends or distributions on liquidation, provided that the shares purchasable pursuant to this Warrant shall include only shares of Common Stock, par value \$.0001 per share, in respect of which this Warrant is exercisable, or shares resulting from any subdivision or combination of such Common Stock, or in the case of any reorganization, reclassification, consolidation, merger, or sale of the character referred to in Paragraph 4(e) hereof, the stock or other securities or property provided for in such Paragraph.

5. **Issue Tax.** The issuance of certificates for Warrant Shares upon the exercise of this Warrant shall be made without charge to the holder of this Warrant or such shares for any issuance tax or other costs in respect thereof, provided that the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than the holder of this Warrant.

6. **No Rights or Liabilities as a Shareholder.** This Warrant shall not entitle the holder hereof to any voting rights or other rights as a shareholder of the Company. No provision of this Warrant, in the absence of affirmative action by the holder hereof to purchase Warrant Shares, and no mere enumeration herein of the rights or privileges of the holder hereof, shall give rise to any liability of such holder for the Exercise Price or as a shareholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

7. **Transfer, Exchange, and Replacement of Warrant.**

(a) **Restriction on Transfer.** This Warrant and the rights granted to the holder hereof are transferable, in whole or in part, upon surrender of this Warrant, together with a properly executed assignment in the form attached hereto, at the office or agency of the Company referred to in Paragraph 7(e) below, provided, however, that any transfer or assignment shall be subject to the conditions set forth in Paragraph 7(f) hereof and to the applicable provisions of the Subscription Agreement. Until due presentment for registration of transfer on the books of the Company, the Company may treat the registered holder hereof as the owner and holder hereof for all purposes, and the Company shall not be affected by any notice to the contrary.

(b) **Warrant Exchangeable for Different Denominations.** This Warrant is exchangeable, upon the surrender hereof by the holder hereof at the office or agency of the Company referred to in Paragraph 7(e) below, for new Warrants of like tenor representing in the aggregate the right to purchase the number of shares of Common Stock which may be purchased hereunder, each of such new Warrants to represent the right to purchase such number of shares as shall be designated by the holder hereof at the time of such surrender.

(c) **Replacement of Warrant.** Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction, or mutilation of this Warrant and, in the case of any such loss, theft, or destruction, upon delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company, or, in the case of any such mutilation, upon surrender and cancellation of this Warrant, the Company, at its expense, will execute and deliver, in lieu thereof, a new Warrant of like tenor.

(d) **Cancellation; Payment of Expenses.** Upon the surrender of this Warrant in connection with any transfer, exchange, or replacement as provided in this Paragraph 7, this Warrant shall be promptly canceled by the Company. The Company shall pay all taxes (other than securities transfer taxes) and all other expenses (other than legal expenses, if any, incurred by the holder or transferees) and charges payable in connection with the preparation, execution, and delivery of Warrants pursuant to this Paragraph 7.

(e) **Register.** The Company shall maintain, at its principal executive offices (or such other office or agency of the Company as it may designate by notice to the holder hereof), a register for this Warrant, in which the Company shall record the name and address of

the person in whose name this Warrant has been issued, as well as the name and address of each transferee and each prior owner of this Warrant.

(f) **Exercise or Transfer Without Registration.** If, at the time of the surrender of this Warrant in connection with any exercise, transfer, or exchange of this Warrant, this Warrant (or, in the case of any exercise, the Warrant Shares issuable hereunder), shall not be registered under the Securities Act and under applicable state securities or blue sky laws, the Company may require, as a condition of allowing such exercise, transfer, or exchange, (i) that the holder or transferee of this Warrant, as the case may be, furnish to the Company a written opinion of counsel, which opinion and counsel are acceptable to the Company, to the effect that such exercise, transfer, or exchange may be made without registration under said Act and under applicable state securities or blue sky laws, (ii) that the holder or transferee execute and deliver to the Company an investment letter in form and substance acceptable to the Company and (iii) that the transferee be an "accredited investor" as defined in Rule 501(a) promulgated under the Securities Act; provided that no such opinion, letter or status as an "accredited investor" shall be required in connection with a transfer pursuant to Rule 144 under the Securities Act. The first holder of this Warrant, by taking and holding the same, represents to the Company that such holder is acquiring this Warrant for investment and not with a view to the distribution thereof.

8. Notices. All notices, requests, and other communications required or permitted to be given or delivered hereunder to the holder of this Warrant shall be in writing, and shall be personally delivered, or shall be sent by certified or registered mail or by recognized overnight mail courier, postage prepaid and addressed, to such holder at the address shown for such holder on the books of the Company, or at such other address as shall have been furnished to the Company by notice from such holder. All notices, requests, and other communications required or permitted to be given or delivered hereunder to the Company shall be in writing, and shall be personally delivered, or shall be sent by certified or registered mail or by recognized overnight mail courier, postage prepaid and addressed, to the office of the Company at 5300 Westview Drive, Suite 406, Frederick, Maryland 21703, Attention: President, or at such other address as shall have been furnished to the holder of this Warrant by notice, or at such other address as shall have been furnished to the holder of this Warrant by notice from the Company. Any such notice, request, or other communication may be sent by facsimile, but shall in such case be subsequently confirmed by a writing personally delivered or sent by certified or registered mail or by recognized overnight mail courier as provided above. All notices, requests, and other communications shall be deemed to have been given either at the time of the receipt thereof by the person entitled to receive such notice at the address of such person for purposes of this Paragraph 8, or, if mailed by registered or certified mail or with a recognized overnight mail courier upon deposit with the United States Post Office or such overnight mail courier, if postage is prepaid and the mailing is properly addressed, as the case may be.

9. Governing Law. THIS WARRANT SHALL BE ENFORCED, GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF MARYLAND APPLICABLE TO AGREEMENTS MADE AND TO BE PERFORMED ENTIRELY WITHIN SUCH STATE, WITHOUT REGARD TO THE PRINCIPLES OF CONFLICT OF LAWS. THE PARTIES HERETO HEREBY SUBMIT TO THE EXCLUSIVE JURISDICTION OF THE UNITED STATES FEDERAL COURTS LOCATED IN COUNTY OF FREDERICK, MARYLAND, WITH RESPECT TO ANY DISPUTE ARISING UNDER THIS WARRANT, THE AGREEMENTS ENTERED INTO IN

CONNECTION HEREWITH OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY. BOTH PARTIES IRREVOCABLY WAIVE THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH SUIT OR PROCEEDING. BOTH PARTIES FURTHER AGREE THAT SERVICE OF PROCESS UPON A PARTY MAILED BY FIRST CLASS MAIL SHALL BE DEEMED IN EVERY RESPECT EFFECTIVE SERVICE OF PROCESS UPON THE PARTY IN ANY SUCH SUIT OR PROCEEDING. NOTHING HEREIN SHALL AFFECT EITHER PARTY'S RIGHT TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY LAW. BOTH PARTIES AGREE THAT A FINAL NON-APPEALABLE JUDGMENT IN ANY SUCH SUIT OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON SUCH JUDGMENT OR IN ANY OTHER LAWFUL MANNER. THE PARTY WHICH DOES NOT PREVAIL IN ANY DISPUTE ARISING UNDER THIS WARRANT SHALL BE RESPONSIBLE FOR ALL FEES AND EXPENSES, INCLUDING ATTORNEYS' FEES, INCURRED BY THE PREVAILING PARTY IN CONNECTION WITH SUCH DISPUTE.

10. Piggy-Back Registration Rights.

(a) If at any time there is not an effective registration statement covering all of the shares of Common Stock issuable upon the exercise of this Warrant (the "Registrable Securities"), and the Company shall determine to prepare and file with the Securities and Exchange Commission (the "SEC") a registration statement relating to an offering for its own account or the account of others under the Securities Act of 1933, as amended (the "Securities Act") of any of its equity securities, other than on Form S-4 or Form S-8 (each as promulgated under the Securities Act) or their then equivalents relating to equity securities to be issued solely in connection with any acquisition of any entity or business or equity securities issuable in connection with stock option or other employee benefit plans and other than any registration relating to the Company's Investment Agreements and Registration Rights Agreements with Kodiak Capital LLC, then the Company shall send to each holder written notice of such determination and if, within fifteen days after receipt of such notice, any such holder shall so request in writing, the Company shall include in such registration statement all or any part of such Registrable Securities such Holder requests to be registered; provided, however, that the Company shall not be required to register any Registrable Securities pursuant to this Section 2.1 that are eligible for sale pursuant to Rule 144 of the Securities Act without limitation as to the volume of securities that may be sold.

(b) The Company shall notify each Holder in writing promptly (and in any event within one business day) after receiving notification from the SEC that the Registration Statement has been declared effective.

(c) If, in connection with the underwritten public offering by the Company the managing underwriter(s) advise the Company in writing that in their opinion the number of securities requested to be included in such registration exceeds the number that can be sold in an orderly manner in such offering within a price range acceptable to the Company, the Company will include in such registration (i) first, the securities proposed to be sold by the Buyer; and (ii) second, the common stock requested to be included in such registration, pro rata among the holder of this Warrant and the other selling stockholders based on the ratio of the number of shares of common stock that each such selling stockholder has requested that the

Company include in such registration over the total number of shares of common stock requested to be included in such registration.

(d) The Company shall, notwithstanding any termination of this Warrant, indemnify, defend and hold harmless the holder, its affiliates and its agents against any and all losses, as incurred, arising out of or relating to any untrue or alleged untrue statement of a material fact contained in the registration statement, any prospectus or any form of prospectus or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any prospectus or form of prospectus or supplement thereto, in the light of the circumstances under which they were made) not misleading, except to the extent, but only to the extent, that (i) such untrue statements or omissions are based solely upon information furnished in writing to the Company by such holder expressly for use therein, or to the extent that such information relates to such holder or such holder's proposed method of distribution of Registrable Securities and was reviewed and expressly approved in writing by such holder expressly for use in the registration statement, such prospectus or such form of prospectus or in any amendment or supplement thereto. The Company shall notify the holder promptly of the institution, threat or assertion of any proceeding of which the Company is aware in connection with the transactions contemplated by this Agreement. If a claim for indemnification is unavailable to an indemnified party (by reason of public policy or otherwise), then each indemnifying party, in lieu of indemnifying such indemnified party, shall contribute to the amount paid or payable by such indemnified party as a result of such losses, in such proportion as is appropriate to reflect the relative fault of the indemnifying party and indemnified party in connection with the actions, statements or omissions that resulted in such losses as well as any other relevant equitable considerations. The relative fault of such indemnifying party and indemnified party shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission of a material fact, has been taken or made by, or relates to information supplied by, such indemnifying party or indemnified party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action, statement or omission. The amount paid or payable by a party as a result of any losses shall be deemed to include, any reasonable attorneys' or other reasonable fees or expenses incurred by such party in connection with any proceeding to the extent such party would have been indemnified for such fees or expenses if the indemnification provided for in this Section was available to such party in accordance with its terms.

(e) The Company shall pay any and all registration expenses associated with the registration of the Registrable Securities and shall employ procedures that are customary in order to effectuate the registration of the Registrable Securities, including providing the holder with reasonable notice of comment letters and the status of a registration statement.

11. Miscellaneous.

(a) If the resale of the Warrant Shares by the holder is not registered pursuant to an effective registration statement under the Securities Act and this Warrant is exercised in whole or in part, then each certificate representing Warrant Shares issued upon the exercise of this Warrant shall be stamped or otherwise imprinted with a legend in substantially the following form:

“THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “ACT”), OR ANY STATE SECURITIES LAWS, AND NEITHER SUCH SECURITIES NOR ANY INTEREST THEREIN MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR OTHERWISE TRANSFERRED UNLESS (1) A REGISTRATION STATEMENT WITH RESPECT THERETO IS EFFECTIVE UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR (2) AN EXEMPTION FROM SUCH REGISTRATION EXISTS AND THE COMPANY RECEIVES AN OPINION OF COUNSEL TO THE HOLDER OF SUCH SECURITIES, WHICH COUNSEL AND OPINION ARE REASONABLY SATISFACTORY TO THE COMPANY, THAT SUCH SECURITIES MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR TRANSFERRED IN THE MANNER CONTEMPLATED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT OR APPLICABLE STATE SECURITIES LAWS. THE WARRANT AND THE SECURITIES ISSUABLE UPON EXERCISE OF THE WARRANT MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT SECURED BY SUCH SECURITIES.”

(b) **Amendments.** This Warrant and any provision hereof may only be amended by an instrument in writing signed by the Company and the holder hereof.

(c) **Descriptive Headings.** The descriptive headings of the several paragraphs of this Warrant are inserted for purposes of reference only, and shall not affect the meaning or construction of any of the provisions hereof.

(d) **Remedies.** The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the holder, by vitiating the intent and purpose of the transaction contemplated hereby. Accordingly, the Company acknowledges that the remedy at law for a breach of its obligations under this Warrant will be inadequate and agrees, in the event of a breach or threatened breach by the Company of the provisions of this Warrant, that the holder shall be entitled, in addition to all other available remedies at law or in equity, and in addition to the penalties assessable herein, to an injunction or injunctions restraining, preventing or curing any breach of this Warrant and to enforce specifically the terms and provisions thereof, without the necessity of showing economic loss and without any bond or other security being required.

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IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its duly authorized officer.

VACCINOGEN, INC.

By: _____
Name: _____
Title: _____

Dated as of _____, 2013

FORM OF EXERCISE AGREEMENT

Dated: _____, 20__

To: _____

The undersigned, pursuant to the provisions set forth in the within Warrant, hereby agrees to purchase _____ shares of Common Stock covered by such Warrant, and makes payment herewith in full therefor at the price per share provided by such Warrant in cash or by certified or official bank check in the amount of, or by surrender of securities issued by the Company (including a portion of the Warrant) having a market value (in the case of a portion of this Warrant, determined in accordance with Section 1(b) of the Warrant) equal to, \$_____. Please issue a certificate or certificates for such shares of Common Stock in the name of and pay any cash for any fractional share to:

Name: _____

Signature:

Address: _____

Note: The above signature should correspond exactly with the name on the face of the within Warrant, if applicable.

and, if said number of shares of Common Stock shall not be all the shares purchasable under the within Warrant, a new Warrant is to be issued in the name of said undersigned covering the balance of the shares purchasable thereunder less any fraction of a share paid in cash

FORM OF ASSIGNMENT

FOR VALUE RECEIVED, the undersigned hereby sells, assigns, and transfers all the rights of the undersigned under the within Warrant, with respect to the number of shares of Common Stock covered thereby set forth herein below, to:

<u>Name of Assignee</u>	<u>Address</u>	<u>No of Shares</u>
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, and hereby irrevocably constitutes and appoints _____ as agent and attorney-in-fact to transfer said Warrant on the books of the within-named corporation, with full power of substitution in the premises.

Dated: _____, 201_

In the presence of:

Name: _____

Signature: _____
Title of Signing Officer or Agent (if any):

Address: _____

Note: The above signature should correspond exactly with the name on the face of the within Warrant, if applicable.

EXHIBIT 4.1

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

SUBSCRIPTION DOCUMENTS

VACCINOGEN, INC.

**Offering of up to 400,000 shares of
of Common Stock**

CONTENTS

Instructions for Subscription

Section A: General Instructions - Wiring and Check Instructions

Section B: Subscription Agreement

Section C: Confidential Purchaser Questionnaire

SECTION A

INSTRUCTIONS FOR SUBSCRIPTION FOR SHARES

Each subscriber for Shares offered must do the following:

1. Complete, sign and deliver the Subscription Agreement (Section B) included in this Subscription Booklet.
2. Complete, sign and deliver the Confidential Purchaser Questionnaire (Section C) included in this Subscription Booklet.
3. Deliver payment in the amount of \$5.20 per Share subscribed for in accordance with the wire transfer and check instructions as indicated in the Subscription Agreement (Section B).
4. **All subscriptions from partnerships, corporations, trusts, or limited liability companies must be accompanied by resolutions of the appropriate corporate authority (board of directors, trustee or managing partners or members) and trust documents evidencing the authorization and power to make the subscription.**

Delivery of the completed subscription documents described above and check (if applicable) should be delivered directly to the Company at the following address:

Vaccinogen, Inc.
5300 Westview Drive, Suite 406
Frederick, MD 21703
Tel No.: 301-668-8400
Facsimile No.: 301-631-2970
Email: atussing@vaccinogeninc.com
Attention: Andrew L. Tussing

The Company may accept or reject subscriptions, in whole or in part, in their sole discretion. The offering is available only to "accredited investors" as defined under Regulation D under the Securities Act of 1933, as amended. In the event a subscription offer is not accepted by the Company, the subscription funds shall be returned to the subscriber, without interest or deduction thereon.

SECTION B
SUBSCRIPTION AGREEMENT

VACCINOGEN, INC.

Please review, sign on page B-13 or page B-15, and return to:

Vaccinogen, Inc.
5300 Westview Drive, Suite 406
Frederick, MD 21703
Tel No.: 301-668-8400
Facsimile No.: 301-631-2970
Email: atussing@vaccinogeninc.com
Attention: Andrew L. Tussing

VACCINOGEN, INC.

SUBSCRIPTION AGREEMENT

The undersigned (hereinafter "**Subscriber**") hereby confirms his/her/its subscription for the purchase of shares ("**Shares**") of common stock, par value \$.0001 per share ("**Common Stock**") of Vaccinogen, Inc., a Maryland corporation (the "**Company**"), on the terms described below.

Capitalized terms used and not otherwise defined herein shall have the meanings set forth for such terms in the Company's Offering Circular, dated May __, 2013 (as amended or supplemented, and together with all documents and exhibits thereto, the "**Offering Circular**").

In connection with this subscription, Subscriber and the Company agree as follows:

1. Purchase and Sale of the Shares.

(a) The Company hereby agrees to issue and to sell to Subscriber, and Subscriber hereby agrees to purchase from the Company, a number of Shares at a price equal to \$___ per Share (the "**Purchase Price**") and for the aggregate subscription amount set forth on the signature page hereto. Upon acceptance of this Subscription Agreement by the Company, the Company shall issue and deliver to Subscriber a share certificate evidencing the applicable number of Shares subscribed for against payment in U.S. Dollars of the Purchase Price (as defined below).

(b) Subscriber has hereby delivered and paid concurrently herewith the aggregate purchase price (the "**Purchase Price**") set forth on the signature page hereof required to purchase the Shares subscribed for hereunder which amount has been paid in U.S. Dollars by cash, wire transfer or check, subject to collection, to the order of "Vaccinogen, Inc."

(c) Subscriber understands and acknowledges that this subscription is part of a proposed placement by the Company of up 400,000 Shares, which offering is being made on a "best efforts" basis (the "**Offering**"). During the Offering Period, funds will be held in an account established by the Company and released at the discretion of the Company from time to time. If a subscription is not accepted, whether in whole or in part, the subscription funds held therein will be returned to the investor without interest or deduction.

2. Covenants, Representations and Warranties of Subscriber. Subscriber covenants with, and represents and warrants to, the Company as follows:

(a) The Confidential Purchaser Questionnaire has been completed, signed and delivered to the Company by the Subscriber and is, as of the date hereof, true, complete, and correct in all respects.

(b) Subscriber is an “accredited investor” as defined by Rule 501 of Regulation D under the Securities Act of 1933, as amended (the “Act”), and Subscriber is capable of evaluating the merits and risks of Subscriber’s investment in the Company and has the capacity to protect Subscriber’s own interests.

(c) Subscriber acknowledges and understands that the Shares are being purchased for investment purposes and not with a view to distribution or resale, nor with the intention of selling, transferring or otherwise disposing of all or any part thereof for any particular price, or at any particular time, or upon the happening of any particular event or circumstances, except selling, transferring, or disposing of the Shares made in full compliance with all applicable provisions of the Act, the rules and regulations promulgated by the Securities and Exchange Commission (“SEC”) thereunder, and applicable state securities laws; and that an investment in the Shares is not a liquid investment.

(d) Subscriber acknowledges that Subscriber has had the opportunity to ask questions of, and receive answers from the Company or any person acting on its behalf concerning the Company and its business and to obtain any additional information, to the extent possessed by the Company (or to the extent it could have been acquired by the Company without unreasonable effort or expense) necessary to verify the accuracy of the information received by Subscriber. In connection therewith, Subscriber acknowledges that Subscriber has had the opportunity to discuss the Company’s business, management and financial affairs with the Company’s management or any person acting on its behalf. Subscriber has received and reviewed the Offering Circular, and all the information, both written and oral, that it desires. Without limiting the generality of the foregoing, Subscriber has been furnished with or has had the opportunity to acquire, and to review: (i) copies of all of the Company’s publicly available documents, and (ii) all information, both written and oral, it desires with respect to the Company’s business, management, financial affairs and prospects. In determining whether to make this investment, Subscriber has relied solely on Subscriber’s own knowledge and understanding of the Company and its business based upon Subscriber’s own due diligence investigations and the information furnished pursuant to this paragraph. Subscriber understands that no person has been authorized to give any information or to make any representations which were not furnished pursuant to this paragraph and Subscriber has not relied on any other representations or information.

(e) Subscriber has all requisite legal and other power and authority to execute and deliver this Subscription Agreement and to carry out and perform Subscriber’s obligations under the terms of this Subscription Agreement. This Subscription Agreement constitutes a valid and legally binding obligation of Subscriber, enforceable in accordance with its terms, and subject to laws of general application relating to bankruptcy, insolvency and the relief of debtors and rules of law governing specific performance, injunctive relief or other general principals of equity, whether such enforcement is considered in a proceeding in equity or law.

(f) Subscriber has carefully considered and has discussed with the Subscriber’s professional legal, tax, accounting and financial advisors, to the extent Subscriber has deemed necessary, the suitability of this investment and the transactions contemplated by this Subscription Agreement for the Subscriber’s particular federal, state, local and foreign tax and

financial situation and has determined that this investment and the transactions contemplated by this Subscription Agreement are a suitable investment for the Subscriber. Subscriber relies solely on such advisors and not on any statements or representations of the Company or any of its agents. Subscriber understands that Subscriber (and not the Company) shall be responsible for Subscriber's own tax liabilities which may arise as a result of this investment or the transactions contemplated by this Subscription Agreement.

(g) Neither this Subscription Agreement nor the Confidential Purchaser Questionnaire contain any untrue statement of a material fact or omit any material fact concerning Subscriber.

(h) There are no actions, suits, proceedings or investigations pending against Subscriber or Subscriber's properties before any court or governmental agency (nor, to Subscriber's knowledge, is there any threat thereof) which would impair in any way Subscriber's ability to enter into and fully perform Subscriber's commitments and obligations under this Subscription Agreement or the transactions contemplated hereby.

(i) The execution, delivery and performance of and compliance with this Subscription Agreement and the issuance of the Shares will not result in any material violation of, or conflict with, or constitute a material default under, any of Subscriber's articles of incorporation or bylaws or other governing documents, if applicable, or any of Subscriber's material agreements nor result in the creation of any mortgage, pledge, lien, encumbrance or charge against any of the assets or properties of Subscriber or the Shares.

(j) Subscriber acknowledges the Shares are speculative and involve a high degree of risk and that Subscriber can bear the economic risk of the purchase of the Shares, including a total loss of his/her/its investment.

(k) Subscriber acknowledges he/she/it has carefully reviewed and considered the risk factors discussed in the "Risk Factors" section of the Offering Circular prior to making an investment decision.

(l) Subscriber recognizes that no federal, state or foreign agency has recommended or endorsed the purchase of the Shares.

(m) Subscriber acknowledges that Subscriber has such knowledge and experience in financial and business matters that he/she/it is capable of evaluating the merits and risks of an investment in the Shares and of making an informed investment decision.

(n) Subscriber represents: (i) Subscriber is able to bear the economic risks of an investment in the Shares and to afford the complete loss of the investment, and (ii) (A) Subscriber could be reasonably assumed to have the capacity to protect his/her/its own interests in connection with this subscription; or (B) Subscriber has a pre-existing personal or business relationship with either the Company or any affiliate thereof of such duration and nature as would enable a reasonably prudent purchaser to be aware of the character, business acumen and

general business and financial circumstances of the Company or such affiliate and is otherwise personally qualified to evaluate and assess the risks, nature and other aspects of this subscription.

(o) Subscriber further represents the address set forth in the Confidential Purchaser Questionnaire is his/her principal residence (or, if Subscriber is a company, partnership or other entity, the address of its principal place of business); that Subscriber is purchasing the Shares for Subscriber's own account and not, in whole or in part, for the account of any other person; Subscriber is purchasing the Shares for investment and not with a view to resale or distribution; and Subscriber has not formed any entity for the purpose of purchasing the Shares.

(p) Subscriber understands the Company shall have the unconditional right to accept or reject each subscription, in whole or in part, for any reason or without a specific reason, in the sole and absolute discretion of the Company (even after receipt and clearance of Subscriber's funds). No subscription will be binding upon the Company until accepted by an authorized officer of the Company. In the event the subscription is rejected, Subscriber's subscription funds will be returned without interest thereon or deduction therefrom.

(q) Subscriber has not been furnished with any oral representation or oral information in connection with the offering of the Shares that is not contained in the Offering Circular and this Subscription Agreement.

(r) Subscriber represents that Subscriber is not subscribing for Shares as a result of or subsequent to any advertisement, article, notice or other communication published in any newspaper, magazine or similar media or broadcast over the Internet, television or radio or presented at any seminar or meeting.

(s) Subscriber has carefully read this Subscription Agreement, and the Offering Circular, and Subscriber has accurately completed the Confidential Purchaser Questionnaire which accompanies this Subscription Agreement.

(t) No representations or warranties have been made to Subscriber by the Company, or any officer, employee, agent, affiliate or subsidiary of the Company, other than the representations of the Company contained herein, and in subscribing for the Shares, Subscriber is not relying upon any representations other than those contained in the Offering Circular or in this Subscription Agreement.

(u) Subscriber represents and warrants, to the best of its knowledge, that other than set forth in the Offering Circular, no finder, broker, agent, financial advisor or other intermediary, nor any purchaser representative or any broker-dealer acting as a broker, is entitled to any compensation in connection with the transactions contemplated by this Subscription Agreement.

(v) Subscriber represents and warrants that Subscriber: (i) has not distributed or reproduced the Offering Circular, in whole or in part, at any time, without the prior written consent of the Company; and (ii) for three (3) years from the date hereof will keep confidential the existence of the Offering Circular and the information contained therein or made available in

connection with any further investigation of the Company and not use the information about the Company for any other purpose.

(w) If Subscriber is a trust, this investment, together with all other securities of the Company held by the trust, does not exceed 10% of the trust assets.

3. Covenants, Representations and Warranties of the Company. The Company covenants with, and represents and warrants to, Subscriber as follows:

(a) The Company is duly organized and validly exists as a corporation in good standing under the laws of the State of Maryland.

(b) The Company has all such corporate power and authority to enter into, deliver and perform this Subscription Agreement.

(c) All necessary corporate action has been duly and validly taken by the Company to authorize the execution, delivery and performance of this Subscription Agreement and the Warrant by the Company, and the issuance and sale of the Shares to be sold by the Company pursuant to this Subscription Agreement. This Subscription Agreement has been duly and validly authorized, executed and delivered by the Company and constitutes the legal, valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except as the enforceability thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and by general equitable principles.

(d) As of the date hereof, there is no litigation, arbitration, claim, governmental or other proceeding (formal or informal), or investigation pending or to the Company's knowledge threatened, with respect to the Company, or its respective operations, businesses, properties, or assets, except as properly described in the Offering Circular or such as individually or in the aggregate do not now have and will not, to the best knowledge of the Company, in the future have a material adverse effect upon the operations, business, properties or assets of the Company. The Company is not, nor as of each Closing Date shall be, in violation of, or in default with respect to, any law, rule, regulation, order, judgment or decree, except as properly described in the Offering Circular or such as individually or in the aggregate do not have and will not in the future have a material adverse effect upon the operations, business, properties, or assets of the Company; nor is the Company required to take any action in order to avoid any such violation or default.

(e) To its best knowledge, the Company has not infringed, is not infringing, nor has received notice of any claim that the Company has infringed with respect to asserted intellectual property rights (including, without limitation, copyright, patent, trademark, trade dress, service mark and any other intellectual property rights) of others. To the best knowledge of the Company, none of the patents, patent applications, trademarks, service marks, trade names and copyrights, and licenses and rights to the foregoing presently owned or held by the Company, materially infringe upon any like right of any other person or entity. The Company: (i) owns or

has the right to use, free and clear of all liens, charges, claims, encumbrances, pledges, security interests, defects or other restrictions of any kind whatsoever, sufficient patents, trademarks, service marks, trade names, copyrights, licenses and rights with respect to the foregoing, to conduct its business as presently conducted except as set forth in the Offering Circular, and (ii) except as set forth in the Offering Circular, is not obligated or under any liability whatsoever to make any payments by way of royalties, fees or otherwise to any owner or licensee of, or other claimant to, any patent, trademark, service mark, trade name, copyright, know-how, technology or other intangible asset, with respect to the use thereof or in connection with the conduct of its business as now conducted or otherwise. The Company has direct ownership of title to all its intellectual property (including all United States and foreign patent applications and patents), other proprietary rights, confidential information and know-how.

(f) The Shares to be issued and sold to the undersigned as provided in the Offering Circular and in this Subscription Agreement have been duly authorized and when issued and delivered against payment therefor, will be validly issued, fully paid and non-assessable and will conform to the description thereof in the Offering Circular. Except as set forth in the Offering Circular, there are no preemptive or other rights to subscribe for or to purchase, nor any restriction upon the voting or transfer of, any shares of Common Stock issuable to Subscriber pursuant to the Company's certificate of incorporation or by-laws or any agreement or other outstanding instrument to which the Company is a party or is otherwise known to the Company.

4. Indemnification. Subscriber agrees to indemnify and hold harmless the Company and its officers, directors, employees, shareholders, agents representatives and affiliates, and any person acting on behalf of the Company, from and against any and all damage, loss, liability, cost and expense (including reasonable attorneys' fees) which any of them may incur by reason of the failure by Subscriber to fulfill any of the terms and conditions of this Subscription Agreement, or by reason of any breach of the representations and warranties made by Subscriber herein, or in any other document provided by Subscriber to the Company. All representations, warranties and covenants of each of Subscriber and the Company contained herein shall survive the acceptance of this subscription.

5. Patriot Act Compliance. (Terms used in this section are defined in paragraph (d) below.)

To induce the Company to accept the undersigned's investment, the undersigned hereby makes the following representations, warranties and covenants to the Company:

(a) The undersigned represents and warrants that no holder of any beneficial interest in the undersigned's equity securities of the Company (each a "**Beneficial Interest Holder**") and, no Related Person (in the case the undersigned is an entity) is or will be:

- (1) A person or entity whose name appears on the list of specially designated nationals and blocked persons maintained by the Office of Foreign Asset Control from time to time;
- (2) A Foreign Shell Bank; or

(3) A person or entity resident in or whose subscription funds are transferred from or through an account in a Non-Cooperative Jurisdiction.

(b) The undersigned represents that the bank or other financial institution (the “**Wiring Institution**”) from which the undersigned’s funds will be wired is located in a FATF Country.

(c) The undersigned represents that:

(1) Neither it, any Beneficial Interest Holder nor any Related Person (in the case of the undersigned is an entity) is a Senior Foreign Political Figure, any member of a Senior Foreign Political Figure’s Immediate Family or any Close Associate of a Senior Foreign Political Figure;

(2) Neither it, any Beneficial Interest Holder nor any Related Person (in the case the undersigned is an entity) is resident in, or organized or chartered under the laws of, a jurisdiction designated by the Secretary of the Treasury under Section 311 or 312 of the USA PATRIOT Act as warranting special measures due to money laundering concerns; and

(3) Its investment funds do not originate from, nor will they be routed through, an account maintained at a Foreign Shell Bank, an “offshore bank,” or a bank organized or chartered under the laws of a Non-Cooperative Jurisdiction.

(d) Definitions:

Close Associate: With respect to a Senior Foreign Political Figure, a person who is widely and publicly known internationally to maintain an unusually close relationship with the Senior Foreign Political Figure, and includes a person who is in a position to conduct substantial domestic and international financial transactions on behalf of the Senior Foreign Political Figure.

FATF: The Financial Action Task Force on Money Laundering.

FATF Country: A country that is a member of FATF. As of September 1, 2003, the countries which are members of FATF are: Argentina; Australia; Austria; Belgium; Brazil; Canada; Denmark; Finland; France; Germany; Greece; Hong Kong; Iceland; Ireland; Italy; Japan; Luxembourg; Mexico; Kingdom of the Netherlands; New Zealand; Norway; Portugal; Singapore; South Africa; Spain; Sweden; Switzerland; Turkey; United Kingdom and United States. For a current list of FATF members see http://www1.oecd.org/fatf/Members_en.htm.

Foreign Bank: An organization which (i) is organized under the laws of a country outside the United States; (ii) engages in the business of banking; (iii) is recognized as a bank by the bank supervisory or monetary authority of the country of its organization or principal banking operations; (iv) receives deposits to a substantial extent in the regular course of its business; and

(v) has the power to accept demand deposits, but does not include the U.S. branches or agencies of a foreign bank.

Foreign Shell Bank: A Foreign Bank without a Physical Presence in any country, but does not include a Regulated Affiliate.

Government Entity: Any government or any state, department or other political subdivision thereof, or any governmental body, agency, authority or instrumentality in any jurisdiction exercising executive, legislative, regulatory or administrative functions of or pertaining to government.

Immediate Family: With respect to a Senior Foreign Political Figure, typically includes the political figure's parents, siblings, spouse, children and in-laws.

Non-Cooperative Jurisdiction: Any foreign country or territory that has been designated as non-cooperative with international anti-money laundering principles or procedures by an intergovernmental group or organization, such as FATF, of which the United States is a member and with which designation the United States representative to the group or organization continues to concur. See http://www1.oecd.org/fatf/NCCT_en.htm for FATF's list of non-cooperative countries and territories.

Physical Presence: A place of business maintained by a Foreign Bank and is located at a fixed address, other than solely a post office box or an electronic address, in a country in which the Foreign Bank is authorized to conduct banking activities, at which location the Foreign Bank: (a) employs one or more individuals on a full-time basis; (b) maintains operating records related to its banking activities; and (c) is subject to inspection by the banking authority that licensed the Foreign Bank to conduct banking activities.

Publicly Traded Company: An entity whose securities are listed on a recognized securities exchange or quoted on an automated quotation system in the U.S. or country other than a Non-Cooperative Jurisdiction or a wholly-owned subsidiary of such an entity.

Qualified Plan: A tax qualified pension or retirement plan in which at least 100 employees participate that is maintained by an employer organized in the U.S. or is a U.S. Government Entity.

Regulated Affiliate: A Foreign Shell Bank that: (a) is an affiliate of a depository institution, credit union or Foreign Bank that maintains a Physical Presence in the U.S. or a foreign country, as applicable; and (b) is subject to supervision by a banking authority in the country regulating such affiliated depository institution, credit union or Foreign Bank.

Related Person: With respect to any entity, any interest holder, director, senior officer, trustee, beneficiary or grantor of such entity; provided that in the case of an entity that is a Publicly Traded Company or a Qualified Plan, the term "Related Person" shall exclude any interest holder holding less than 5% of any class of securities of such Publicly Traded Company and beneficiaries of such Qualified Plan.

Senior Foreign Political Figure: A senior official in the executive, legislative, administrative, military or judicial branches of a non-U.S. government (whether elected or not), a senior official of a major non-U.S. political party, or a senior executive of a non-U.S. government-owned corporation. In addition, a Senior Foreign Political Figure includes any corporation, business or other entity that has been formed by, or for the benefit of, a Senior Foreign Political Figure.

USA PATRIOT Act: The Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT Act) Act of 2001 (Pub. L. No. 107-56).

6. Independent Nature of Subscriber's Obligations and Rights. The obligations of the Subscriber under this Agreement and any other documents delivered in connection herewith and therewith (collectively, the "Transaction Documents") are several and not joint with the obligations of any other purchaser of Shares and the Subscriber is not responsible in any way for the performance of the obligations of any other purchaser of Shares under any Transaction Document. The decision of the Subscriber to purchase Shares pursuant to the Transaction Documents has been made by the Subscriber independently of any other purchaser of Shares. Nothing contained herein or in any Transaction Document, and no action taken by any purchaser of Shares pursuant thereto, shall be deemed to constitute such purchasers as a partnership, an association, a joint venture, or any other kind of entity, or create a presumption that the purchasers of Shares are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. The Subscriber acknowledges that no other purchaser of Shares has acted as agent for the Subscriber in connection with making its investment hereunder and that no other purchaser of Shares will be acting as agent of the Subscriber in connection with monitoring its investment in the Shares or enforcing its rights under the Transaction Documents. The Subscriber shall be entitled to independently protect and enforce its rights, including without limitation the rights arising out of this Agreement or out of the other Transaction Documents, and it shall not be necessary for any other purchaser of Shares to be joined as an additional party in any proceeding for such purpose.

7. Miscellaneous.

(a) Subscriber agrees not to transfer or assign this Subscription Agreement or any of Subscriber's interest herein and further agrees that the transfer or assignment of the Shares acquired pursuant hereto shall be made only in accordance with all applicable laws.

(b) Subscriber agrees that Subscriber cannot cancel, terminate or revoke this Subscription Agreement or any agreement of Subscriber made hereunder, and this Subscription Agreement shall survive the death or legal disability of Subscriber and shall be binding upon Subscriber's heirs, executors, administrators, successors and permitted assigns.

(c) Subscriber has read and accurately completed this entire Subscription Agreement and Offering Circular.

(d) This Subscription Agreement constitutes the entire agreement among the parties hereto with respect to the subject matter hereof and may be amended only by a written execution by all parties.

(f) Subscriber acknowledges it has been advised to consult with his/her/its own attorney regarding this subscription and Subscriber has done so to the extent that Subscriber deems appropriate. Subscriber understands and agrees that Subscriber has not been represented in this transaction by counsel to the Company.

(g) Any notice or other document required or permitted to be given or delivered to the Subscriber shall be in writing and sent: (i) by registered or certified mail with return receipt requested (postage prepaid) or (ii) by a recognized overnight delivery service (with charges prepaid).

If to the Company, at:

Vaccinogen, Inc.
5300 Westview Drive, Suite 406
Frederick, MD 21703
Tel No.: 301-668-8400
Facsimile No.: 301-631-2970
Email: atussing@vaccinogeninc.com
Attention: Andrew L. Tussing

If to the Subscriber, at its address set forth on the signature page to this Subscription Agreement, or such other address as it shall have specified to the Company in writing.

(h) Failure of the Company to exercise any right or remedy under this Subscription Agreement or any other agreement between the Company and the Subscriber, or otherwise, or delay by the Company in exercising such right or remedy, will not operate as a waiver thereof. No waiver by the Company will be effective unless and until it is in writing and signed by the Company.

(i) This Subscription Agreement shall be enforced, governed and construed in all respects in accordance with the laws of the State of Maryland, as such laws are applied by the Maryland courts except with respect to the conflicts of law provisions thereof, and shall be binding upon the Subscriber, the Subscriber's heirs, estate, legal representatives, successors and assigns and shall inure to the benefit of the Company, its successors and assigns.

(j) Any legal suit, action or proceeding arising out of or relating to this Subscription Agreement or the transactions contemplated hereby shall be instituted exclusively in state or federal courts located in County of Frederick, State of Maryland (the "**Maryland Courts**"). The parties hereto hereby: (i) waive any objection which they may now have or hereafter have to the venue of any such suit, action or proceeding, and (ii) irrevocably consent to the jurisdiction of the

applicable Maryland Court in any such suit, action or proceeding. The parties further agree to accept and acknowledge service of any and all process which may be served in any such suit, action or proceeding in the Maryland Courts and agree that service of process upon a party mailed by certified mail to such party's address shall be deemed in every respect effective service of process upon such party in any such suit, action or proceeding.

(k) If any provision of this Subscription Agreement is held to be invalid or unenforceable under any applicable statute or rule of law, then such provision shall be deemed modified to conform to such statute or rule of law. Any provision hereof that may prove invalid or unenforceable under any law shall not affect the validity or enforceability of any other provisions hereof.

(l) The parties understand and agree money damages would not be a sufficient remedy for any breach of the Subscription Agreement by the Company or the Subscriber and that the party against which such breach is committed shall be entitled to equitable relief, including injunction and specific performance, as a remedy for any such breach. Such remedies shall not be deemed to be the exclusive remedies for a breach by either party of the Subscription Agreement but shall be in addition to all other remedies available at law or equity to the party against which such breach is committed.

(m) All pronouns and any variations thereof used herein shall be deemed to refer to the masculine, feminine, singular or plural, as identity of the person or persons may require.

(n) This Subscription Agreement may be executed in counterparts and by facsimile, each of which shall be deemed an original, but all of which shall constitute one and the same instrument.

[Signature Pages Follow]

Signature Page for Individuals:

IN WITNESS WHEREOF, Subscriber has caused this Subscription Agreement to be executed as of the date indicated below.

\$ _____ (\$ _____ per Share)	_____
Purchase Price	Number of Shares
_____	_____
Print or Type Name	Print or Type Name (Joint-owner)
_____	_____
Signature	Signature (Joint-owner)
_____	_____
Date	Date (Joint-owner)
_____	_____
IRS Taxpayer Identification Number	IRS Taxpayer Identification Number (Joint-owner)
_____	_____
Address	Address (Joint-owner)
_____	_____
Telephone Number	Telephone Number
_____	_____
Fax Number	Fax Number
_____	_____
E-mail Address	E-mail Address
_____	_____

Type of Ownership

- Individual
- Tenants in common
- Joint tenants with right of survivorship
- Community property (check only if resident of community property state)
- Other (please specify: _____)

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Wiring Instructions:

Bank Name: M&T Bank
ABA #: 022000046
Tel Number: 301 698 7825
Address: 26 North Ct. Street, Frederick, MD 21701
Acct #: 984 555 6001
Swift Code: MANTUS33
Acct. Name: Vaccinogen, Inc.
Reference: Vaccinogen Investment

Partnerships, Corporations or Other Entities:

IN WITNESS WHEREOF, Subscriber has caused this Subscription Agreement to be executed as of the date indicated below.

\$ _____ (\$ _____ per Share) _____
Total Purchase Price Number of Shares

Print or Type Name of Entity

Address

Telephone Number

Fax Number

Email Address

Taxpayer I.D. No. (if applicable)

Date

By: _____
Signature: Name:
Title:

Print or Type Name and Indicate
Title or Position with Entity

Signature (other authorized signatory)

Print or Type Name and Indicate
Title or Position with Entity

Type of Ownership

- Individual
- Tenants in common
- Joint tenants with right of survivorship
- Community property (check only if resident of community property state)
- Other (please specify: _____)

All subscriptions from partnerships, corporations, trusts or limited liability companies must be accompanied by resolutions of the appropriate corporate authority (board of directors, trustee or managing partner or members, as applicable) and trust documents evidencing the authorization and power to make the subscription.

Wiring Instructions:

Bank Name: M&T Bank
ABA #: 022000046
Tel Number: 301 698 7825
Address: 26 North Ct. Street, Frederick, MD 21701
Acct #: 984 555 6001
Acct. Name: MANTUS33
Reference: Vaccinogen, Inc.

SUBSCRIPTION ACCEPTANCE BY VACCINOGEN, INC.

IN WITNESS WHEREOF, the Company has caused this Subscription Agreement to be executed, and the foregoing subscription accepted, as of the date indicated below.

Vaccinogen, Inc.

By: _____
Name: _____
Title: _____

Date: _____, 2013

SECTION C

CONFIDENTIAL PURCHASER QUESTIONNAIRE

Please review, sign on page C-8, and return to:

Vaccinogen, Inc.

5300 Westview Drive, Suite 406

Frederick, MD 21703

Tel No.: 301-668-8400

Facsimile No.: 301-631-2970

Email: atussing@vaccinogeninc.com

Attention: Andrew L. Tussing

CONFIDENTIAL PURCHASER QUESTIONNAIRE

THIS QUESTIONNAIRE WILL BE USED IN CONNECTION WITH THE UNDERSIGNED'S EXPRESSED INTEREST IN A PROPOSED INVESTMENT IN VACCINOGEN, INC. (THE "COMPANY").

THE COMPANY SHALL HAVE THE RIGHT TO FULLY RELY ON THE REPRESENTATIONS AND WARRANTIES CONTAINED HEREIN UNTIL SUCH TIME AS THE UNDERSIGNED HAS FURNISHED AN AMENDED CONFIDENTIAL PURCHASER QUESTIONNAIRE.

THIS QUESTIONNAIRE MUST BE ANSWERED FULLY AND RETURNED TO THE COMPANY

THE INFORMATION SUPPLIED IN THIS QUESTIONNAIRE WILL BE HELD IN STRICT CONFIDENCE. NO INFORMATION WILL BE DISCLOSED EXCEPT TO THE EXTENT THAT SUCH DISCLOSURE IS REQUIRED BY LAW OR REGULATION, OTHERWISE DEMANDED BY PROPER LEGAL PROCESS OR IN LITIGATION INVOLVING THE COMPANY AND ITS CONTROLLING PERSONS.

(1) The undersigned represents and warrants that he, she or it comes within at least one category marked below, and that for any category marked, he, she or it has truthfully set forth, where applicable, the factual basis or reason the undersigned comes within that category. The undersigned agrees to furnish any additional information which any issuer of securities deems necessary in order to verify the answers set forth below.

Category A ___ The undersigned is an individual (not a partnership, corporation, etc.) whose individual net worth, or joint net worth with his or her spouse, presently exceeds \$1,000,000.

Explanation. In calculating net worth you may include equity in personal property and real estate (excluding your principal residence), cash, short-term investments, stock and securities. Equity in personal property and real estate should be based on the fair market value of such property less debt secured by such property.

Category B ___ The undersigned is an individual (not a partnership, corporation, etc.) who had an income in excess of \$200,000 in each of the two most recent years, or joint income with his or her spouse in excess of \$300,000 in each of those years (in each case including foreign income, tax exempt income and full amount of capital gains and losses but excluding any income of other family members and any unrealized capital appreciation) and has a reasonable expectation of reaching the same income level in the current year.

Category C ___ The undersigned is a director or executive officer of the company which is issuing and selling the Shares.

Category D ___ The undersigned is (i) a bank, as defined in Section 3(a)(2) of the Securities Act of 1933, as amended (the "Act"); (ii) a savings and loan association or other institution as defined in Section 3(a)(5)(A) of the Act, whether acting in its individual or fiduciary capacity; (iii) an insurance company as defined in Section 2(13) of the Act; (iv) an investment company registered under the Investment Company Act of 1940 or a business development company as defined in Section 2(a)(48) of that Act; (v) a Small Business Investment Company (SBIC) licensed by the U.S. Small Business Administration under Section 301(c) or (d) of the Small Business Investment Act of 1958; or (vi) a plan established and maintained by a state, its political subdivisions, or any agency or instrumentality of a state or its political subdivisions, for the benefit of its employees, if such plan has total assets in excess of \$5,000,000;

Category E ___ The undersigned is an (i) employee benefit plan within the meaning of the Employee Retirement Income Security Act of 1974 if the investment decision is made by a plan fiduciary, as defined in Section 3(21) of such act, which is either a bank, savings and loan association, insurance company, or registered investment advisor, (ii) an employee benefit plan with total assets in excess of \$5,000,000, or (iii) a self-directed employee benefit plan (including a self-directed individual retirement account or IRA, Keough or SEP plan) with investment decisions made solely by persons that are accredited investors (describe entity).

Category F ___ The undersigned is a private business development company as defined in section 202(a) (22) of the Investment Advisors Act of 1940 (describe entity)

Category G ___ The undersigned is either a corporation, limited liability company, partnership, Massachusetts business trust, or non-profit organization within the meaning of Section 501(c)(3) of the Internal Revenue Code, in

each case not formed for the specific purpose of acquiring the Shares and with total assets in excess of \$5,000,000. (describe entity)

Category H ___ The undersigned is a trust with total assets in excess of \$5,000,000, not formed for the specific purpose of acquiring the Shares, where the purchase is directed by a “sophisticated investor” as defined in Regulation 506(b)(2)(ii) under the Act. **(Must also answer Question 5 below).**

Category I ___ The undersigned is an entity (other than a trust) in which all of the equity owners are “accredited investors” within one or more of the above categories. If relying upon this category alone, each equity owner must complete a separate copy of this Purchaser Questionnaire. **(describe entity below)**

The undersigned agrees that the undersigned will notify the Company at any time in the event that the representations and warranties in this Purchaser Questionnaire shall cease to be true, accurate and complete.

(2) Suitability (please answer each question)

(a) For an individual, please describe your current employment, including the company by which you are employed and its principal business:

(b) For an individual, please describe any college or graduate degrees held by you:

(c) For all subscribers, please list types of prior investments:

(d) For all subscribers, please state whether you have participated in other private placements before:

YES _____ NO _____

- (e) If your answer to question (d) above was "YES", please indicate frequency of such prior participation in private placements of:

	Public Companies	Private Companies
Frequently	_____	_____
Occasionally	_____	_____
Never	_____	_____

- (f) For individuals, do you expect your current level of income to significantly decrease in the foreseeable future?

YES _____ NO _____

- (g) For trust, corporate, partnership and other institutional subscribers, do you expect your total assets to significantly decrease in the foreseeable future?

YES _____ NO _____

- (h) For all subscribers, do you have any other investments or contingent liabilities which you reasonably anticipate could cause you to need sudden cash requirements in excess of cash readily available to you?

YES _____ NO _____

- (i) For all subscribers, are you familiar with the risk aspects and the non-liquidity of investments such as the Shares for which you seek to purchase?

YES _____ NO _____

- (j) For all subscribers, do you understand that there is no guarantee of financial return on this investment and that you run the risk of losing your entire investment?

YES _____ NO _____

(3) Manner in which title is to be held: (circle one)

- (a) Individual Ownership
- (b) Community Property
- (c) Joint Tenant with Right of Survivorship (both parties must sign)
- (d) Partnership
- (e) Tenants in Common
- (f) Limited Liability Company
- (g) Corporation
- (h) Trust
- (i) Other

(4) NASD Affiliation.

Are you affiliated or associated with an NASD member firm (please check one):

YES _____ NO _____

If Yes, please describe:

*If subscriber is a Registered Representative with an NASD member firm, have the following acknowledgment signed by the appropriate party:

The undersigned NASD member firm acknowledges receipt of the notice required by the NASD Conduct Rules.

Name of NASD Member Firm

By: _____
Authorized Officer

Date: _____

(5) For Trust Subscribers

A. Certain trusts generally may not qualify as accredited investors except under special circumstances. Therefore, if you intend to hold securities in whole or in part through a trust, please answer each of the following questions.

Is the trustee of the trust a national or state bank that is acting in its fiduciary capacity in making the investment on behalf of the trust?

Yes

No

B. If the trust is a **revocable** trust, please complete Question 1 below. If the trust is an **irrevocable** trust, please complete Question 2 below.

1. **REVOCABLE TRUSTS**

Can the trust be amended or revoked at any time by its grantors:

Yes

No

If yes, please answer the following questions relating to **each** grantor (please add sheets if necessary):

Grantor Name: _____

Net worth of grantor (including spouse, if applicable), including home, home furnishings and automobiles exceeds \$1,000,000?

Yes

No

OR

Income (exclusive of any income attributable to spouse) was in excess of \$200,000 for the prior two taxable years and is reasonably expected to be in excess of \$200,000 for the current taxable year?

Yes

No

OR

Income (including income attributable to spouse) was in excess of \$300,000 for the prior two taxable years and is reasonably expected to be in excess of \$300,000 for the current taxable year?

Yes

No

2. **IRREVOCABLE TRUSTS**

If the trust is an irrevocable trust, please answer the following questions:

Please provide the name of each trustee:

Trustee Name: _____

Trustee Name: _____

Does the trust have assets greater than \$5 million?

Yes

No

Indicate how often you invest in:

Marketable Securities

Often

Occasionally

Seldom

Never

Restricted Securities

Often

Occasionally

Seldom

Never

Venture Capital Companies

Often

Occasionally

Seldom

Never

This completes the questions applicable to Trust Investors. Please sign below.

The undersigned has been informed of the significance of the foregoing representations and answers contained in this Confidential Purchaser Questionnaire and such representations and answers have been provided with the understanding that the Company, will rely on them.

Individual

Date: _____

Name of Individual
(Please type or print)

Signature of Individual

Name of Joint Owner
(Please type or print)

Signature (Joint Owner)

**Partnership, Corporation or
Other Entity**

Date: _____

Print or Type Entity Name

By: _____
Name:
Title:

Signature (other authorized signatory, if any)

EXHIBIT 6.1

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

NEW SECURITY AGREEMENT

THIS NEW SECURITY AGREEMENT (together with all exhibits, this "Security Agreement") is made as of October 31, 2007 by and between Intracel Holdings Corporation, as the grantor (the "Grantor") and Organon BioSciences International B.V. (as successor in interest to Akzo Nobel Pharma International B.V.) and Organon Teknika Corporation (the "Secured Parties"). All terms capitalized but not otherwise defined herein shall have the meanings ascribed to them in the Letter Agreement (as defined below).

Under the terms hereof, the Secured Parties desire to obtain and the Grantor desires to grant the Secured Parties security for all of the Obligations (as hereinafter defined).

NOW, THEREFORE, the Grantor and the Secured Parties, intending to be legally bound, hereby agree as follows:

1. Definitions.

(a) "Collateral" means, unless and until the events described in the following sentence occur, those certain patents and patent applications set forth in Exhibit A, attached hereto, that are labeled in Exhibit A as having been previously owned by Organon (including, without limitations, all divisions, continuations, continuations in part, reissues, renewals or extensions thereof) (the "Organon Patents"). Solely if (i) Vaccinogen makes, on behalf of Intracel, the payment set forth in Section 3.1(a)(i) of the Letter Agreement, as required by the Vaccinogen License, and otherwise complies with all requirements in the Vaccinogen License necessary for the license granted to Vaccinogen thereunder to become effective, or (ii) Vaccinogen fails to comply with such requirements and Intracel elects to cure such failure in accordance with Sections 5(a) and 5(b) of the Letter Agreement, then the Collateral shall thereafter mean (A) the Organon Patents; (B) all other patents and patent applications set forth in Exhibit A, attached hereto (including, without limitations, all divisions, continuations, continuations in part, reissues, renewals or extensions thereof) (the "Intracel Patents"), (C) certain trademarks set forth on Exhibit B, attached hereto (including all goodwill connected with the use of, and symbolized by, any and all such trademarks), and (D) any other ownership and/or license rights of Grantor in the OncoVax Program. For clarity, the Collateral shall not include any rights in real property.

(b) "Obligations" means Grantor's obligation to satisfy its obligations in connection with the Current Liabilities (as defined in the Letter Agreement) under Section 3(a) of the Letter Agreement, and all reasonable costs and expenses of the Secured Parties incurred in the enforcement or collection of such obligation, including but not limited to reasonable attorneys' fees and expenses.

(c) "Letter Agreement" means the Letter Agreement dated as of the date hereof by and between the Grantor and the Secured Parties, including all riders, exhibits and schedules thereto, as the same may be amended from time to time.

(d) "Escrow Agreement" means that certain Escrow Agreement among Grantor, Secured Parties and Escrow Agent, a form of which is attached hereto as Exhibit C.

(e) "Escrow Agent" means the party serving as escrow agent under the Escrow Agreement.

(f) "OncoVax Program" means all assets or property owned or controlled by Grantor relating to its OncoVax Active Specific Immunotherapy technology platform and related human monoclonal antibody products, including, but not limited to, all know-how, NDAs, and patent rights, related to and/or necessary to commercially exploit the OncoVax Program. For clarity, the OncoVax Program shall exclude the Excluded Assets (including any know-how, NDAs, or patents that are associated with or claim the Excluded Assets).

(g) "Excluded Assets" means any and all of the following and any other assets or properties that are specifically associated therewith: (a) the Xoma material transfer agreement dated as of January 29, 2007 (b) the Exclusive License Agreement between Intracel and Oxigene, Inc., dated as of March 30, 2007; (c) the KLH and CVD reagent business and associated intellectual property; and (d) materials, know-how, research data, patents and patent applications covering HumaCD4, HumaRESP, AntiCD38, HumaSTAPH and HumaENT, or any human antibody that has been isolated by or on behalf of Intracel from phage display libraries.

(h) "Permitted Lien" means: (i) liens or other encumbrances for taxes, fees, assessments or other governmental charges or levies, either not delinquent or being contested in good faith by appropriate proceedings; (ii) liens or other encumbrances (A) upon or in any equipment acquired or held by Grantor to secure the purchase price of such equipment or indebtedness incurred solely for the purpose of financing the acquisition of such equipment or (B) existing on such equipment at the time of its acquisition, provided that the lien is confined solely to the equipment so acquired, improvements thereon and/or the proceeds of such equipment; (iii) licenses or sublicenses (whether express or implied) granted to distributors in connection with the sale of inventory in the ordinary course of business or granted to end users of products with respect to the use of such products; (iv) liens or other encumbrances arising solely by virtue of any statutory or common law provision relating to banker's liens, rights of setoff or similar rights and remedies as to deposit accounts or other funds maintained with a creditor depository institution; and (v) any liens securing debt issued in connection with investments in Intracel, its affiliates, or Vaccinogen, provided that such liens comply with the last sentence of Section 6 (whether as a result of priority rules, subordination, or otherwise). All liens that, as of the Effective Date, fall within the category of Permitted Liens described in subsection (v) above are listed in Exhibit G.

(i) "Vaccinogen" means Vaccinogen, Inc.

(j) "Vaccinogen License" has the meaning set forth in the Letter Agreement.

2. **Grant of Security Interest.** To secure the Obligations, the Grantor hereby assigns and grants to the Secured Parties, as Secured Parties, a continuing lien on and security interest in the Collateral.

3. **Change in Name.** The Grantor hereby agrees that if the Grantor changes its name or form of organization, the Grantor will promptly notify the Secured Parties in writing of the changes.

4. **Representations and Warranties.** The Grantor represents, warrants and covenants to the Secured Parties that, other than the Permitted Liens and the transaction with Vaccinogen described in the Letter Agreement: (a) the Grantor has not made any prior pledge, encumbrance, assignment or other disposition of any of the Collateral and the same are free from all encumbrances and rights of setoff of any kind; and (b) the Grantor will defend the Collateral against all claims and demands of all persons at any time claiming any interest therein that is in conflict with the security interest granted to the Secured Parties herein.

5. **Grantor's Covenants.** The Grantor covenants that it shall:

(a) do, obtain, make, execute and deliver all such additional and further acts, things, deeds, assurances and instruments as the Secured Parties may reasonably require to vest in and assure to the Secured Parties its rights hereunder and in or to the Collateral;

(b) to the extent applicable, keep the Collateral in good order and repair at all times, normal wear and tear excepted, or, if Grantor so elects, replace the Collateral with items of similar use and value; and

(c) only use or permit the Collateral to be used in material compliance with all applicable federal, state, county and municipal laws and regulations.

6. **Negative Pledge; No Transfer.** Except for the Permitted Liens or the transaction with Vaccinogen described in the Letter Agreement and except in connection with the sale of inventory in the ordinary course of business, the Grantor will not sell or offer to sell or otherwise transfer or grant or suffer the imposition of any security interest upon the Collateral or use any portion thereof in any manner inconsistent with Grantor's obligations under the Agreement. Notwithstanding anything herein or in the Vaccinogen agreement to the contrary, Organon's security interest (i) in the Organon Patents shall be senior to any debt issued in connection with investments in Intracel or Vaccinogen and (ii) in all other portions of the Collateral shall be pari passu to the most senior debt issued in connection with investments in Intracel or Vaccinogen.

7. **Escrow Agent.** The Grantor and the Secured Parties, along with an escrow agent mutually determined by the Grantor and Secured Parties, shall, as promptly as reasonably practicable following the execution of this Security Agreement, execute and deliver the Escrow Agreement in the form attached as Exhibit C hereto (or such other form of Escrow Agreement mutually agreed by the Grantor, Secured Parties, and the escrow agent).

8. **Assignments.** The Grantor shall execute and deliver to the Escrow Agent (but only to the extent any of the following are included in the Collateral): (i) the assignment of the Organon Patents, Intracel Patents and other patent applications related to the OncoVax Program, (ii) the assignment of know how, and (iii) the NDA assignment, each in the forms attached as Exhibit D, Exhibit E and Exhibit F hereto (together, the "Assignments"). As of the date of this Agreement, the Grantor has executed the Assignments, and such executed Assignments will be temporarily held in escrow at the offices of Cooley Godward Kronish LLP, until such time as the Escrow Agreement has been executed between the Grantor, the Secured Parties, and the escrow agent.

9. **Intentionally deleted.**

10. **Events of Default.** The Grantor shall, after receiving written notice from the Secured Parties informing Grantor either (i) that a failure by Grantor to perform any of the Obligations has occurred (subject to Section 5 of the Letter Agreement) and that the notice required to be given pursuant to the Letter Agreement has been given, or (ii) that the Grantor has attempted to impede the performance by the Escrow Agent of any of its obligations under the Escrow Agreement, have a forty five (45) day period in which to cure the default and if it does not do so cure within such period, an "Event of Default" shall be deemed to have occurred hereunder.

11. **Remedies.** Upon the occurrence of any such Event of Default and at any time thereafter, the Secured Parties may declare all outstanding Obligations secured hereby immediately due and payable upon written notice to Grantor and shall have any remedies provided herein or by any applicable law or in equity, and shall have the unconditional right to demand of and receive from the Escrow Agent the Assignments.

12. **Notices.** All notices, demands, requests, consents, approvals and other communications required or permitted hereunder must be in writing and will be effective upon receipt if delivered personally to such party, or if sent by facsimile transmission with written confirmation of delivery, or by nationally recognized overnight courier service, to the address set forth herein or to such other address as any party may give to the other in writing for such purpose.

13. **Preservation of Rights.** No delay or omission on the part of the Secured Parties to exercise any right or power arising hereunder will impair any such right or power or be considered a waiver of any such right or power or any acquiescence therein, nor will the action or inaction of the Secured Parties impair any right or power arising hereunder. The Secured Party's rights and remedies hereunder are cumulative and not exclusive of any other rights or remedies which the Secured Parties may have under other agreements, at law or in equity.

14. **Changes in Writing.** No modification, amendment or waiver of any provision of this Security Agreement nor consent to any departure by the Grantor therefrom, will in any event be effective unless the same is in writing and signed by the Secured Parties, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice to or demand on the Grantor in any case will entitle the Grantor to any other or further notice or demand in the same, similar or other circumstance.

15. **Counterparts.** This Security Agreement may be signed in any number of counterpart copies and by the parties hereto on separate counterparts, but all such copies shall constitute one and the same instrument.

16. **Successors and Assigns.** Grantor may assign this Security Agreement to a third party in connection with the transfer and assignment of the Collateral to such party, to the extent such transfer and assignment is permitted under the Letter Agreement. This Security Agreement will be binding upon and inure to the benefit of the Grantor and the Secured Parties and their respective successors and assigns; provided, however, that the Grantor may not assign this Security Agreement in whole or in part except to the extent specifically provided in the Letter Agreement, and subject to the conditions set forth therein.

17. **Governing Law and Jurisdiction.** This Security Agreement will be governed by and construed under the laws of the State of New York, applicable to contracts made and to be performed in the State of New York.

18. **Termination.** This Security Agreement shall terminate upon the payment and performance in full of the Obligations.

IN WITNESS WHEREOF, the parties hereto have duly executed this Security Agreement, as of the date first written above.

INTRACEL HOLDINGS CORPORATION

By: _____

Print Name: _____

Title: _____

ORGANON TEKNIKA CORP.

By: _____

Print Name: VANTA SERRIBIO

Title: PRESIDENT

By: _____

Print Name: A.P. van Tiggelen

Title: VP FINANCE

ORGANON BIOSCIENCES INTERNATIONAL B.V.

By: _____

Print Name: _____

Title: _____

By: _____

Print Name: _____

Title: _____



[SIGNATURE PAGE TO NEW SECURITY AGREEMENT]

IN WITNESS WHEREOF, the parties hereto have duly executed this Security Agreement, as of the date first written above.

INTRACEL HOLDINGS CORPORATION

By: _____

Print Name: _____

Title: _____

ORGANON TEKNIKA CORP.

By: _____

Print Name: _____

Title: _____

By: _____

Print Name: _____

Title: _____

ORGANON BIOSCIENCES INTERNATIONAL B.V.

By: A. Wilderbeek

Print Name: A.T.M. Wilderbeek

Title: Director

By: _____

Print Name: G. van Alphen

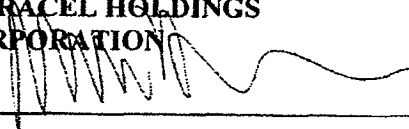
Title: Director



[SIGNATURE PAGE TO NEW SECURITY AGREEMENT]

IN WITNESS WHEREOF, the parties hereto have duly executed this Security Agreement, as of the date first written above.

**INTRACEL HOLDINGS
CORPORATION**

By:  _____

Print Name: _____

Title: _____

ORGANON TEKNIKA CORP.

By: _____

Print Name: _____

Title: _____

By: _____

Print Name: _____

Title: _____

**ORGANON BIOSCIENCES
INTERNATIONAL B.V.**

By: _____

Print Name: _____

Title: _____

By: _____

Print Name: _____

Title: _____

ALL-PURPOSE ACKNOWLEDGMENT FOR CALIFORNIA

STATE OF CALIFORNIA)
) ss.
COUNTY OF SANTA CLARA)

On October 26, 2007, before me, Wendy Seagraves, Notary Public

Date

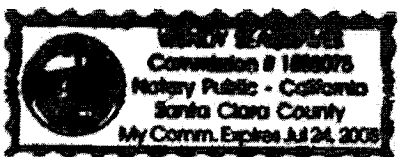
Name And Title Of Officer (e.g. "Jane Doe, Notary Public")

personally appeared Mitchell N. Finer

Name(s) of Signer(s)

- personally known to me
- proved to me on the basis of satisfactory evidence

to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.



WITNESS my hand and official seal.

Wendy Seagraves
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: New Security Agreement Between Intracel Holdings and Organon BioSciences

Document Date: _____ Number of Pages: 6

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer

Signer's Name: _____

- Individual
- Corporate Officer -- Title(s): _____
- Partner -- Limited General
- Attorney-in-Fact
- Trustee
- Guardian or Conservator
- Other: _____

Signer is representing: _____



Exhibit A

Patents and Patent Applications in Collateral

Client-Matter	Country	Status	Title	Number/Date	Number/Date
18602.0006/P006	US	F	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	10/370,081 2/21/2003	
18602.0006/P006	AU	F	STERILE IMMUNOGENIC NON-TUMORIENIC TUMOR CELL COMPOSITIONS AND METHODS	2003230553 2/21/2003	
18602.0006/P006	CA	F	STERILE IMMUNOGENIC NON-TUMORIENIC TUMOR CELL COMPOSITIONS AND METHODS	2,476,999 2/21/2003	
18602.0006/P006	CN	F	STERILE IMMUNOGENIC NON-TUMORIENIC TUMOR CELL COMPOSITIONS AND METHODS	03809115.1 2/21/2003	
18602.0006/P006	EP	F	STERILE IMMUNOGENIC NON-TUMORIENIC TUMOR CELL COMPOSITIONS AND METHODS	03723633.8 2/21/2003	
18602.0006/P006	SG	G	STERILE IMMUNOGENIC NON-TUMORIENIC TUMOR CELL COMPOSITIONS AND METHODS	200404941-7 2/21/2003	106347 5/30/2007
18602.0006/P006	WO	F	STERILE IMMUNOGENIC NON-TUMORIENIC TUMOR CELL COMPOSITIONS AND METHODS	PCT/US03/05154 2/21/2003	
18602.0006/P006	JP	I	STERILE IMMUNOGENIC NON-TUMORIENIC TUMOR CELL COMPOSITIONS AND METHODS	570,779/2003 2/21/2003	
18602.0006/P006	US	D	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS		
18602.0006/P006	US	D	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS		

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The following patents were previously owned by Organon:

Client-Matter	Country	Status	Title	Number/Date	Number/Date
I8602.0010/P010	US	G	TUMOR ASSOCIATED MONOCLONAL ANTIBODIES	08/449,613 5/24/1995	5,474,755 12/12/1995
I8602.0011/P011	US	I	TUMOR ASSOCIATED MONOCLONAL ANTIBODY 81AV/78	08/094,589 7/20/1993	5,348,880 9/20/1994
I8602.0014/P014	US	F	ANTIGEN RECOGNIZED BY MCA 16-88	08/272,402 7/7/1994	
I8602.0015/P015	WO	F	ANTIGEN RECOGNIZED BY MCA 16-88	PCT/US88/02245 7/1/1988	
I8602.0029/P029	US	G	TUMOR SPECIFIC MONOCLONAL ANTIBODIES	645,069 1/22/1991	5,180,814 1/19/1993
I8602.0030/P030	US	G	TUMOR SPECIFIC MONOCLONAL	302,155 1/25/1989	5,106,738 4/21/1992
I8602.0031/P031	US	G	TUMOR SPECIFIC MONOCLONAL	697,078 1/31/1985	4,828,991 5/9/1989
I8602.0032/P032	US	G	ACTIVE SPECIFIC IMMUNOTHERAPY	07/122,257 11/1/1993	5,484,596 1/16/1996
I8602.0033/P033	US	G	CHELATING AGENTS FOR ATTACHING METAL IONS TO PROTEINS	08/044,875 4/8/1993	5,292,868 3/8/1994
I8602.0034/P034	US	G	TUMOR ASSOCIATED EPI TOPE	08/960,128 8/19/1997	5,951,985 9/14/1999
I8602.0035/P035	US	G	ANTIGEN RECOGNIZED BY MCA 16-88	07/929,842 8/13/1992	5,338,832 8/16/1994
I8602.0036/P036	CA	G	TUMOR SPECIFIC MONOCLONAL ANTIBODIES	473130 1/30/1985	1,340,781 1/30/1985
I8602.0037/P037	CA	F	TUMOR ASSOCIATED EPI TOPE	2,222,551 6/6/1996	
I8602.0038/P038	PT	I	PROCESS FOR PREPARING TUMOR SPECIFIC MONOCLONAL ANTIBODIES	8579894 1/31/1984	79894 1/31/1984
I8602.0039/P039	JP	G	ANTIGEN RECOGNIZED BY MONOCLONAL ANTIBODY 16- 88	1988 505983 7/1/1988	3081208 6/23/1989

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18602.0040/P040	JP	F	TUMOR ASSOCIATED EPITOPES	9-501429 6/6/1996	
18602.0041/P041	DE	G	CHELATING AGENTS FOR ATTACHING METAL IONS TO PROTEINS	9069022542 5/23/1990	69022542 6/23/1991
18602.0042/P042	DE	G	TUMRO SPECIFIC MONOCLONAL ANTIBODIES	8585300610 1/30/1985	358093 1/30/1985
18602.0043/P043	GB	G	TUMOR SPECIFIC MONOCLONAL ANTIBODIES	EP0151030 1/30/1985	8585300610 1/30/1985
18602.0044/P044	IL	G	TUMOR SPECIFIC MONOCLONAL ANTIBODIES	92103758 11/16/1992	103758 11/16/1992
18602.0045/P045	IT	I	TUMOR SPECIFIC MONOCLONAL ANTIBODIES	8585300610 1/30/1985	151030 1/30/1985
18602.0046/P046	IT	I	CHELATING AGENTS FOR ATTACHING METAL IONS TO PROTEINS	9090914273 5/23/1990	429644 5/23/1990
18602.0047/P047	NZ	G	TUMOUR-SPECIFIC MONOCLONAL ANTIBODIES, PRODUCTION THEREOF AND USE	85210867 1/17/1985	210867 1/17/1985

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Exhibit B
Trademarks

ONCOVAX (Stylized)

ONCOVAX

HUMASPECT

COLOSPECT (Stylized)

BCI-IMMUNE ACTIVATOR

Exhibit C
Escrow Agreement

Exhibit D

Collateral Assignment of Patent and Patent Applications

Exhibit E
Collateral Assignment of Know How

Exhibit F
NDA Assignment

Exhibit G

Existing Investor Liens

Each lien held as of the date of this Agreement with respect to the Collateral by any of the following persons/entities:

3V Sourceone Ventures Fund Limited
3V Sourceone Ventures Fund, L.P.
Alliance Equities LLC
Arthur Sanders
Curtis Partnership
Daniel Fitzgerald
Dublind Partners
Intracel Acquisition Holding Company, LLC
Intracel Follow-On Investments LLC
Intracel Follow-On Investments II LLC
Intracel Follow-On Investments III LLC
Intracel Follow-On Investments IV LLC
Intracel Follow-On Investments V LLC
Intracel Follow-On Investments VI LLC
Intracel Investments LLC
Michael Smith
MPM Asset Management Investors 2002 BVIII LLC
MPM BioVentures III GmbH & Co. Beteiligungs KG
MPM BioVentures III Parallel Fund, LP
MPM BioVentures III, LP
MPM BioVentures III-QP, LP
PEG Intracel Lending Co. LLC

EXHIBIT 6.2

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

EXTENSION AND SECOND AMENDMENT TO LEASE

This Extension and Second Amendment to Lease (the "Amendment") is made this 23 day of October, 2012, by and between Martens Properties L.L.P., a Maryland limited liability limited partnership ("Landlord") and Vaccinogen LLC ("Tenant").

WITNESSETH:

WHEREAS, Landlord and Tenant entered into a certain Lease, dated October 24, 2007, pursuant to which Tenant leased four thousand and sixty four (4,064) square feet, known as Suite 406 (the "Leased Premises"), in the commercial office building known as Westview Office Court located at 5300 Westview Drive, Frederick, Maryland 21710 (the "Building"), and

WHEREAS, the term of the Lease will expire on October 31, 2012, and Landlord and Tenant desire to extend the term of the Lease and amend certain other terms and conditions hereinafter set forth;

NOW THEREFORE, in consideration of the premises and mutual covenants and agreements contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. Extension of Lease Term. The term of the Lease is hereby extended for a period of six (6) months, commencing on November 1, 2012 ("Extension Commencement Date") and expiring April 30, 2013 ("Lease Expiration Date"). This First Extension Term shall be upon all the same terms and conditions as set forth in the Lease with respect to the Initial Term thereof, except as modified herein. Tenant will be provided one (1) additional six (6) month extension period by providing Landlord with sixty days (60) prior written notice by February 28, 2013 (hereinafter referred to as "Second Extension Period"). In the Second Extension Period Landlord shall have the right to terminate the lease, at any time, by providing sixty (60) days prior written notice to Tenant. All provisions of the Lease shall govern during any extension period.

2. Base Rent. As of the Extension Commencement Date, the Base Rent amount of Five Thousand Eighty Nine and 38/100 Dollars (\$5,089.38) shall be paid in equal monthly installments.

3. Additional Rent. In addition to paying the Base Rent specified in Paragraph 2 above, Tenant shall remain obligated to pay to Landlord the amounts determined to be Tax Adjustment and Expense Adjustment (collectively called "Additional Rent") upon the same terms and conditions as set forth in the Initial Lease.

4. Brokers. Tenant represents and warrants to Landlord that Tenant has not dealt with any realtor, broker, agent, or finder in connection with this Amendment other than McShea and Company, Inc. ("Landlord's Agent"). Tenant shall indemnify and hold Landlord harmless from and against any loss, claim, damage, expense or liability for any compensation, commission, or charges claimed by any other realtor, broker, agent, or finder claiming to have dealt with Tenant in connection with this Amendment.

5. Reaffirmation of Terms. All other terms, covenants, and provisions of the Lease not expressly modified and amended hereby shall remain in full force and effect, and are hereby ratified and confirmed in all respects.

IN WITNESS WHEREOF, the parties hereto have duly executed this Second Amendment to Lease on the day and year first written above.

WITNESS

Willard Harkin

TENANT
VACCINOGEN LLC

By: M. SA

Date: 23 October 2012

WITNESS

Chris Jones

LANDLORD
MARTENS PROPERTIES L.L.P.

By: Mary MTD

Date: 11/28/2012

EXHIBIT 6.3

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

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SECURITY AGREEMENT

THIS SECURITY AGREEMENT is made this 26th day of October, 2011, by and between **VACCINOGEN, INC.**, a Maryland corporation whose address is 5300 Westview Drive, Suite 406, Frederick, Maryland 21703 ("Debtor"), and **THE ABELL FOUNDATION, INC.**, a Maryland corporation whose address is 111 South Calvert Street, Suite 2300, Baltimore, Maryland 21202 ("Secured Party"). In consideration of credit extended by Secured Party to Debtor, Debtor and Secured Party agree as follows:

1. **Defined Terms.** All of the terms used herein without definition which are defined by the Maryland Uniform Commercial Code shall have the meanings assigned to them by the Maryland Uniform Commercial Code, as amended from time to time, unless and to the extent varied by this Agreement. The use of the singular herein may also refer to the plural and vice versa, and use of the neuter or any gender shall be applicable to any other gender or to the neuter. As used herein, the following terms shall have the following meanings:

"Collateral" shall mean the property described on Schedule A attached hereto and incorporated herein and all the proceeds thereof, including any cash or other property to which Debtor shall become entitled for any reason whatsoever in respect of, as an addition to, in substitution for or in exchange for any of such property, including, without limitation, any interest, dividends, distributions, settlements or exchanges of any kind in respect of such property, whether in the ordinary course of business or, if applicable, in connection with any merger, consolidation, reorganization, recapitalization, reclassification, stock split, liquidation or increase or reduction of capital in respect of any issuer of any of the Collateral; provided, however, that the term "Collateral" shall not include (a) any rights or interest of Debtor under any contract, lease, permit, license, instrument or other agreement entered into by Debtor if under the terms of such contract, lease, permit, license, instrument or agreement, or applicable law with respect thereto, the grant of a security interest or lien therein is prohibited and such prohibition has not been waived or the consent of the other party to such contract, lease, permit, license, instrument or agreement has not been obtained, but only, in each case, to the extent and for so long as, such prohibition is not terminated or rendered unenforceable or otherwise deemed ineffective by the Uniform Commercial Code or other applicable law, or (b) any of the "Collateral" as defined in that certain New Security Agreement made as of October 31, 2007 by and between (i) Intracel Holdings Corporation (predecessor in interest to Debtor) and (ii) Organon BioSciences International B.V. and Organon Teknika Corporation, to the extent and for so long as the prohibition against the granting of a security interest in such Collateral contained in such New Security Agreement remains in effect.

"Documents" shall mean, individually and collectively, all promissory notes, security agreements and other documents and instruments, whether now existing or hereafter executed, and evidencing, securing or otherwise relating to any of the Obligations.

"Event of Default" shall have the meaning given to such term in the Note.

"Note" shall mean that certain Promissory Note of even date herewith made by Debtor to the order of Secured Party, as may from time to time hereafter be amended, modified, restated, extended, renewed or replaced.

"Obligations" shall mean all present and future debts, liabilities and obligations of Debtor to Secured Party hereunder and all other present and future debts, liabilities and obligations of Debtor to Secured Party of every kind and description, matured or unmatured, under or in connection with the Note.

11/1/11

2. **Grant of Security Interest.** Debtor hereby grants to Secured Party a security interest in the Collateral and in the proceeds thereof in order to secure the due payment and performance of the Obligations. Contemporaneously herewith, and at such other times hereafter as may be required by Secured Party, Debtor shall execute and deliver to Secured Party (in blank if required by Secured Party) such assignments, control agreements, notices, transfer instruments, stock powers, sight drafts, withdrawal forms or other instruments as may be required by Secured Party to further evidence or perfect the security interest of Secured Party in, or otherwise relating to any of, the Collateral. Without limitation of the foregoing and to the maximum extent permitted by applicable law, Debtor specifically authorizes Secured Party to file such financing statements and amendments thereof from time to time as Secured Party may deem necessary or advisable to assure to Secured Party the rights and remedies intended to be conveyed by this Agreement.

3. **Representations and Warranties.** Debtor represents, warrants and covenants that (a) Debtor is the absolute sole owner of the Collateral and the Collateral is and shall remain, so long as any of the Obligations remain unpaid, free and clear of all liens, security interests, encumbrances and claims of every kind excepting only security interests of Secured Party and other Permitted Encumbrances (as defined in the Note and Warrant Purchase Agreement), (b) Debtor is a "registered organization" as defined in Section 9-102 of the Uniform Commercial Code "organized solely" under the law of the State of Maryland within the meaning of Section 9-102(a)(70) of the Uniform Commercial Code, (c) the location of the Debtor for purposes of Section 9-307 of the Uniform Commercial Code is and shall remain the State of Maryland, and (d) Debtor's organizational identification number for purposes of Section 9-516 of the Uniform Commercial Code is D13848726.

4. **Delivery of Collateral** If Debtor shall at any time become entitled to receive or shall receive any cash, certificates, passbooks, options or rights, or any other property of any kind in respect of, in evidence of, as an addition to, in substitution for or in exchange for any of the Collateral, Debtor agrees to accept the same as Secured Party's agent and to deliver the same promptly to Secured Party in the exact form received, together with such assignments, control agreements, notices, transfer instruments, stock powers, sight drafts, withdrawal forms or other instruments relating thereto as may be required by Secured Party, duly executed by Debtor (in blank if required by Secured Party), to be held by Secured Party, subject to the terms hereof, as part of the Collateral and as further security for the Obligations.

5. **Additional Rights of Secured Party.** Any or all of the Collateral may at any time, at the option of Secured Party, be registered in the name of Secured Party or its nominee. In the event that any of the Collateral shall mature or otherwise become payable, Secured Party may, in the place and stead of Debtor, cause the same to be renewed, rolled over or reinvested in such manner and upon such terms and conditions as Secured Party may determine. At any time after the occurrence and during the continuance of an Event of Default, if applicable with respect to any of the Collateral, Secured Party may, without notice, exercise (a) all voting, corporate and other rights at any meeting of the shareholders or other members of the issuer of the Collateral and exercise any and all rights of conversion, exchange, subscription or any other rights, privileges or options pertaining to the Collateral as if it were the absolute owner thereof, including, without limitation, the right to exchange, at its discretion, any and all of the Collateral upon any merger, consolidation, reorganization, recapitalization, reclassification, stock split, liquidation or other readjustment in respect of any issuer of any of the Collateral, and (b) all rights with respect to the liquidation, transfer and withdrawal of any Collateral in any securities account or other account.

6. **Additional Debtor Covenants.** Debtor covenants and agrees: (a) to maintain the Collateral in good condition and repair (except for wear and tear in the ordinary course of business) and to keep insured all of the Collateral against such risks and in such amounts as are

customarily insured against by corporations in similar circumstances, (b) to promptly pay and discharge all taxes, assessments and charges of every kind (other than those taxes, assessments and charges being contested in good faith by appropriate proceedings and for which adequate reserves are maintained) which may be imposed upon or represent a lien or charge against any of the Collateral, and (c) that Debtor will not, without the prior written consent of Secured Party (i) change its name, or (ii) sell, assign, transfer, convey, license or lease any interest in any of the Collateral (or permit any of the foregoing to occur).

7. **Default Remedies.** Upon and after the occurrence and during the continuance of an Event of Default, Secured Party may, without notice or demand, exercise in any jurisdiction in which enforcement hereof is sought, the following rights and remedies, in addition to the rights and remedies available to Secured Party under the other Documents, the rights and remedies of a secured party under the Uniform Commercial Code and all other rights and remedies available to Secured Party under applicable law, all such rights and remedies being cumulative and enforceable alternatively, successively or concurrently: (a) enforce the security interests granted to Secured Party hereunder by collecting or liquidating all or any part of the Collateral or selling, assigning, leasing, renting, licensing or otherwise disposing of all or any part of the Collateral or any interest therein, in one or more parcels, at the same or different times, at public or private sale or disposition, or otherwise, and (b) institute any proceeding or proceedings to enforce the Obligations and any security interests of Secured Party. Such sales or dispositions may be made for cash, upon credit or for future delivery. Secured Party may also resell all or any part of the Collateral. In no event shall Debtor be credited with any part of the proceeds of liquidation, sale or other disposition of any Collateral until cash payment thereon has actually been received by Secured Party and Secured Party shall have no obligation to delay any liquidation, sale or other disposition because the same may result in the imposition of any forfeiture, premium or penalty, Debtor hereby acknowledging that the risk of such forfeiture, premium or penalty is inherent in granting a security interest in the Collateral to Secured Party. Without limitation of the foregoing, Secured Party (x) shall comply with applicable state or federal law requirements in connection with the disposition of the Collateral, and (y) may sell the Collateral without giving any warranties with respect thereto (Secured Party being specifically permitted to disclaim any warranties of title and the like in connection therewith), and such compliance or sale without warranties will not be considered to adversely affect the commercial reasonableness of any sale of Collateral.

8. **Disposition of Collateral.** Secured Party shall give Debtor at least ten (10) calendar days prior written notice of the liquidation of any of the Collateral, of the time and place of any public disposition of any of the Collateral, or of the time after which any of the Collateral may be disposed of privately, which notice Debtor agrees is commercially reasonable. In the case of all liquidations, sales or other dispositions of the Collateral, public or private, Debtor shall pay all out-of-pocket costs and expenses of every kind paid or incurred by Secured Party relating to such liquidations, sales or other dispositions of the Collateral, including reasonable and documented broker's and attorney's fees, and the proceeds of any liquidations, sales or other dispositions of the Collateral may be applied against such costs, expenses and fees. Secured Party may be the purchaser of any or all of the Collateral at any such sales or dispositions and thereafter hold the same in its own right free of any interests or claims of Debtor. Notwithstanding the foregoing, upon the occurrence and during the continuance of an Event of Default, as applicable, (a) Secured Party shall be entitled to exercise, without prior notice to Debtor, those rights provided under Section 9-607(a)(4) of the Uniform Commercial Code, and (b) Secured Party shall not be required to provide prior notice of disposition to the extent such notice is not required under Section 9-611(d) of the Uniform Commercial Code. In connection with any liquidation, sale or other disposition of any of the Collateral pursuant to this Agreement, Secured Party shall have the right in the name, place and stead of Debtor, to execute all necessary assignments or other instruments of conveyance or transfer with respect to the Collateral.

9. **Further Assurances.** Debtor shall promptly execute, acknowledge and deliver to Secured Party, and do, all such additional and further acts, things, assurances, instruments, documents (including financing statements), acts and things as Secured Party may reasonably request from time to time to vest in and assure to Secured Party, or to protect and preserve, the Collateral, Secured Party's security interest therein, perfection of Secured Party's security interest and/or Secured Party's rights and remedies hereunder. Debtor hereby irrevocably appoints Secured Party as Debtor's attorney-in-fact for the purpose of executing, acknowledging and delivering any such documents and doing such further acts and things to the extent Debtor fails or refuses to do so following any required notice.

10. **Termination of Security Interests; Release of Collateral.** Upon the payment in full in cash of the Obligations, the Collateral shall be released from all liens, security interests and encumbrances created hereby, and this Agreement, and all obligations of Debtor hereunder, shall terminate, all without delivery of any instrument or performance of any act by any party, and all rights to the Collateral shall revert to the Debtor. At the request and sole expense of Debtor following any such termination, Secured Party shall promptly: (a) deliver to Debtor any Collateral held by Secured Party hereunder; and (b) execute and deliver to Debtor such documents as Debtor shall reasonably request to evidence such termination.

11. **Miscellaneous.**

(a) Debtor agrees that Secured Party may, but shall not be required to, pay or satisfy any taxes, charges, assessments, security interests or liens of any kind with respect to or encumbering any of the Collateral, and Secured Party shall be the sole judge of the legality or validity thereof and the amount necessary to discharge the same. All payments, charges, costs and expenses (including reasonable and documented attorney's fees) made or incurred by Secured Party in exercising any of its rights, powers or remedies under this Agreement or applicable law shall be secured hereby and paid by Debtor to Secured Party on written demand.

(b) Beyond the exercise of reasonable care to assure the safe custody of any of the Collateral while in the possession of Secured Party, Secured Party shall have no duty or liability to collect any cash or other property due in respect thereof or to protect or preserve any rights pertaining thereto, and shall be relieved of all responsibility for the Collateral upon surrendering same to Debtor.

(c) No failure or delay on the part of Secured Party in exercising any right, power or remedy hereunder, under any of the Documents or under applicable law shall operate as a waiver thereof, nor shall a single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or remedy. The rights and remedies herein provided are cumulative and are in addition to, and not exclusive of, any rights or remedies provided by law or by any of the Documents.

(d) The provisions of this Agreement are severable, and if any clause or provision hereof shall be held invalid or unenforceable in whole or in part, such invalidity or unenforceability shall not affect the remainder of such clause or provision nor any other clause or provision of this Agreement.

(e) This Agreement shall inure to the benefit of Secured Party, its successors and assigns, and shall be binding upon Debtor and Debtor's successors and assigns.

(f) The construction, performance and enforcement of this Agreement shall be governed by the internal laws of the State of Maryland. References herein to the Maryland Uniform

Commercial Code shall mean the Uniform Commercial Code as the same may be in effect from time to time in the State of Maryland.

(g) Any notice or other communication in connection with this Agreement shall be sent by registered mail or by telecopy. If sent by registered mail, such notice shall be deemed to have been given when received by the party to whom directed, provided that any such notice or communication shall be addressed to a party hereto at the address given for such party on the first page hereof (or at such other address as such party shall specify in writing to the other parties hereto). Notwithstanding the foregoing, if delivery of any notice by registered mail is refused by the party to whom it has been directed, such notice may be sent by regular mail, and shall be deemed given when deposited in the mail, postage prepaid, at the address given for such party on the first page hereof (or at such other address as such party shall specify in writing to the other parties hereto). If sent by telecopy, a notice shall be deemed to have been given when the telecopy is transmitted to the following telecopier numbers and an electronic confirmation of receipt is received (or if transmission is not made during normal business hours on a business day, the first business day thereafter): (a) if to Secured Party, to 410/539-6579, and (b) if to Debtor, to 301/631-2970.

(h) This Agreement may be executed in any number of counterparts and by different parties hereto on separate counterparts, each of which, when so executed and delivered, shall be an original, but all such counterparts shall together constitute one and the same instrument.

(i) The headings contained in the titling of this Agreement are intended to be used for convenience only and shall not be used or deemed to limit or diminish any of the provisions hereof.

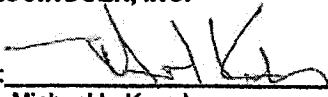
[THE NEXT PAGE IS THE SIGNATURE PAGE]

IN WITNESS WHEREOF, the parties hereto have executed or caused to be executed this Security Agreement under seal as of the date first above written.

DEBTOR:

WITNESS/ATTEST:

VACCINOGEN, INC.

By:  _____ (SEAL)
Michael L. Kranda
Chief Executive Officer

SECURED PARTY:

THE ABELL FOUNDATION, INC.

By: _____ (SEAL)
Robert C. Embry, Jr.
President

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IN WITNESS WHEREOF, the parties hereto have executed or caused to be executed this Security Agreement under seal as of the date first above written.

DEBTOR:

WITNESS/ATTEST:

VACCINOGEN, INC.

By: _____ (SEAL)

Michael L. Kranda
Chief Executive Officer

SECURED PARTY:

THE ABELL FOUNDATION, INC.

Kathleen Han

By: _____ (SEAL)

Robert C. Embry, Jr.
President

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SCHEDULE A

Collateral

The Collateral consists of the following assets and properties now owned or at any time hereafter acquired by Debtor or in which Debtor now has or at any time hereafter may acquire any right, title or interest:

- all Accounts
- all Chattel Paper;
- all Deposit Accounts;
- all Documents;
- all Equipment;
- all General Intangibles;
- all Instruments;
- all Inventory;
- all Investment Property;
- all Letter-of-Credit Rights;
- all Supporting Obligations;
- all books and records pertaining to the Collateral; and
- to the extent not otherwise included, all Proceeds and products of any and all of the foregoing and all collateral security and guarantees given by any person with respect to any of the foregoing.

Each capitalized term used in this Schedule A but not otherwise defined in the foregoing Security Agreement, and which is defined in the Maryland Uniform Commercial Code, shall have the meaning specified in the Maryland Uniform Commercial Code.

EXHIBIT 6.4

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

MASTER SERVICES AGREEMENT

This Master Services Agreement (this "Agreement") is entered into as of the 16 day of April, 2012 by and between **Vaccinogen**, having its registered address at 5300 Westview Drive, Suite 406, Fredrick, MD 21703 ("Vaccinogen"), and **Oncology Trials Insights, Inc.**, having its registered address at 950 S. Cherry St., Suite 1210, Denver, Colorado, U.S.A. ("OTI"). The above parties are hereinafter referred to each as a "Party" and jointly as the "Parties".

WHEREAS, OTI specializes in providing protocol development, site selection, site enrollment diagnostics, enrollment management, site and investigator education, and clinical trial awareness services on behalf of clinical trial sponsors;

WHEREAS, Vaccinogen wishes to retain OTI to provide services of site selection, project management, and trial enrollment for the Phase II Oncovax trial in colon cancer; and

WHEREAS, OTI and Vaccinogen desire to enter into a Master Services Agreement to set forth the terms and conditions under which Vaccinogen would engage OTI to perform such services in connection with the Project;

NOW, THEREFORE, in consideration of the foregoing and of the covenants, agreements and conditions contained herein, and other good and valuable consideration, the adequacy and receipt of which are hereby acknowledged, the Parties hereto agree as follows:

1 Performance of Services

1.1 OTI hereby agrees to perform services for Vaccinogen from time to time under the terms set forth in this Agreement. All services performed by OTI pursuant to the terms of this Agreement shall be referred to herein as "Services."

1.2 Services to be performed by OTI shall be mutually agreed upon by the Parties and set forth in one or more Project Work Orders. Each Project Work Order executed and delivered by the Parties is deemed to be incorporated into, and form part of this Agreement, and the terms of this Agreement shall be construed accordingly. In the event of any conflict between this Agreement and any provision of a Project Work Order, the terms of this Agreement shall control, except to the extent the Project Work Order expressly states that the provision in the Project Work Order takes precedent with respect to the Services provided under such Project Work Order.

1.3 Changes in the Services to be provided under a Project Work Order shall be documented in the form of an executed Change Order. No change to the Scope of Work and/or Budget in respect of the Services to be provided under any Project Work Order shall be effective unless set forth in a Change Order executed by both Parties.

1.4 The first Project Work Order to be conducted under this Agreement is attached hereto as Exhibit "A."

2 Compensation for Services Rendered

2.1 In consideration for OTI's performance of the Services described in this Agreement, Vaccinogen shall pay OTI fees in accordance with and for which a duly executed Project Work Order exists.

2.2 OTI shall provide to Vaccinogen separate invoices for each Project Work Order. All amounts due under any undisputed invoice shall be paid within 30 days of receipt by Vaccinogen of the applicable invoice.

2.3 Additional services may be contracted separately at the sole discretion and upon mutual agreement of the Parties.

3 Compliance

3.1 OTI shall comply with all applicable laws, regulations and guidance documents, including but not limited to, rules governing United States federal and state healthcare programs, while performing Services under this Agreement.

3.2 Vaccinogen shall comply with all applicable laws, regulations and guidance documents, including but not limited to, rules governing United States federal and state healthcare programs, while conducting the Clinical Trial.

3.3 While on Vaccinogen's premises or while acting on behalf of Vaccinogen on the premises of Vaccinogen's study sites, OTI shall comply with Vaccinogen's policies, provided that Vaccinogen has delivered to OTI with a written copy of any such applicable policies.

3.4 Vaccinogen shall immediately notify OTI with regard to any safety or regulatory issues resulting from or arising out of the Clinical Trial.

4 Use and Disclosure of Confidential Information

4.1 In this Agreement, "Confidential Information" means any and all information, materials, know-how, intellectual property, technology, data and ideas, whether written, oral or in other form, which is reasonably considered confidential by the disclosing Party and which is obtained by a Party, or any directors, officers, employees, agents or advisers ("Representatives") of a Party, from the other Party or any Representative of such Party, in respect of the Project and/or any related Project Work Order, with the exception of any information which (i) at the date of its disclosure is publicly known or at any time after that date becomes publicly known (other than by breach of this Agreement), or (ii) the receiving Party can evidence was in its possession at the time of disclosure and was not obtained, directly or indirectly, by or as a result of breach of a confidentiality obligation under this Section 4.

4.2 Any current Project Work Order or potential Project Work Order which is the subject of consideration, evaluation and discussion between the Parties and the existence and contents of this Agreement shall be considered Confidential Information.

4.3 The Parties agree that the Confidential Information may be used solely for the purpose of performing each Party's obligations under this Agreement and not for any other purpose. Except as provided in Section 4.6 below, the Confidential Information will be held in complete and strict confidence and may only be disclosed to Representatives of the Parties on a strict need-to-know basis for the performance of such Party's obligations under the Agreement. No Confidential Information received by a Party may be copied or reproduced in any way without the prior written consent of the other Party.

4.4 The Parties undertake to ensure that each of its Representatives who receive Confidential Information is made aware of and observes the obligations under this Agreement. For the avoidance of any doubt, any disclosure or unauthorized use of any Confidential Information under this Agreement by any of the Representatives of a Party shall constitute a breach by the relevant Party of this Agreement.

4.5 Upon written request by either Party, each Party agrees that it will, as soon as reasonably practicable, return or destroy (at the disclosing Party's discretion) all copies of any document in such Party's or such Party's Representative's possession containing or reflecting Confidential Information, provided however that the Parties may retain one copy of such Confidential Information for purposes of performing their obligations under this Agreement.

4.6 Section 4.3 above does not, however, apply to the extent that any Party is required to make a disclosure of Confidential Information by law or pursuant to any order of court or other competent authority or tribunal or by any applicable stock exchange regulations or the regulations of any other recognized market place. In the event that any Party would be required to make any such disclosure, each Party undertakes to give the other Party reasonable notice prior to any such disclosure in order to make it possible for the other Party to seek an appropriate protective order or other remedy. Each Party also agrees and undertakes to use its best efforts to ensure that any Confidential Information disclosed under this Section 4.6, to the extent possible, will be treated confidentially by any party receiving such Confidential Information.

4.7 Neither Party, nor any of its Representatives, makes any representation or warranty, express or implied, as to the accuracy, reliability or completeness of any of the Confidential Information, and neither Party, nor any of its Representatives, will have any liability whatsoever to the other Party resulting from any use of the Confidential Information.

4.8 OTI acknowledges that some or all of the Confidential Information, including the discussions between the Parties hereto, may be inside information under applicable law and that neither OTI nor any of its Representatives may deal in price-affected securities in relation to the inside information, encourage another person to deal in price-affected securities or disclose the inside information except as permitted by law.

5 Non-solicitation

5.1 The Parties shall not, during the term of this Agreement and for a period of two years following its termination, either directly or indirectly recruit, solicit, induce or attempt to induce any current director, officer or employee of the other Party (including any director, officer or employee of any company within the same group as the other Party) to terminate his or her

employment with such Party or otherwise be employed by it or any other person, firm or company and shall not approach any such employee for such purpose or authorize or approve the taking of such action by any other person without the prior written consent of the other Party.

5.2 The Parties shall not, during the term of this Agreement and for a period of two years following its termination, other than in the ordinary course of business, either directly or indirectly approach, recruit, solicit, induce or attempt to induce any person or entity that is a customer, supplier, agent, representative or adviser of the other Party, or that the Parties otherwise know has some form of business relationship of any kind with the other Party, to cease, restrict or vary in any way its relationship with the other Party without the prior written consent of the other Party, but in any event not in connection with a current or potential Project Work Order.

6 Contacts

6.1 All communications made by Vaccinogen to OTI in connection with the provision of Services under this Agreement or in connection with any current or potential Project Work Order shall be directed to Joseph D. Giglio, MBA, President and CEO, jgiglio@oncologytrialsinsights.org, 303-759-5579.

6.2 All communications made by OTI to Vaccinogen in connection with the provision of Services under this Agreement or in connection with any current or potential Project Work Order shall be directed to Michael G. Hanna, Jr., Ph.D., Chairman & CEO, mghannajr@vaccinogeninc.com, m) 301 793-7736 or o) 301 668-8400.

7 Term and Termination

7.1 This Master Services Agreement shall be effective as of the date first set forth above (the "Effective Date") and shall remain in full force and effect until the later of (i) three (3) years after the Effective Date (the "Term"), or (ii) the date that all Services under all Project Work Orders executed prior to the expiration of the Term are completed, unless otherwise terminated by the Parties in accordance with this Section 7.

7.2 Either Party may terminate this Agreement immediately upon written notice to the other Party in the event of a breach by the other Party of a material provision of this Agreement that remains uncured thirty (30) days following the receipt of notice in writing of such breach from the non-breaching Party.

7.3 Termination or expiration of this Agreement shall not affect any rights or obligations which have accrued prior thereto or in connection therewith, or any obligations hereunder which by their terms survive termination or expiration.

8 Failure to Perform; Remedies

8.1 If OTI does not provide Services conforming to the Services set forth in each Project Work Order in all material respects, and such failure is due to a reason other than a force majeure event (as described below in Section 8.2) or Vaccinogen's negligence or failure to act as reasonably required under this Agreement, Vaccinogen shall timely notify OTI in writing of such

material non-compliance and shall allow OTI to correct such material non-compliance or provide an acceptable corrective action plan within thirty (30) days of such notification.

8.2 Neither Party shall be liable or deemed to be in default under this Agreement for any delay due to causes beyond the control of the Party, including but not limited to, war, civil disorders, acts of God or government action, provided that the affected Party promptly notifies the other Party of the causes and its effects on the Services to be performed hereunder.

9 Deliverables, Work Product & Intellectual Property

9.1 All methodologies, innovations, discoveries and practices conceived, reduced to practice, made or developed by OTI for protocol development, site selection, site enrollment diagnostics, enrollment management, site and investigator education, and clinical trial awareness services in connection with OTI's performance of the Services not exclusively related to the Services and not containing Vaccinogen Confidential Information shall be the sole property of OTI. All other reports, communications, materials, information, innovations and discoveries (whether or not patentable or copyrightable) conceived, reduced to practice, made or developed by OTI solely or jointly with others in connection with OTI's performance of the Services shall be promptly disclosed to and be the sole property of Vaccinogen.

9.2 Notwithstanding the foregoing, Vaccinogen shall not acquire ownership of any materials, information, products, costs, operational techniques, financial and tax information, projections, research and development plans, inventions, trade secrets and know-how and/or other intellectual property owned by OTI prior to OTI's performance of Services under this Agreement or that is licensed by OTI from any third party.

10 Presentations, Publications and Publicity

10.1 OTI shall not present or publish, nor submit for publication, any work resulting from the Services without Vaccinogen's prior written approval.

11 Representation and Warranties

11.1 Each Party represents and warrants that the total payment for the Services represents fair market value for the Services and has not been determined in any manner that takes into account the volume or value of any referrals or business between OTI and Vaccinogen.

11.2 OTI and Vaccinogen represent and warrant that the terms of this Agreement are not inconsistent with any other contractual or legal obligations that the respective Parties may have.

12 Independent Contractor

12.1 OTI's status under this Agreement is that of an independent contractor.

12.2 OTI shall not be deemed an employee or joint venture partner of Vaccinogen for any purpose whatsoever.

12.3 This Agreement shall not entitle OTI to participate in any benefit plan or program of Vaccinogen.

12.4 OTI is not entitled to worker's compensation coverage by Vaccinogen, and OTI hereby waives any and all rights OTI may have to be covered under Vaccinogen's worker's compensation policies.

13 Indemnification

13.1 Vaccinogen hereby agrees to indemnify OTI and its affiliates, employees, directors, officers and agents and hold them harmless against any liability, judgment, demand, action, suit, loss, damage, cost and other expense (including but not limited to reasonable attorney's fees and court costs) ("Liability") resulting from any third party claims made or proceedings brought against OTI to the extent that such Liability arises as a result of the Vaccinogen's negligence, willful misconduct or breach of the representations and warranties set forth in this Agreement., or OTI's performance of the Services; except to the extent that such Liability results from OTI's negligence, wilful misconduct or breach of the representations or warranties set forth in this Agreement.

13.2 OTI agrees to indemnify Vaccinogen and its affiliates, employees, directors, officers and agents and hold them harmless against Liability resulting from any third party claims made or proceedings brought against Vaccinogen to the extent that such Liability arises as a result of OTI's negligence, willful misconduct or breach of the representations and warranties set forth in this Agreement.

14 Waiver

14.1 No waiver of any term or condition of this Agreement in any instance shall be deemed to be or construed as a further or continuing waiver of such term or condition or of any other term or condition of this Agreement.

15 Notices

15.1 All notices hereunder shall be in writing and shall be effective upon deposit in the United States mail, certified mail, return receipt requested with postage paid, or personally delivered by express courier, faxed or transmitted by electronic mail as follows:

If to OTI, address to:

Oncology Trials Insights, Inc.
Attn: Joseph D. Giglio
President and CEO
950 South Cherry Street
Suite 1210
Denver, CO 80246
303-759-5579 (Phone)
303-759-5892 (Fax)
jgiglio@oncologytrialsinsights.org

16 April 2012

with a copy (which shall not constitute notice) to:

Hogan Lovells US LLP
Attn: Asher M. Rubin
Harbor East
100 International Drive, Suite 2000
Baltimore, MD 21202
410-659-2777 (Phone)
410-659-2701 (Fax)
asher.rubin@hoganlovells.com

If to Vaccinogen, address to:

Vaccinogen
Attn: Michael G. Hanna, Jr., Ph.D.
Chairman & CEO
5300 Westview Drive
Suite 406
Fredrick, MD 21703
Office 301 668 8400
Mobile 301 793 7736
Fax 301 631 2970
mghannajr@vaccinogeninc.com

16 April 2012

16 Assignment; Subcontracting

16.1 Neither Party may assign this Agreement or any interest herein, or delegate any duty hereunder, to any third party without the other Party's prior written consent (which is in its sole discretion to grant or withhold).

16.2 In the event that OTI is permitted to subcontract any duty hereunder to a third party, such subcontractor shall execute an agreement in a form acceptable to Vaccinogen obligating such subcontractor to comply with the terms and conditions hereof, and OTI shall remain responsible and liable for the acts or omissions of such subcontractor activities as if such activities had been performed by OTI.

17 Miscellaneous

17.1 This Agreement contains the entire understanding of the Parties with respect to the subject matter hereof and supersedes all previous agreements and undertakings with respect thereto. This Agreement may be modified only by written agreement signed by the Parties.

17.2 Each Party agrees and undertakes to hold the other Party harmless from any damages, loss, costs or liability arising out of or in relation to any breach of this Agreement by a Party or any Representative of a Party.

18 Governing Law and Jurisdiction

18.1 This Agreement shall be governed by and construed in accordance with the laws of Colorado without regard to its principles of conflicts of laws.

18.2 Any dispute, controversy or claim arising out of or in connection with this Agreement, or the breach, termination or invalidity thereof, shall be finally settled by arbitration in accordance with the JAMS Streamlined Arbitration Rules and Procedures.

18.3 The place of arbitration shall be Denver, Colorado. The language to be used in the proceedings shall be English.

18.4 The Parties undertake and agree that all arbitral proceedings conducted with reference to this arbitration clause will be kept strictly confidential. This confidentiality undertaking shall cover all information disclosed in the course of such arbitral proceedings, as well as any decision or award that is made or declared during the proceedings. Information covered by this confidentiality undertaking may not, in any form, be disclosed to a third party without the prior written consent by the other Party.


19 Counterparts; Electronic Signatures

19.1 For the convenience of the Parties, any number of counterparts of this Agreement may be executed by any one or more Parties hereto, and each such executed counterpart shall be, and shall be deemed to be, an original, but all of which shall constitute, and shall be deemed to constitute, in the aggregate but one and the same instrument.

19.2 This Agreement may be circulated for signature through electronic transmission, including, without limitation, facsimile and email, and all signatures so obtained and transmitted shall be deemed for all purposes under this Agreement to be original signatures until such time, if ever, as original counterparts are exchanged by the Parties.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first set forth above.

Vaccinogen

By: 

Michael G. Hanna, Jr., Ph.D.

Chairman & CEO

Oncology Trials Insights, Inc.

By: 

Name: Joseph Giglio

Title: President + CEO

16 April 2012

EXHIBIT 6.5

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

INVESTMENT AGREEMENT

THIS INVESTMENT AGREEMENT (hereinafter referred to as the “Agreement”), dated as of July 18, 2012 (“Execution Date”) by and between Vaccinogen, Inc., a Maryland corporation (hereinafter referred to as the “Company”), and Kodiak Capital Group, LLC, a Delaware limited liability company (hereinafter referred to as the “Investor”).

WHEREAS, the parties desire that, upon the terms and subject to the conditions contained herein, the Investor shall invest up to twenty five million dollars (\$25,000,000) to purchase the Company’s Common Stock, \$0.0001 par value per share (the “Common Stock”); and

WHEREAS, such investments will be made in reliance upon the provisions of Section 4(2) under the Securities Act of 1933, as amended (the “1933 Act”), Rule 506 of Regulation D, and the rules and regulations promulgated thereunder, and/or upon such other exemption from the registration requirements of the 1933 Act as may be available with respect to any or all of the investments in Common Stock to be made hereunder; and

WHEREAS, contemporaneously with the execution and delivery of this Agreement, the parties hereto are executing and delivering a Registration Rights Agreement substantially in the form attached hereto (the “Registration Rights Agreement”) pursuant to which the Company has agreed to provide certain registration rights under the 1933 Act, and the rules and regulations promulgated thereunder, and applicable state securities laws.

NOW THEREFORE, in consideration of the foregoing recitals, which shall be considered an integral part of this Agreement, the covenants and agreements set forth hereafter, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Company and the Investor hereby agree as follows:

SECTION 1. DEFINITIONS.

As used in this Agreement, the following terms shall have the following meanings specified or indicated below, and such meanings shall be equally applicable to the singular and plural forms of such defined terms.

“**1933 Act**” shall have the meaning set forth in the preamble of this agreement.

“**1934 Act**” shall mean the Securities Exchange Act of 1934, as it may be amended.

“**Affiliate**” shall have the meaning specified in Section 5(H), below.

“Agreement” shall mean this Investment Agreement.

“By-laws” shall have the meaning specified in Section 4(C).

“Certificate of Incorporation” shall have the meaning specified in Section 4(C).

“Closing” shall have the meaning specified in Section 2(G).

“Closing Date” shall mean no more than five (5) Trading Days following a Put Notice Date.

“Commitment Shares” shall have the meaning specified in Section 12(M).

“Common Stock” shall have the meaning set forth in the preamble of this Agreement.

“Company” shall mean Vaccinogen, Inc., a Maryland corporation.

“Control” or **“Controls”** shall have the meaning specified in Section 5(H).

“Document Preparation Fee” shall have the meaning specified in Section 12(M).

“Effective Date” shall mean the date the SEC declares effective under the 1933 Act the Registration Statement covering the Securities.

“Environmental Laws” shall have the meaning specified in Section 4(M).

“Equity Line Transaction Documents” shall mean this Agreement and the Registration Rights Agreement.

“Execution Date” shall mean the date indicated in the preamble to this Agreement.

“Facility Amount” shall have the meaning specified in Section 2(A).

“Indemnities” shall have the meaning specified in Section 11.

“Indemnified Liabilities” shall have the meaning specified in Section 11.

“Ineffective Period” shall mean any period of time that the Registration Statement or any Supplemental Registration Statement (as defined in the Registration Rights Agreement between the parties) becomes ineffective or unavailable for use for the sale or resale, as applicable, of any or all of the Registrable Securities (as defined in the Registration Rights Agreement) for any reason (or in the event the prospectus under

either of the above is not current and deliverable) during any time period required under the Registration Rights Agreement.

“**Investor**” shall have the meaning indicated in the preamble of this Agreement.

“**Material Adverse Effect**” shall have the meaning specified in Section 4(A).

“**Material Amount**” or “**Material in Amount**” shall mean greater than \$10,000.

“**Maximum Common Stock Issuance**” shall have the meaning specified in Section 2(H).

“**Open Market Adjustment Amount**” shall have the meaning specified in Section 2(I).

“**Open Market Share Purchase**” shall have the meaning specified in Section 2(I).

“**Open Period**” shall mean the period beginning on and including the Trading Day immediately following the Effective Date and ending on the earlier to occur of (i) the date which is eighteen months (18) months from the Execution Date; or (ii) termination of the Agreement in accordance with Section 9, below.

“**Pricing Period**” shall mean the period beginning on the Put Notice Date and ending on and including the date that is five (5) Trading Days after such Put Notice Date.

“**Principal Market**” shall mean the American Stock Exchange, Inc., the National Association of Securities Dealers, Inc. Over-the-Counter Bulletin Board, the NASDAQ National Market System or the NASDAQ SmallCap Market, whichever is the principal market on which the Common Stock will be listed pursuant to the Company’s plans to become a fully-reporting publicly-listed Company on a Principal Market.

“**Prospectus**” shall mean the prospectus, preliminary prospectus, and supplemental prospectus used in connection with the Registration Statement.

“**Purchase Amount**” shall mean the total amount being paid by the Investor on a particular Closing Date to purchase the Securities.

“**Purchase Price**” shall mean eighty percent (80%) of the lowest daily VWAP during the Pricing Period.

“**Put**” shall have the meaning set forth in Section 2(B)(1) hereof.

“**Put Amount**” shall have the meaning set forth in Section 2(B)(1) hereof.

“Put Notice” shall mean a written notice sent to the Investor by the Company stating the Put Amount in U.S. dollars the Company intends to sell to the Investor pursuant to the terms of the Agreement and stating the current number of Shares issued and outstanding on such date.

“Put Notice Date” shall mean the Trading Day, as set forth below, on which the Investor receives a Put Notice; however, a Put Notice shall be deemed delivered on (a) the Trading Day it is received by facsimile or otherwise by the Investor if such notice is received prior to 9:00 am Eastern Time, or (b) the immediately succeeding Trading Day if it is received by facsimile or otherwise after 9:00 am Eastern Time on a Trading Day. No Put Notice may be deemed delivered on a day that is not a Trading Day.

“Put Restriction” shall mean the days between the beginning of the Pricing Period and Closing Date. During this time, the Company shall not be entitled to deliver another Put Notice.

“Put Shares Due” shall have the meaning specified in Section 2(I).

“Registration Period” shall have the meaning specified in Section 5(C), below.

“Registration Rights Agreement” shall have the meaning set forth in the recitals, above.

“Registration Statement” means a registration statement of the Company filed under the 1933 Act covering the Securities issuable hereunder.

“Related Party” shall have the meaning specified in Section 5(H).

“Resolution” shall have the meaning specified in Section 8(E).

“SEC” shall mean the U.S. Securities & Exchange Commission.

“Securities” shall mean the Shares of Common Stock issued pursuant to the terms of the Agreement.

“Shares” shall mean the shares of the Company’s Common Stock.

“Subsidiaries” shall have the meaning specified in Section 4(A).

“Term Sheet” shall mean an executed instrument between the parties hereto containing the terms of this and other agreements between the parties, and is hereby incorporated by reference. If any conflict exists between the terms or provisions of the Term Sheet and this Agreement, the latter shall prevail.

“Trading Day” shall mean any day on which the Principal Market for the Common Stock is open for trading, from the hours of 9:30 am until 4:00 pm.

“VWAP” shall mean the volume weighted average price of the Common Stock during a given period of time.

SECTION 2. PURCHASE AND SALE OF COMMON STOCK.

(A) **PURCHASE AND SALE OF COMMON STOCK.** Subject to the terms and conditions set forth herein, the Company shall issue and sell to the Investor, and the Investor shall purchase from the Company, up to that number of Shares having an aggregate Purchase Price of twenty five million dollars (\$25,000,000) (the “Facility Amount”).

(B) **DELIVERY OF PUT NOTICES.** Subject to the terms and conditions of the Equity Line Transaction Documents, and from time to time during the Open Period, the Company may, in its sole discretion, deliver a Put Notice to the Investor which states the dollar amount (designated in U.S. Dollars) (the “Put Amount”) which the Company intends to sell to the Investor on a Closing Date (the “Put”). The Put Notice shall be in the form attached hereto as Exhibit C and incorporated herein by reference. The amount that the Company shall be entitled to Put to the Investor (the “Put Amount”) shall be up to twenty five million dollars (\$25,000,000). During the Open Period, the Company shall not be entitled to submit a Put Notice until after the previous Closing has been completed. The Purchase Price for the Common Stock identified in the Put Notice shall be the Purchase Price.

(C) **RESERVED**

(D) **RESERVED**

(E) **CONDITIONS TO INVESTOR’S OBLIGATION TO PURCHASE SHARES.** Notwithstanding anything to the contrary in this Agreement, the Company shall not be entitled to deliver a Put Notice and the Investor shall not be obligated to purchase any Shares at a Closing (as defined in Section 2(G)) unless each of the following conditions are satisfied:

(I) a Registration Statement shall have been declared effective and shall remain effective and available for the resale of all the Registrable Securities (as defined in the Registration Rights Agreement) at all times until the Closing with respect to the subject Put Notice;

(II) at all times during the period beginning on the related Put Notice Date and ending on and including the related Closing Date, the Common Stock shall have been listed and/or eligible for quotation on the Principal Market and shall not have been suspended from trading and/or quotation thereon for a period of two (2) consecutive Trading Days during the Open Period and the Company shall not have been notified of any pending or threatened proceeding or other action to suspend the trading and/or quotation of the Common Stock;

(III) the Company has complied with its obligations and is otherwise not in breach of or in default under this Agreement, the Registration Rights Agreement, or any other agreement executed in connection herewith which has not been cured prior to the Put Notice Date;

(IV) no injunction shall have been issued and remain in force, or action commenced by a governmental authority which has not been stayed or abandoned, prohibiting the purchase or the issuance of the Securities; and

(V) with respect to all Puts, the issuance of the Securities will not violate any shareholder approval requirements of the Principal Market.

If any of the events described in clauses (I) through (V) above occurs during a Pricing Period, then the Investor shall have no obligation to purchase the Put Amount of Common Stock set forth in the applicable Put Notice.

(F) RESERVED.

(G) MECHANICS OF PURCHASE OF SHARES BY INVESTOR. Subject to the satisfaction of the conditions set forth in Sections 2(E), 7, and 8, the closing of the purchase by the Investor of Securities pursuant to a Put (a "Closing") shall occur on the date which is no later than five (5) Trading Days following the applicable Put Notice Date (each a "Closing Date"). Prior to or on each Closing Date, (I) the Investor shall deliver to the Company the Purchase Price to be paid for such Securities, and (II) the Company shall deliver to the Investor certificates representing the Securities to be issued to the Investor on such date and registered in the name of the Investor. In lieu of delivering physical certificates representing the Securities, and provided that the Company's transfer agent is then participating in the Depository Trust Company ("DTC") Fast Automated Securities Transfer ("FAST") program, upon request of the Investor, the Company shall use commercially reasonable efforts to cause its transfer agent to electronically transmit the Securities by crediting the account of the Investor's prime broker (as specified by the Investor within a reasonable in advance of the Investor's notice) with DTC through its Deposit Withdrawal Agent Commission ("DWAC") system.

The Company understands that a delay in the issuance of Securities beyond the Closing Date could result in economic damage to the Investor. After the Effective Date, as compensation to the Investor for such loss, the Company agrees to make late payments to the Investor for late issuance of Securities (delivery of Securities after the applicable Closing Date) in accordance with the following schedule (where “No. of Days Late” is defined as the number of trading days beyond the Closing Date, with the Amounts being cumulative):

LATE PAYMENT FOR EACH
NO. OF DAYS LATE \$10,000 WORTH OF COMMON STOCK

1	\$100
2	\$200
3	\$300
4	\$400
5	\$500
6	\$600
7	\$700
8	\$800
9	\$900
10	\$1,000
Over 10	\$1,000 + \$200 for each Business Day late beyond 10 days

Provided, however, that the Company shall not be liable for, and shall not be required to make late payment for, any loss that results from a delay in the issuance of Securities caused by the Investor, the Investor’s broker-dealer and/or prime broker, or DTC.

The Company shall make any payments incurred under this Section in immediately available funds upon demand by the Investor. Nothing herein shall limit the Investor’s right to pursue actual damages for the Company’s failure to issue and deliver the Securities to the Investor, except that such late payments shall offset any such actual damages incurred by the Investor, and any Open Market Adjustment Amount, as set forth below.

(H) OVERALL LIMIT ON COMMON STOCK ISSUABLE. Notwithstanding anything contained herein to the contrary, if, during the Open Period, the Company becomes listed on an exchange that limits the number of shares of Common Stock that may be issued without shareholder approval, then the number of Shares issuable by the Company and purchasable by the Investor, shall not exceed that number of the shares of Common Stock that may be issuable without shareholder approval (the “Maximum

Common Stock Issuance”). If such issuance of shares of Common Stock could cause a delisting on the Principal Market, then the Maximum Common Stock Issuance shall first be approved by the Company’s shareholders in accordance with applicable law and the By-laws and Certificate of Incorporation of the Company, as amended. The parties understand and agree that the Company’s failure to seek or obtain such shareholder approval shall in no way adversely affect the validity and due authorization of the issuance and sale of Securities or the Investor’s obligation in accordance with the terms and conditions hereof to purchase a number of Shares in the aggregate up to the Maximum Common Stock Issuance limitation, and that such approval pertains only to the applicability of the Maximum Common Stock Issuance limitation provided in this Section 2(H).

(I) ADDITIONAL PENALTIES. If, by the third (3rd) Trading Day after the Closing Date, the Company fails to deliver any portion of the shares of the Put to the Investor (the “Put Shares Due”) and the Investor purchases, in an open market transaction or otherwise, shares of Common Stock necessary to make delivery by the Investor of Shares in respect of sales to subsequent purchasers, pursuant to transactions entered into before the Closing Date (“Subsequent Purchasers”), which such Shares would have been delivered to the Investor by the Company but for the Company’s failure to so deliver (the “Open Market Share Purchase”), then the Company shall pay to the Investor, in addition to any other amounts due to Investor pursuant to the Put, and not in lieu thereof, the Open Market Adjustment Amount (as defined below). The “Open Market Adjustment Amount” is the amount equal to the excess, if any, of (x) the Investor’s total purchase price (including brokerage commissions, if any) for the Open Market Share Purchase minus (y) the net proceeds (after brokerage commissions, if any) received by the Investor from the sale of the Put Shares Due to such Subsequent Purchasers. The Company shall pay the Open Market Adjustment Amount to the Investor in immediately available funds within five (5) Trading Days of written demand by the Investor. By way of illustration and not in limitation of the foregoing, if the Investor purchases Shares of Common Stock having a total purchase price (including brokerage commissions, if any) of \$11,000 to cover an Open Market Share Purchase with respect to Shares of Common Stock it sold for net proceeds of \$10,000, the Open Market Share Purchase Adjustment Amount which the Company will be required to pay to the Investor will be \$1,000, provided the Investor shall provide written proof of its losses to the Company.

(J) LIMITATION ON AMOUNT OF OWNERSHIP. Notwithstanding anything to the contrary in this Agreement, in no event shall the Investor be entitled to purchase that number of Shares, which when added to the sum of the number of shares of Common Stock beneficially owned (as such term is defined under Section 13(d) and Rule 13d-3 of the 1934 Act), by the Investor, would exceed 9.99% of the number of shares of Common Stock outstanding on the Closing Date, as determined in accordance with Rule 13d-1(j) of the 1934 Act.

SECTION 3. INVESTOR'S REPRESENTATIONS, WARRANTIES, AND COVENANTS.

The Investor represents and warrants to the Company, and covenants, as follows:

(A) SOPHISTICATED INVESTOR. The Investor has, by reason of its business and financial experience, such knowledge, sophistication, and experience in financial and business matters and in making investment decisions of this type that it is capable of (I) evaluating the merits and risks of an investment in the Securities and making an informed investment decision; (II) protecting its own interest; and (III) bearing the economic risk of such investment for an indefinite period of time.

(B) AUTHORIZATION; ENFORCEMENT. The Investor has the requisite power and authority to enter into and perform this Agreement. The execution and delivery of this Agreement by the Investor and the consummation by it of the transactions contemplated hereby and thereby have been duly and validly authorized by the Investor, and no further consent or authorization is required by its members. This Agreement has been duly and validly authorized, executed, and delivered on behalf of the Investor and is a valid and binding agreement of the Investor enforceable against the Investor in accordance with its terms, subject as to enforceability to general principles of equity and to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies.

(C) SECTION 9 OF THE 1934 ACT. During the term of this Agreement, the Investor will comply with the provisions of Section 9 of the 1934 Act, and the rules promulgated thereunder, with respect to transactions involving the Common Stock. The Investor agrees not to sell the Company's stock short, either directly or indirectly through its affiliates, principals or advisors, the Company's common stock during the term of this Agreement.

(D) ACCREDITED INVESTOR. Investor is an "Accredited Investor" as that term is defined in Rule 501(a) of Regulation D of the 1933 Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act.

(E) NO CONFLICTS. The execution, delivery, and performance of the Equity Line Transaction Documents by the Investor and the consummation by the Investor of the transactions contemplated hereby and thereby will not (I) result in a violation of the limited liability company operating agreement or other organizational documents of the Investor, or (II) conflict with, or constitute a material default (or an event which, with notice or lapse of time or both would become a material default) under, or give to others any rights of termination, amendment, acceleration, or cancellation of, any material

agreement, contract, indenture mortgage, indebtedness, or instrument to which the Investor is a party, or to the Investor's knowledge, result in a violation of any law, rule, regulation, order, judgment, or decree (including federal and state securities laws and regulations) applicable to the Investor or by which any property or asset of the Investor is bound or affected.

(F) OPPORTUNITY TO DISCUSS. The Investor has received all materials relating to the Company's business, finance and operations which it has requested. The Investor has had an opportunity to discuss the business, management, and financial affairs of the Company and the terms and conditions of this Agreement and the merits and risks of investing in the Securities with the Company's management sufficient to enable it to evaluate its investment. The Investor has had the opportunity to obtain such additional information that the Company possesses or can acquire without unreasonable effort or expense that is necessary to make an informed investment decision with respect to the investment.

(G) INVESTMENT PURPOSES. The Investor is purchasing the Securities for its own account for investment purposes and not with a view towards distribution and agrees to resell or otherwise dispose of the Securities solely in accordance with the registration provisions of the 1933 Act (or pursuant to an exemption from such registration provisions).

(H) NO REGISTRATION AS A DEALER. The Investor is not and will not be required to be registered as a "dealer" under the 1934 Act, either as a result of its execution and performance of its obligations under this Agreement or otherwise.

(I) GOOD STANDING. The Investor is a limited liability company, duly formed, validly existing, and in good standing in the State of Delaware.

(J) TAX LIABILITIES. The Investor understands that it is liable for its own tax liabilities.

(K) REGULATION M. The Investor will comply with Regulation M under the 1934 Act, if applicable.

(L) INVESTOR FUNDS. The Investor has, and will have at each Closing, all funds or financing in place necessary to pay and deliver to the Company the cash Purchase Price as contemplated hereby.

SECTION 4. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

Except as set forth in the Schedules attached hereto, or as may be disclosed and amended from time to time on the Company's reports, schedules, forms, statements and other documents that may be required to be filed by it with the SEC pursuant to the reporting requirements of the 1934 Act filed with the SEC and/or FINRA (the "SEC Documents") after the Effective Date, the Company represents and warrants to the Investor as follows:

(A) **ORGANIZATION AND QUALIFICATION.** The Company is a corporation duly organized and validly existing in good standing under the laws of the State of Maryland, and has the requisite corporate power and authorization to own its properties and to carry on its business as now being conducted. Both the Company and the companies it owns or controls ("Subsidiaries") are duly qualified to do business and are in good standing in every jurisdiction in which its ownership of property or the nature of the business conducted by it makes such qualification necessary, except to the extent that the failure to be so qualified or be in good standing would not have a Material Adverse Effect. As used in this Agreement, "Material Adverse Effect" means any material adverse effect on the business, properties, assets, operations, results of operations, financial condition or prospects of the Company and its Subsidiaries, if any, taken as a whole, or on the transactions contemplated hereby or by the agreements and instruments to be entered into in connection herewith, or on the authority or ability of the Company to perform its obligations under the Equity Line Transaction Documents (as defined in Section 1 and 4(B), below).

(B) AUTHORIZATION; ENFORCEMENT; COMPLIANCE WITH OTHER INSTRUMENTS.

(I) The Company has the requisite corporate power and authority to enter into and perform this Agreement and the Registration Rights Agreement (collectively, the "Equity Line Transaction Documents"), and at any time during the Agreement after the Effective Date, to issue the Securities in accordance with the terms hereof and thereof.

(II) The execution and delivery of the Equity Line Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby, including, without limitation, the reservation for issuance and the issuance of the Securities pursuant to this Agreement, have been duly and validly authorized by the Company's Board of Directors and shareholders, and no further consent or authorization is required by the Company, its Board of Directors, or its shareholders.

(III) The Equity Line Transaction Documents have been duly and validly executed and delivered by the Company.

(IV) The Equity Line Transaction Documents constitute the valid and binding obligations of the Company enforceable against the Company in accordance with their terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of creditors' rights and remedies.

(C) CAPITALIZATION.

Except as disclosed in Schedule 4(c) and as may be disclosed in the Company's SEC Documents or other publicly available filings with the SEC and/or FINRA after the Effective Date:

- (I) No shares of the Company's capital stock are subject to preemptive rights or any other similar rights or any liens or encumbrances suffered or permitted by the Company;
- (II) There are no outstanding debt securities;
- (III) There are no outstanding shares of capital stock, options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, any shares of capital stock of the Company or any of its Subsidiaries, or contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to issue additional shares of capital stock of the Company or any of its Subsidiaries or options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, any shares of capital stock of the Company or any of its Subsidiaries;
- (IV) There are no agreements or arrangements under which the Company or any of its Subsidiaries is obligated to register the sale of any of their securities under the 1933 Act (except the Registration Rights Agreement);
- (V) There are no outstanding securities of the Company or any of its Subsidiaries which contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to redeem a security of the Company or any of its Subsidiaries;

- (VI) There are no securities or instruments containing anti-dilution or similar provisions that will be triggered by the issuance of the Securities as described in this Agreement;
- (VII) The Company does not have any stock appreciation rights or “phantom stock” plans or agreements or any similar plan or agreement; and
- (VIII) There is no dispute as to the classification of any shares of the Company’s capital stock.

The Company has furnished to the Investor true and correct copies of the Company’s Certificate of Incorporation, as in effect on the date hereof (the “Certificate of Incorporation”), and the Company’s By-laws, as in effect on the date hereof (the “By-laws”), and the terms of all securities convertible into or exercisable for Common Stock and the material rights of the holders thereof in respect thereto.

(D) ISSUANCE OF SHARES. The Company agrees to reserve adequate Shares for issuance pursuant to this Agreement, which have been duly authorized and reserved those Shares for issuance (subject to adjustment pursuant to the Company’s covenant set forth in Section 5(F) below) pursuant to this Agreement. Upon issuance in accordance with this Agreement, the Securities will be validly issued, fully paid for and non-assessable and free from all taxes, liens and charges with respect to the issue thereof. In the event the Company cannot reserve a sufficient number of Shares for issuance pursuant to this Agreement, the Company will use its best efforts to authorize and reserve for issuance the number of Shares required for the Company to perform its obligations hereunder as soon as reasonably practicable.

(E) NO CONFLICTS. The execution, delivery, and performance of the Equity Line Transaction Documents by the Company and the consummation by the Company of the transactions contemplated hereby and thereby will not: (I) result in a violation of the Certificate of Incorporation, any Certificate of Designations, Preferences and Rights of any outstanding series of preferred stock of the Company, or the By-laws; or (II) conflict with, or constitute a material default (or an event which with notice or lapse of time or both would become a material default) under, or give to others any rights of termination, amendment, acceleration, or cancellation of, any material agreement, contract, indenture mortgage, indebtedness, or instrument to which the Company or any of its Subsidiaries is a party, or to the Company’s knowledge result in a violation of any law, rule, regulation, order, judgment, or decree (including federal and state securities laws and regulations and the rules and regulations of the Principal Market or principal securities exchange or trading market on which the Common Stock is to be traded or listed) applicable to the Company or any of its Subsidiaries or by which any property or asset of the Company or

any of its Subsidiaries is bound or affected. Except as disclosed in Schedule 4(e), neither the Company nor its Subsidiaries is in violation of any term of, or in default under, the Certificate of Incorporation, any Certificate of Designations, Preferences and Rights of any outstanding series of preferred stock of the Company or the By-laws or their organizational charter or by-laws, respectively, or any contract, agreement, mortgage, indebtedness, indenture, instrument, judgment, decree, or order or any statute, rule, or regulation applicable to the Company or its Subsidiaries, except for possible conflicts, defaults, terminations, amendments, accelerations, cancellations, and violations that would not individually or in the aggregate have or constitute a Material Adverse Effect. The business of the Company and its Subsidiaries is not being conducted, and shall not be conducted, in violation of any law, statute, ordinance, rule, order, or regulation of any governmental authority or agency, regulatory or self-regulatory agency, or court, except for possible violations the sanctions for which either individually or in the aggregate would not have a Material Adverse Effect. Except as specifically contemplated by this Agreement and as required under the 1933 Act, the 1934 Act, or any securities laws of any states, to the Company's knowledge, the Company is not required to obtain any consent, authorization, permit or order of, or make any filing or registration (except the filing of a registration statement as outlined in the Registration Rights Agreement between the Parties) with, any court, governmental authority or agency, regulatory or self-regulatory agency, or other third party in order for it to execute, deliver, or perform any of its obligations under, or contemplated by, the Equity Line Transaction Documents in accordance with the terms hereof or thereof. All consents, authorizations, permits, orders, filings, and registrations which the Company is required to obtain pursuant to the preceding sentence have been obtained or effected on or prior to the date hereof and are in full force and effect as of the date hereof or are pending. Except as disclosed in Schedule 4(e), the Company and its Subsidiaries are unaware of any facts or circumstances which might give rise to any of the foregoing. The Company will not be in violation of the listing requirements of the Principal Market as in effect on the date hereof and on each of the Closing Dates and is not aware of any facts which would reasonably lead to delisting of the Common Stock by the Principal Market in the foreseeable future.

(F) RESERVED.

(G) ABSENCE OF CERTAIN CHANGES. The Company does not intend to change the business operations of the Company in any material way. The Company has not taken any steps, and does not currently expect to take any steps, to seek protection pursuant to any bankruptcy law nor does the Company or its Subsidiaries have any knowledge or reason to believe that its creditors intend to initiate involuntary bankruptcy proceedings.

(H) ABSENCE OF LITIGATION AND/OR REGULATORY PROCEEDINGS. Except as set forth in Schedule 4(h), there is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company or any of its Subsidiaries, threatened

against or affecting the Company, the Common Stock or any of the Company's Subsidiaries or any of the Company's or the Company's Subsidiaries' officers or directors in their capacities as such, in which an adverse decision could have a Material Adverse Effect.

(I) ACKNOWLEDGMENT REGARDING INVESTOR'S PURCHASE OF SHARES.

The Company acknowledges and agrees that the Investor is acting solely in the capacity of an arm's length purchaser with respect to the Equity Line Transaction Documents and the transactions contemplated hereby and thereby. The Company further acknowledges that the Investor is not acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to the Equity Line Transaction Documents and the transactions contemplated hereby and thereby and any advice given by the Investor or any of its respective representatives or agents in connection with the Equity Line Transaction Documents and the transactions contemplated hereby and thereby is merely incidental to the Investor's purchase of the Securities, and is not being relied on by the Company. The Company further represents to the Investor that the Company's decision to enter into the Equity Line Transaction Documents has been based solely on the independent evaluation by the Company and its representatives.

(J) RESERVED.

(K) EMPLOYEE RELATIONS. Neither the Company nor any of its Subsidiaries is involved in any union labor dispute, nor, to the knowledge of the Company or any of its Subsidiaries, is any such dispute threatened. Neither the Company nor any of its Subsidiaries is a party to a collective bargaining agreement, and the Company and its Subsidiaries believe that relations with their employees are good. No executive officer (as defined in Rule 501(f) of the 1933 Act) has notified the Company that such officer intends to leave the Company's employ or otherwise terminate such officer's employment with the Company.

(L) INTELLECTUAL PROPERTY RIGHTS. To the Company's knowledge, the Company and its Subsidiaries own or possess adequate rights or licenses to use all trademarks, trade names, service marks, service mark registrations, service names, patents, patent rights, copyrights, inventions, licenses, approvals, governmental authorizations, trade secrets, and rights necessary to conduct their respective businesses as now conducted. Except as set forth in Schedule 4(1), to the Company's knowledge, none of the Company's trademarks, trade names, service marks, service mark registrations, service names, patents, patent rights, copyrights, inventions, licenses, approvals, government authorizations, trade secrets, or other intellectual property rights necessary to conduct its business as now or as proposed to be conducted have expired or terminated, or are expected to expire or terminate within two (2) years from the date of this Agreement. The Company and its Subsidiaries do not have any knowledge of any infringement by the Company or its Subsidiaries of trademark, trade name rights, patents,

patent rights, copyrights, inventions, licenses, service names, service marks, service mark registrations, trade secret, or other similar rights of others, or of any such development of similar or identical trade secrets or technical information by others and, except as set forth in the Schedule 4(l), there is no claim, action or proceeding being made or brought against, or to the Company's knowledge, being threatened against, the Company or its Subsidiaries regarding trademark, trade name, patents, patent rights, invention, copyright, license, service names, service marks, service mark registrations, trade secret or other infringement; and the Company and its Subsidiaries are unaware of any facts or circumstances which might give rise to any of the foregoing. The Company and its Subsidiaries have taken commercially reasonable security measures to protect the secrecy, confidentiality, and value of all of their intellectual properties.

(M) ENVIRONMENTAL LAWS. The Company and its Subsidiaries (I) are, to the knowledge of the management and directors of the Company and its Subsidiaries, in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("Environmental Laws"); (II) have, to the knowledge of the management and directors of the Company, received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses; and (III) are in compliance, to the knowledge of the management and directors of the Company, with all terms and conditions of any such permit, license or approval where, in each of the three (3) foregoing cases, the failure to so comply would have, individually or in the aggregate, a Material Adverse Effect.

(N) TITLE. The Company and its Subsidiaries have good and marketable title to all personal property owned by them which is material to the business of the Company and its Subsidiaries, in each case free and clear of all liens, encumbrances, and defects except such as are described in Schedule 4(n) or such as do not materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company or any of its Subsidiaries. Any real property and facilities held under lease by the Company or any of its Subsidiaries are held by them under valid, subsisting, and enforceable leases with such exceptions as are not material and do not interfere with the use made and proposed to be made of such property and buildings by the Company and its Subsidiaries.

(O) INSURANCE. The Company and each of its Subsidiaries, where applicable, are or will be insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as management of the Company reasonably believes to be prudent and customary in the businesses in which the Company and its Subsidiaries are engaged. Neither the Company nor any of its Subsidiaries has been refused any insurance coverage sought or applied for and neither the Company nor its Subsidiaries has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as

may be necessary to continue its business at a cost that would not have a Material Adverse Effect.

(P) REGULATORY PERMITS. The Company and its Subsidiaries have in full force and effect all certificates, approvals, authorizations, and permits from the appropriate federal, state, local, or foreign regulatory authorities and comparable foreign regulatory agencies, necessary to own, lease, or operate their respective properties and assets and conduct their respective businesses, and neither the Company nor any such Subsidiary has received any notice of proceedings relating to the revocation or modification of any such certificate, approval, authorization or permit, except for such certificates, approvals, authorizations, or permits which if not obtained, or such revocations or modifications which, would not have a Material Adverse Effect.

(Q) RESERVED.

(R) RESERVED.

(S) TAX STATUS. Except as set forth on Schedule 4(s), the Company and each of its Subsidiaries has made or filed all United States federal and state income and all other tax returns, reports, and declarations required by any jurisdiction to which it is subject (unless and only to the extent that the Company and each of its Subsidiaries has set aside on its books provisions reasonably adequate for the payment of all unpaid and unreported taxes) and has paid all taxes and other governmental assessments and charges that are Material in Amount, shown or determined to be due on such returns, reports, and declarations, except those being contested in good faith and has set aside on its books provision reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. Except as set forth on Schedule 4(s), there are no unpaid taxes in any Material Amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company know of no basis for any such claim.

(T) CERTAIN TRANSACTIONS. Except as set forth in Schedule 4(t), or filed with the SEC and/or FINRA at least ten (10) days prior to the first Put Notice, but after the Effective Date and except for arm's length transactions pursuant to which the Company makes payments in the ordinary course of business upon terms no less favorable than the Company could obtain from disinterested third parties and other than the grant of stock options disclosed in Schedule 4(t), none of the officers, directors, or employees of the Company is presently a party to any transaction with the Company or any of its Subsidiaries (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any officer, director, or such employee or, to the knowledge of the

Company, any corporation, partnership, trust, or other entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee, or partner.

(U) DILUTIVE EFFECT. The Company understands and acknowledges that the number of shares of Common Stock issuable upon purchases pursuant to this Agreement will increase in certain circumstances including, but not necessarily limited to, the circumstance wherein the trading price of the Common Stock declines during the period between the Effective Date and the end of the Open Period. The Company's executive officers and directors have studied and fully understand the nature of the transactions contemplated by this Agreement and recognize that they have a potential dilutive effect on the shareholders of the Company. The Board of Directors of the Company has concluded, in its good faith business judgment, and with full understanding of the implications, that such issuance is in the best interests of the Company. The Company specifically acknowledges that, subject to such limitations as are expressly set forth in the Equity Line Transaction Documents, its obligation to issue shares of Common Stock upon purchases pursuant to this Agreement is absolute and unconditional regardless of the dilutive effect that such issuance may have on the ownership interests of other shareholders of the Company.

(V) LOCK-UP. The Company shall cause its officers, insiders, directors, and affiliates or other related parties under control of the Company, to refrain from buying and/or selling Common Stock during each Pricing Period.

(W) NO GENERAL SOLICITATION. Neither the Company, nor any of its affiliates, nor any person acting on its behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with the offer or sale of the Common Stock to be offered as set forth in this Agreement.

(X) NO BROKERS, FINDERS OR FINANCIAL ADVISORY FEES OR COMMISSIONS. No brokers, finders, or financial advisory fees or commissions will be payable by the Company, its agents or Subsidiaries, with respect to the transactions contemplated by this Agreement, except as otherwise disclosed in this Agreement.

SECTION 5. COVENANTS OF THE COMPANY

(A) COMMERCIALLY REASONABLE EFFORTS. The Company shall use all commercially reasonable efforts to timely satisfy each of the conditions set forth in Section 7 of this Agreement.

(B) BLUE SKY. The Company shall, at its sole cost and expense, on or before each of the Closing Dates, take such action as the Company shall reasonably determine is necessary to qualify the Securities for, or obtain exemption for the Securities for, sale to the Investor at each of the Closings pursuant to this Agreement under applicable securities or “Blue Sky” laws of such states of the United States, as reasonably specified by the Investor in writing at least ten (10) days prior to each of the Closing Dates, and shall provide evidence of any such action so taken to the Investor on or prior to the Closing Date.

(C) REPORTING STATUS. At any time during this Agreement after the Effective Date, if the Company shall become registered pursuant to Section 12 of the 1934 Act, or if the Company becomes subject to the 1934 Act reporting requirements pursuant to Section 15(d) of the 1933 Act, the Company shall file all reports required to be filed with the SEC pursuant to the 1934 Act, and the Company shall not terminate its status, or take an action or fail to take any action, which would terminate its status as a reporting company under the 1934 Act, until one of the following occurs: (i) this Agreement terminates pursuant to Section 9 and the Investor has the right to sell all of the Securities without restrictions pursuant to Rule 144(b) promulgated under the 1933 Act or another applicable exemption, or (ii) the date on which the Investor has sold all the Securities and this Agreement has been terminated pursuant to Section 9.

(D) USE OF PROCEEDS. The Company will use the proceeds from the sale of the Shares (excluding amounts paid by the Company for fees as set forth in the Equity Line Transaction Documents) for general corporate and working capital purposes and acquisitions or assets, businesses or operations or for other purposes that the Board of Directors, in its good faith deem to be in the best interest of the Company.

(E) FINANCIAL INFORMATION. During the Open Period, if the Company shall become registered pursuant to Section 12 of the 1934 Act, or if the Company becomes subject to the 1934 Act reporting requirements pursuant to Section 15(d) of the 1933 Act, the Company agrees to make available to the Investor via EDGAR or other electronic means the following documents and information on the forms set forth: (I) within ten (10) Trading Days after the filing thereof with the SEC, a copy of its Annual Reports on Form 10-K, its Quarterly Reports on Form 10-Q, any Current Reports on Form 8-K and any Registration Statements or amendments filed pursuant to the 1933 Act; (II) copies of any notices and other information made available or given to the shareholders of the Company generally, contemporaneously with the making available or giving thereof to the shareholders; and (III) within ten (10) calendar days of filing or delivery thereof, copies of all documents filed with, and all correspondence sent to, the Principal Market, any securities exchange or market, or the National Association of Securities Dealers, Inc., unless such information is material nonpublic information.

(F) RESERVATION OF SHARES. The Company shall take all action necessary to at all times have authorized, and reserved for the purpose of issuance, a sufficient number of shares of Common Stock to provide for the issuance of the Securities to the Investor as required hereunder. In the event that the Company determines that it does not have a sufficient number of authorized shares of Common Stock to reserve and keep available for issuance as described in this Section 5(F), the Company shall use all commercially reasonable efforts to increase the number of authorized shares of Common Stock by seeking shareholder approval for the authorization of such additional shares.

(G) LISTING. The Company shall promptly secure or initiate, as described in the definition of Principal Markets from Section 1, and maintain the listing of all of the Registrable Securities (as defined in the Registration Rights Agreement) on the Principal Market and each other national securities exchange and automated quotation system, if any, upon which shares of Common Stock are then listed (subject to official notice of issuance) and shall maintain, such listing of all Registrable Securities from time to time issuable under the terms of the Equity Line Transaction Documents. Neither the Company nor any of its Subsidiaries shall take any action which would be reasonably expected to result in the delisting or suspension of the Common Stock on the Principal Market (excluding suspensions of not more than one (1) Trading Day resulting from business announcements by the Company). The Company shall promptly provide to the Investor copies of any notices it receives from the Principal Market regarding the continued eligibility of the Common Stock for listing on such automated quotation system or securities exchange. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 5(G).

(H) TRANSACTIONS WITH AFFILIATES. The Company shall not, and shall cause each of its Subsidiaries not to, enter into, amend, modify, or supplement, or permit any Subsidiary to enter into, amend, modify, or supplement, any agreement, transaction, commitment, or arrangement with any of its or any Subsidiary's officers, directors, persons who were officers or directors at any time during the previous two (2) years, shareholders who beneficially own 5% or more of the Common Stock, or Affiliates or with any individual related by blood, marriage or adoption to any such individual or with any entity in which any such entity or individual owns a 5% or more beneficial interest (each a "Related Party"), except for (I) customary employment arrangements and benefit programs on reasonable terms, (II) any agreement, transaction, commitment, or arrangement on an arms-length basis on terms no less favorable than terms which would have been obtainable from a disinterested third party other than such Related Party, or (III) any agreement, transaction, commitment or arrangement which is approved by a majority of the disinterested directors of the Company. For purposes hereof, any director who is also an officer of the Company or any Subsidiary of the Company shall not be a disinterested director with respect to any such agreement, transaction, commitment, or arrangement. "Affiliate" for purposes hereof means, with respect to any person or entity, another person or entity that, directly or indirectly, (I) has a 5% or more equity interest in that person or entity, (II) has 5% or more common ownership with that person or entity,

(III) controls that person or entity, or (IV) is under common control with that person or entity. “Control” or “Controls” for purposes hereof means that a person or entity has the power, directly or indirectly, to conduct or govern the policies of another person or entity.

(I) RESERVED.

(J) CORPORATE EXISTENCE. The Company shall use all commercially reasonable efforts to preserve and continue the corporate existence of the Company.

(K) NOTICE OF CERTAIN EVENTS AFFECTING REGISTRATION; SUSPENSION OF RIGHT TO MAKE A PUT. The Company shall promptly notify the Investor upon the occurrence of any of the following events in respect of a Registration Statement or related prospectus in respect of an offering of the Securities: (I) receipt of any request for additional information by the SEC or any other federal or state governmental authority during the period of effectiveness of the Registration Statement for amendments or supplements to the Registration Statement or related prospectus; (II) the issuance by the SEC or any other federal or state governmental authority of any stop order suspending the effectiveness of any Registration Statement or the initiation of any proceedings for that purpose; (III) receipt of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Securities for sale in any jurisdiction or the initiation or notice of any proceeding for such purpose; (IV) the happening of any event that makes any statement made in such Registration Statement or related prospectus or any document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires the making of any changes in the Registration Statement, related prospectus or documents so that, in the case of a Registration Statement, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, and that in the case of the related prospectus, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; and (V) the Company’s reasonable determination that a post-effective amendment to the Registration Statement would be appropriate, and the Company shall promptly make available to Investor any such supplement or amendment to the related prospectus. The Company shall not deliver to Investor any Put Notice during the continuation of any of the foregoing events in this Section 5(K).

(L) REIMBURSEMENT. If (I) the Investor becomes involved in any capacity in any action, proceeding or investigation brought by any shareholder of the Company, in connection with or as a result of the consummation of the transactions contemplated by the Equity Line Transaction Documents, or if the Investor is impleaded in any such action, proceeding or investigation by any person (other than as a result of a breach of the Investor’s representations and warranties set forth in this Agreement); or (II) the Investor

becomes involved in any capacity in any action, proceeding or investigation brought by the SEC against or involving the Company or in connection with or as a result of the consummation of the transactions contemplated by the Equity Line Transaction Documents (other than as a result of a breach of the Investor's representations and warranties set forth in this Agreement), or if this Investor is impleaded in any such action, proceeding or investigation by any person, then in any such case, the Company will reimburse the Investor for its reasonable legal and other expenses (including the cost of any investigation and preparation) incurred in connection therewith, as such expenses are incurred. In addition, other than with respect to any matter in which the Investor is a named party, the Company will pay to the Investor the charges, as reasonably determined by the Investor, for the time of any officers or employees of the Investor devoted to appearing and preparing to appear as witnesses, assisting in preparation for hearings, trials or pretrial matters, or otherwise with respect to inquiries, hearing, trials, and other proceedings relating to the subject matter of this Agreement. The reimbursement obligations of the Company under this section shall be in addition to any liability which the Company may otherwise have, shall extend upon the same terms and conditions to any affiliates of the Investor that are actually named in such action, proceeding or investigation, and partners, directors, agents, employees, attorneys, accountants, auditors and controlling persons (if any), as the case may be, of Investor and any such affiliate, and shall be binding upon and inure to the benefit of any successors of the Company, the Investor and any such affiliate and any such person.

(M) TRANSFER AGENT. Upon effectiveness of the Registration Statement, and for so long as the Registration Statement is effective, the Company shall deliver instructions to its transfer agent to issue Shares to the Investor that are subject to a Put and are covered for resale by the Registration Statement free of restrictive legends.

(N) ACKNOWLEDGEMENT OF TERMS. The Company hereby represents and warrants to the Investor that: (i) it is voluntarily entering into this Agreement of its own freewill, (ii) it is not entering this Agreement under economic duress, (iii) the terms of this Agreement are reasonable and fair to the Company, and (iv) the Company has had independent legal counsel of its own choosing review this Agreement, advise the Company with respect to this Agreement, and represent the Company in connection with this Agreement.

SECTION 6. RESERVED

SECTION 7. CONDITIONS OF THE COMPANY'S OBLIGATION TO SELL.

The obligation hereunder of the Company to issue and sell the Securities to the Investor is further subject to the satisfaction, at or before each Closing Date, of each of the following conditions set forth below. These conditions are for the Company's sole benefit and may be waived by the Company at any time in its sole discretion.

(A) The Investor shall have executed this Agreement and the Registration Rights Agreement and delivered the same to the Company.

(B) The Investor shall have delivered to the Company the Purchase Price for the Securities being purchased by the Investor between the end of the Pricing Period and the Closing Date via a Put Settlement Sheet (attached hereto as Exhibit D).

(C) The representations and warranties of the Investor shall be true and correct in all material respects as of the date when made and as of the applicable Closing Date as though made at that time and the Investor shall have performed, satisfied, and complied in all material respects with the covenants, agreements, and conditions required by the Equity Line Transaction Documents to be performed, satisfied, or complied with by the Investor on or before such Closing Date.

(D) No statute, rule, regulation, executive order, decree, ruling, or injunction shall have been enacted, entered, promulgated, or endorsed by any court or governmental authority of competent jurisdiction which prohibits the consummation of any of the transactions contemplated by this Agreement.

SECTION 8. FURTHER CONDITIONS OF THE INVESTOR'S OBLIGATION TO PURCHASE.

The obligation of the Investor hereunder to purchase Shares is subject to the satisfaction, on or before each Closing Date, of each of the following conditions set forth below.

(A) The Company shall have executed the Equity Line Transaction Documents and delivered the same to the Investor.

(B) The Common Stock shall be authorized for quotation on the Principal Market and trading in the Common Stock shall not have been suspended by the Principal Market or the SEC, at any time beginning on the date hereof and through and including the respective Closing Date (excluding suspensions of not more than one (1) Trading Day resulting from business announcements by the Company, provided that such suspensions occur prior to the Company's delivery of the Put Notice related to such Closing).

(C) The representations and warranties of the Company shall be true and correct as of the date when made and as of the applicable Closing Date as though made at that time and the Company shall have performed, satisfied and complied with the covenants, agreements, and conditions required by the Equity Line Transaction Documents to be performed, satisfied or complied with by the Company on or before such Closing Date.

The Investor may request an update as of such Closing Date regarding the representation contained in Section 4(C) above.

(D) The Company shall have executed and delivered to the Investor the certificates representing, or have executed electronic book-entry transfer of, the Securities (in such denominations as the Investor shall request) being purchased by the Investor at such Closing.

(E) The Board of Directors of the Company shall have adopted resolutions consistent with Section 4(B)(II) above (the "Resolutions") and such Resolutions shall not have been amended or rescinded prior to such Closing Date.

(F) RESERVED

(G) No statute, rule, regulation, executive order, decree, ruling, or injunction shall have been enacted, entered, promulgated, or endorsed by any court or governmental authority of competent jurisdiction which prohibits the consummation of any of the transactions contemplated by this Agreement.

(H) The Registration Statement shall be effective on each Closing Date and no stop order suspending the effectiveness of the Registration Statement shall be in effect or, to the Company's knowledge, shall be pending or threatened. Furthermore, on each Closing Date (I) neither the Company nor the Investor shall have received notice that the SEC has issued or intends to issue a stop order with respect to such Registration Statement or that the SEC otherwise has suspended or withdrawn the effectiveness of such Registration Statement, either temporarily or permanently, or intends or has threatened to do so (unless the SEC's concerns have been addressed and Investor is reasonably satisfied that the SEC no longer is considering or intends to take such action), and (II) no other suspension of the use or withdrawal of the effectiveness of such Registration Statement or related prospectus shall exist.

(I) At the time of each Closing, the Registration Statement (including information or documents incorporated by reference therein) and any amendments or supplements thereto shall not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading or which would require public disclosure or an update supplement to the prospectus.

(J) If applicable, the shareholders of the Company shall have approved the issuance of any Shares in excess of the Maximum Common Stock Issuance in accordance with Section 2(H) or the Company shall have obtained appropriate approval pursuant to the

requirements of the State of Maryland and the Company's Articles of Incorporation and By-laws.

(K) The conditions to such Closing set forth in Section 2(E) shall have been satisfied on or before such Closing Date.

(L) The Company shall have certified to the Investor the number of Shares of Common Stock outstanding when a Put Notice is given to the Investor. The Company's delivery of a Put Notice to the Investor constitutes the Company's certification of the existence of the necessary number of shares of Common Stock reserved for issuance.

SECTION 9. TERMINATION.

A. This Agreement shall terminate upon any of the following events:

(I) when the Investor has purchased an aggregate of twenty five million dollars (\$25,000,000) in the Common Stock of the Company pursuant to this Agreement; or,

(II) on the date which is eighteen (18) months after the Execution Date; or,

(III) upon written notice of the Company to the Investor. Any and all shares, or penalties, if any, due under this Agreement shall be immediately payable and due upon termination of the Line.

B. This Agreement may terminate upon any of the following events:

(I) Termination for Default. In the event that either party commits a material breach of its obligations hereunder, the other party may, at its option, terminate this Agreement by written notice of termination specifying such material breach; provided, however, that if such default is subject to cure, then such notice shall be subject to a twenty (20) day cure period from the date thereof, and if the defaulting party cures such default prior to expiration of such period, termination shall not take place.

(II) Termination for Insolvency. Either party hereto may, at its option, upon five (5) days written notice, terminate this Agreement should the other party hereto (i) admit in writing its inability to pay its debts generally as they become due; (ii) make a general assignment for the benefit of creditors; (iii) institute proceedings to be adjudicated a voluntary bankrupt, or consent to the filing of a petition of bankruptcy against it; (iv) be adjudicated by a court of competent

jurisdiction as being bankrupt or insolvent; (v) seek reorganization under any bankruptcy act, or consent to the filing of a petition seeking such reorganization, or (vi) have a decree entered against it by a court of competent jurisdiction appointing a receiver, liquidator, trustee or assignee in bankruptcy or in insolvency covering all or substantially all of such party's property or providing for the liquidation of such party's property or business affairs.

- C. Survival of Termination. The obligations of the parties under this Agreement that by their nature would continue beyond expiration, termination or cancellation of this Agreement (including, without limitation, the warranties, indemnification obligations, confidentiality requirements and ownership and property rights) shall survive any such expiration, termination or cancellation.

SECTION 10. SUSPENSION

This Agreement shall be suspended upon any of the following events, and shall remain suspended until such event is rectified:

(I) the trading of the Common Stock is suspended by the SEC, the Principal Market or FINRA for a period of two (2) consecutive Trading Days during the Open Period; or,

(II) the Common Stock ceases to be registered under the 1934 Act or listed or traded on the Principal Market.

Immediately upon the occurrence of one of the above-described events, the Company shall send written notice of such event to the Investor.

SECTION 11. INDEMNIFICATION

- (A) In consideration of the parties mutual obligations set forth in the Transaction Documents, each of the parties (in such capacity, an "Indemnitor") shall defend, protect, indemnify, and hold harmless the other and all of the other party's shareholders, officers, directors, employees, counsel, and direct or indirect investors and any of the foregoing person's agents or other representatives (including, without limitation, those retained in connection with the transactions contemplated by this Agreement) (collectively, the "Indemnitees") from and against any and all actions, causes of action, suits, claims, losses, costs, penalties, fees, liabilities, and damages, and reasonable expenses in connection therewith (irrespective of whether any such Indemnitee is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys' fees and disbursements (the "Indemnified Liabilities"), incurred by any Indemnitee as a result of, or arising out of, or relating to (I) any misrepresentation or breach of any representation or warranty made by the Indemnitor or any other certificate,

instrument, or document contemplated hereby or thereby; (II) any breach of any covenant, agreement, or obligation of the Indemnitor contained in the Equity Line Transaction Documents or any other certificate, instrument, or document contemplated hereby or thereby; or (III) any cause of action, suit, or claim brought or made against such Indemnitee by a third party and arising out of or resulting from the execution, delivery, performance, or enforcement of the Equity Line Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, except insofar as any such misrepresentation, breach or any untrue statement, alleged untrue statement, omission or alleged omission is made in reliance upon and in conformity with information furnished to Indemnitor which is specifically intended for use in the preparation of any such Registration Statement, preliminary prospectus, prospectus or amendments to the prospectus. To the extent that the foregoing undertaking by the Indemnitor may be unenforceable for any reason, the Indemnitor shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities which is permissible under applicable law. The indemnity provisions contained herein shall be in addition to any cause of action or similar rights Indemnitor may have, and any liabilities to which the Indemnitor or the Indemnitees may be subject.

- (B) Promptly after receipt by an Indemnitee under this Section 11 of notice of any action or proceeding (including any governmental action or proceeding) involving an indemnifiable claim, such Indemnitee shall, if a claim in respect thereof is to be made against Indemnitor under this Section 11, deliver to Indemnitor a written notice thereof, and Indemnitor shall have the right to participate in, and, to the extent Indemnitor so desires to assume control of the defense thereof with counsel mutually satisfactory to Indemnitor and Indemnitee; provided, however, that an Indemnitee, shall have the right to retain its own counsel with the fees and expenses to be paid by Indemnitor, if, in the reasonable opinion of counsel retained by Indemnitee, the representation by counsel of Indemnitee and Indemnitor would be inappropriate due to actual or potential differing interests between such Indemnitee and any other party represented by such counsel in such proceeding. Indemnitor shall pay for only one (1) separate legal counsel for Indemnitee(s), as applicable selected by it. Indemnitee shall cooperate fully with Indemnitor in connection with any negotiation or defense of any such action or claim by Indemnitor and shall furnish to Indemnitor all information reasonably available to Indemnitee which relates to such action or claim. Indemnitor shall keep Indemnitee fully apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. Indemnitor shall not be liable for any settlement of any action, claim or proceeding affected without its written consent; provided, however, that Indemnitor shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the consent of Indemnitee, consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnitee of a release from all liability in respect to such claim. Following indemnification as provided for hereunder,

Indemnitor shall be subrogated to all rights of Indemnitee with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to Indemnitor within a reasonable time of the commencement of any such action shall not relieve Indemnitor of any liability to Indemnitee under this Section 11, except to the extent that Indemnitor is prejudiced in its ability to defend such action.

SECTION 12. GOVERNING LAW.

(A) **GOVERNING LAW.** All disputes arising under this agreement shall be governed by and interpreted in accordance with the laws of New York, without regard to principles of conflict of laws.

(B) **LEGAL FEES AND MISCELLANEOUS FEES.** Except as otherwise set forth in the Equity Line Transaction Documents, each party shall pay the fees and expenses of its advisers, counsel, the accountants and other experts, if any, and all other expenses incurred by such party incident to the negotiation, preparation, execution, delivery, and performance of this Agreement. Any attorneys' fees and expenses incurred by either the Company or the Investor relating to the enforcement of the rights of any party, after the occurrence of any breach of the terms of this Agreement by another party or any default by another party in respect of the transactions contemplated hereunder, shall be paid on demand by the party which breached the Agreement and/or defaulted, as the case may be. The Company shall pay all stamp and other taxes and duties levied in connection with the issuance of any Securities.

(C) **COUNTERPARTS.** This Agreement may be executed in two or more identical counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party; provided, however, that a .PDF signature shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original signature.

(D) **HEADINGS; SINGULAR/PLURAL.** The headings of this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement. Whenever required by the context of this Agreement, the singular shall include the plural and masculine shall include the feminine.

(E) **SEVERABILITY.** If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction.

(F) ENTIRE AGREEMENT; AMENDMENTS. This Agreement is the final agreement between the Company and the Investor with respect to the terms and conditions set forth herein, and, the terms of this Agreement may not be contradicted by evidence of prior, contemporaneous, or subsequent oral agreements of the Parties. No provision of this Agreement may be amended other than by an instrument in writing signed by the Company and the Investor, and no provision hereof may be waived other than by an instrument in writing signed by the party against whom enforcement is sought. The execution and delivery of the Equity Line Transaction Documents shall not alter the force and effect of any other agreements between the Parties, and the obligations under those agreements.

(G) NOTICES. Any notices or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered (I) upon receipt, when delivered personally; (II) upon receipt, when sent by facsimile (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); or (III) one (1) day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses and facsimile numbers for such communications shall be:

If to the Company:

Vaccinogen, Inc.
5300 Westview Drive, Suite 406
Frederick, MD 21703
Fax: (301) 631-2970

with a copy to:

Indeglia & Carney
1900 Main Street, Suite 300
Irvine, CA 92614
marc@indegliacarney.com
Fax: (949) 861-3324

If to the Investor:

Kodiak Capital Group, LLC
260 Newport Center Drive, Suite 100
Newport Beach, CA 92660
ryan@kodiak-capital.com

Each party shall provide five (5) days prior written notice to the other party of any change in address, facsimile number, or e-mail address.

(H) NO ASSIGNMENT. This Agreement may not be assigned.

(I) NO THIRD PARTY BENEFICIARIES. This Agreement is intended for the benefit of the parties hereto and is not for the benefit of, nor may any provision hereof be enforced by, any other person, except that the Company acknowledges that the rights of the Investor may be enforced by its general partner.

(J) SURVIVAL. The representations and warranties of the Company and the Investor contained in Sections 2 and 3, the agreements and covenants set forth in Sections 4 and 5, and the indemnification provisions set forth in Section 11, shall survive each of the Closings and the termination of this Agreement.

(K) PUBLICITY. The Company and the Investor shall consult with each other in issuing any press releases or otherwise making public statements with respect to the transactions contemplated hereby and no party shall issue any such press release or otherwise make any such public statement without the prior consent of the other party, which consent shall not be unreasonably withheld or delayed, except that no prior consent shall be required if such disclosure is required by law, in which such case the disclosing party shall provide the other party with prior notice of such public statement. Notwithstanding the foregoing, the Company shall not publicly disclose the name of the Investor without the prior consent of the Investor, except to the extent required by law. The Investor acknowledges that this Agreement and all or part of the Equity Line Transaction Documents may be deemed to be "material contracts" as that term is defined by Item 601(b)(10) of Regulation S-K, and that the Company may therefore be required to file such documents as exhibits to reports or registration statements filed under the 1933 Act or the 1934 Act. The Investor further agrees that the status of such documents and materials as material contracts shall be determined solely by the Company, in consultation with its counsel.

(L) FURTHER ASSURANCES. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments, and documents, as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

(M) COMMITMENT FEES; OTHER FEES RELATED TO THE TRANSACTION. In addition to the Shares to be issued pursuant to the Facility Amount, the Company agrees to issue additional shares as follows:

- (I) the Company shall be solely responsible for all commissions, fees and / or transaction costs associated and / or related to, in any way, with the transaction and / or transactions herein contemplated and or agreed to under this Agreement.
- (II) the Company shall pay to the Investor the balance of the Document Preparation Fee of \$25,000 on the Execution Date for the preparation of the Agreement.
- (III) the Company shall issue to the Investor 236,364 Shares of Common Stock (the "Commitment Shares") on the Execution Date, pursuant to Section 4(2) of the 1933 Act.

(N) NO STRICT CONSTRUCTION. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party, as the parties mutually agree that each has had a full and fair opportunity to review this Agreement and seek the advice of counsel on it. The normal rule that ambiguities shall be interpreted against the drafting party shall not apply in the instant case.

(O) REMEDIES. The Investor shall have all rights and remedies set forth in this Agreement and the Registration Rights Agreement and all rights and remedies which such holders have been granted at any time under any other agreement or contract and all of the rights which the Investor has by law. Any person having any rights under any provision of this Agreement shall be entitled to enforce such rights specifically (without posting a bond or other security), to recover damages by reason of any default or breach of any provision of this Agreement, including the recovery of reasonable attorney's fees and costs, and to exercise all other rights granted by law.

(P) PAYMENT SET ASIDE. To the extent that the Company makes a payment or payments to the Investor hereunder or under the Registration Rights Agreement or the Investor enforces or exercises its rights hereunder or thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other person under any law (including, without limitation, any bankruptcy law, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

(Q) PRICING OF COMMON STOCK. For purposes of this Agreement, the lowest daily VWAP of the Common Stock shall be as reported on Bloomberg.

SECTION 13. NON-DISCLOSURE OF NON-PUBLIC INFORMATION.

(A) Once the Company has secured, initiated, and maintained the listing or quotation of the Shares on the Principal Market and each other national securities exchange and automated quotation system, the Company shall not disclose non-public information to the Investor, its advisors, or its representatives.

(B) Nothing herein shall require the Company, once it has secured, initiated, and maintained the listing of the Shares on the Principal Market and each other national securities exchange and automated quotation system, to disclose non-public information to the Investor or its advisors or representatives, and the Company represents that it does not disseminate non-public information to any investors who purchase stock in the Company in a public offering, to money managers or to securities analysts, provided, however, that notwithstanding anything herein to the contrary, the Company will, as hereinabove provided, immediately notify the advisors and representatives of the Investor and, if any, underwriters, of any event or the existence of any circumstance (without any obligation to disclose the specific event or circumstance) of which it becomes aware, constituting non-public information (whether or not requested of the Company specifically or generally during the course of due diligence by such persons or entities), which, if not disclosed in the prospectus included in the Registration Statement would cause such prospectus to include a material misstatement or to omit a material fact required to be stated therein in order to make the statements, therein, in light of the circumstances in which they were made, not misleading. Nothing contained in this Section 13 shall be construed to mean that such persons or entities other than the Investor (without the written consent of the Investor prior to disclosure of such information) may not obtain non-public information in the course of conducting due diligence in accordance with the terms of this Agreement and nothing herein shall prevent any such persons or entities from notifying the Company of their opinion that based on such due diligence by such persons or entities, that the Registration Statement contains an untrue statement of material fact or omits a material fact required to be stated in the Registration Statement or necessary to make the statements contained therein, in light of the circumstances in which they were made, not misleading.

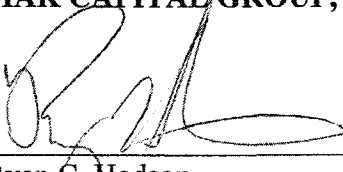
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SIGNATURE PAGE OF INVESTMENT AGREEMENT

Your signature on this Signature Page evidences your agreement to be bound by the terms and conditions of the Investment Agreement as of the date first written above.

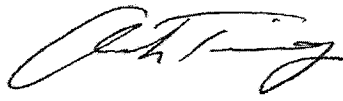
The undersigned signatory hereby certifies that he has read and understands the Investment Agreement, and the representations made by the undersigned in this Investment Agreement are true and accurate, and agrees to be bound by its terms.

KODIAK CAPITAL GROUP, LLC

By: 

Ryan C. Hodson
Managing Director

VACCINOGEN, INC.


By: _____
Andrew L. Tussing
President & Chief Operating Officer



By: _____
Michael G. Hanna, Jr., Ph.D.
Chairman & Interim Chief Executive Officer

EXHIBIT 6.6

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

INVESTMENT AGREEMENT

THIS INVESTMENT AGREEMENT (hereinafter referred to as the “Agreement”), dated as of January 16, 2013 (“Execution Date”) by and between Vaccinogen, Inc., a Maryland corporation (hereinafter referred to as the “Company”), and The Abell Foundation, Inc., a Maryland nonstock corporation (hereinafter referred to as the “Investor”).

WHEREAS, the parties desire that, upon the terms and subject to the conditions contained herein, the Investor shall invest up to five million dollars (\$5,000,000) to purchase the Company’s Common Stock, \$0.0001 par value per share (the “Common Stock”); and

WHEREAS, such investments will be made in reliance upon the provisions of Section 4(2) under the Securities Act of 1933, as amended (the “1933 Act”), Rule 506 of Regulation D, and the rules and regulations promulgated thereunder, and/or upon such other exemption from the registration requirements of the 1933 Act as may be available with respect to any or all of the investments in Common Stock to be made hereunder; and

NOW THEREFORE, in consideration of the foregoing recitals, which shall be considered an integral part of this Agreement, the covenants and agreements set forth hereafter, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Company and the Investor hereby agree as follows:

SECTION 1. DEFINITIONS.

As used in this Agreement, the following terms shall have the following meanings specified or indicated below, and such meanings shall be equally applicable to the singular and plural forms of such defined terms.

“**1933 Act**” shall have the meaning set forth in the preamble of this agreement.

“**1934 Act**” shall mean the Securities Exchange Act of 1934, as it may be amended.

“**Affiliate**” shall have the meaning specified in Section 5(G), below.

“**Agreement**” shall mean this Investment Agreement.

“**By-laws**” shall have the meaning specified in Section 4(C).

“**Certificate of Incorporation**” shall have the meaning specified in Section 4(C).

“Closing” shall have the meaning specified in Section 2(D).

“Closing Date” shall mean no more than five (5) Trading Days following an Option Notice Date.

“Common Stock” shall have the meaning set forth in the preamble of this Agreement.

“Company” shall mean Vaccinogen, Inc., a Maryland corporation.

“Control” or **“Controls”** shall have the meaning specified in Section 5(G).

“Environmental Laws” shall have the meaning specified in Section 4(K).

“Equity Line Transaction Documents” shall mean this Agreement and all documents and agreements now or hereafter executed in connection herewith, as the same may from time to time be amended, supplemented, extended, renewed, replaced or otherwise modified.

“Execution Date” shall mean the date indicated in the preamble to this Agreement.

“Facility Amount” shall have the meaning specified in Section 2(A).

“Indemnities” shall have the meaning specified in Section 9.

“Indemnified Liabilities” shall have the meaning specified in Section 9.

“Investor” shall have the meaning indicated in the preamble of this Agreement.

“Kodiak Capital” shall mean Kodiak Capital Group, LLC.

“Maryland Loan” shall mean a forgivable loan to the Company from the State of Maryland.

“Material Adverse Effect” shall have the meaning specified in Section 4(A).

“Material Amount” or **“Material in Amount”** shall mean greater than \$10,000.

“Note Purchase Agreement” shall mean that certain Note and Warrant Purchase Agreement dated October 26, 2011, by and between the Company and the Investor, as the same has been and hereafter may be amended, supplemented, extended, renewed, replaced or otherwise modified.

“Option” shall have the meaning set forth in Section 2(B) hereof.

“Option Amount” shall have the meaning set forth in Section 2(B) hereof.

“Option Notice” shall mean a written notice sent by the Investor to the Company stating the Option Amount in U.S. dollars the Investor intends to purchase from the Company pursuant to the terms of this Agreement.

“Option Notice Date” shall mean the Trading Day, as set forth below, on which the Company receives an Option Notice; however, an Option Notice shall be deemed delivered on (a) the Trading Day it is received by facsimile or otherwise by the Company if such notice is received prior to 9:00 am Eastern Time, or (b) the immediately succeeding Trading Day if it is received by facsimile or otherwise after 9:00 am Eastern Time on a Trading Day. No Option Notice may be deemed delivered on a day that is not a Trading Day.

“Principal Market” shall mean the American Stock Exchange, Inc., the National Association of Securities Dealers, Inc. Over-the-Counter Bulletin Board, the NASDAQ National Market System or the NASDAQ SmallCap Market, whichever is the principal market on which the Common Stock will be listed pursuant to the Company’s plans to become a fully-reporting publicly-listed Company on a Principal Market.

“Purchase Amount” shall mean the total amount being paid by the Investor on a particular Closing Date to purchase the Securities.

“Purchase Price” shall mean the lowest price paid by any purchaser of Shares in the Venture Capital Financing.

“Related Party” shall have the meaning specified in Section 5(G).

“Resolution” shall have the meaning specified in Section 7(E).

“SEC” shall mean the U.S. Securities & Exchange Commission.

“Securities” shall mean the Shares issued pursuant to the terms of the Agreement.

“Shares” shall mean the shares of the Company’s Common Stock.

“Subsidiaries” shall have the meaning specified in Section 4(A).

“Term Sheet” shall mean an executed instrument between the parties hereto containing the terms of this and other agreements between the parties, and is hereby incorporated by reference. If any conflict exists between the terms or provisions of the Term Sheet and this Agreement, the latter shall prevail.

“Trading Day” shall mean any day on which the Principal Market for the Common Stock is open for trading, from the hours of 9:30 am until 4:00 pm.

“Venture Capital Financing” shall mean shall mean the first transaction or series of transactions to occur after the date hereof involving the issuance or sale of Shares that would result in at least \$35,000,000 in aggregate gross proceeds to the Company; provided, however, that the indicated amount representing the Venture Capital Financing shall be reduced dollar-for-dollar by the principal amount of the indebtedness incurred by the Company with respect to the Maryland Loan (in no event to exceed \$2,000,000).

SECTION 2. PURCHASE AND SALE OF COMMON STOCK.

(A) **PURCHASE AND SALE OF COMMON STOCK.** From time to time, subject to the terms and conditions set forth herein and in the other Equity Line Transaction Documents and in accordance with the procedure described in this Section 2, at the request of the Investor in its sole discretion, the Company shall issue and sell to the Investor, and the Investor shall purchase from the Company, up to that number of Shares having an aggregate Purchase Price not to exceed five million dollars (\$5,000,000) (the “Facility Amount”).

(B) **DELIVERY OF OPTION NOTICES.** The Investor may from time to time in its sole discretion, deliver an Option Notice to the Company which states the dollar amount (designated in U.S. Dollars) (the “Option Amount”) which the Investor intends to invest for the purpose of purchasing Shares from the Company on a Closing Date (the “Option”). The Option Notice shall be in the form attached hereto as Exhibit A and incorporated herein by reference. The Option Amount shall be up to an aggregate amount of five million dollars (\$5,000,000). The Purchase Price for the Common Stock identified in the Option Notice shall be the Purchase Price.

(C) **CONDITIONS TO INVESTOR’S PURCHASE OF SHARES.** Notwithstanding anything to the contrary in this Agreement, it is understood and agreed that the Investor shall not deliver an Option Notice, and shall have no obligation to purchase any Shares pursuant to any Option Notice delivered by it, unless each of the following conditions are satisfied or waived by it in writing:

(I) the Company shall have received gross proceeds of at least twenty-five million dollars (\$25,000,000) under that certain Investment Agreement dated July 18, 2012 with Kodiak Capital;

(II) after the date hereof, the Company shall have received gross proceeds from the sale of Shares of at least ten million dollars (\$10,000,000) from investors other than Kodiak Capital; provided, however, that the required amount of gross proceeds received from the sale of Shares shall be reduced dollar-for-dollar by the principal amount of the

indebtedness incurred by the Company with respect to the Maryland Loan (in no event to exceed \$2,000,000);

(III) the Company shall have complied with its obligations and is otherwise not in breach of or in default under this Agreement, under the Note Purchase Agreement or under any other agreement executed in connection herewith or therewith;

(IV) no injunction shall have been issued and remain in force, or action commenced by a governmental authority which has not been stayed or abandoned, prohibiting the purchase or the issuance of the Securities; and

(V) with respect to all Options, the issuance of the Securities will not violate any shareholder approval requirements of the Principal Market to the extent applicable.

(D) MECHANICS OF PURCHASE OF SHARES BY INVESTOR. Subject to the satisfaction of the conditions set forth in Sections 2(C), 6, and 7, the closing of the purchase by the Investor of Securities pursuant to an Option Notice (a "Closing") shall occur on the date which is no later than five (5) Trading Days following the applicable Option Notice Date (each a "Closing Date"). Prior to or on each Closing Date, (I) the Investor shall deliver to the Company the Purchase Price to be paid for such Securities, and (II) the Company shall deliver to the Investor certificates representing the Securities to be issued to the Investor on such date and registered in the name of the Investor. In lieu of delivering physical certificates representing the Securities, and provided that the Company's transfer agent is then participating in the Depository Trust Company ("DTC") Fast Automated Securities Transfer ("FAST") program, upon request of the Investor, the Company shall use commercially reasonable efforts to cause its transfer agent to electronically transmit the Securities by crediting the account of the Investor's prime broker (as specified by the Investor within a reasonable in advance of the Investor's notice) with DTC through its Deposit Withdrawal Agent Commission ("DWAC") system.

SECTION 3. INVESTOR'S REPRESENTATIONS, WARRANTIES, AND COVENANTS.

The Investor represents and warrants to the Company, and covenants, as follows:

(A) SOPHISTICATED INVESTOR. The Investor has, by reason of its business and financial experience, such knowledge, sophistication, and experience in financial and business matters and in making investment decisions of this type that it is capable of (I) evaluating the merits and risks of an investment in the Securities and making an informed

investment decision; (II) protecting its own interest; and (III) bearing the economic risk of such investment for an indefinite period of time.

(B) AUTHORIZATION; ENFORCEMENT. The Investor has the requisite power and authority to enter into and perform this Agreement. The execution and delivery of this Agreement by the Investor and the consummation by it of the transactions contemplated hereby and thereby have been duly and validly authorized by the Investor, and no further consent or authorization is required by its Board of Trustees. This Agreement has been duly and validly authorized, executed, and delivered on behalf of the Investor and is a valid and binding agreement of the Investor enforceable against the Investor in accordance with its terms, subject as to enforceability to general principles of equity and to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies.

(C) SECTION 9 OF THE 1934 ACT. During the term of this Agreement, the Investor will comply with the provisions of Section 9 of the 1934 Act, and the rules promulgated thereunder, with respect to transactions involving the Common Stock. The Investor agrees not to sell the Company's stock short, either directly or indirectly through its affiliates, principals or advisors during the term of this Agreement.

(D) ACCREDITED INVESTOR. Investor is an "Accredited Investor" as that term is defined in Rule 501(a) of Regulation D of the 1933 Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act.

(E) NO CONFLICTS. The execution, delivery, and performance of the Equity Line Transaction Documents by the Investor and the consummation by the Investor of the transactions contemplated hereby and thereby will not (I) result in a violation of the limited liability company operating agreement or other organizational documents of the Investor, or (II) conflict with, or constitute a material default (or an event which, with notice or lapse of time or both would become a material default) under, or give to others any rights of termination, amendment, acceleration, or cancellation of, any material agreement, contract, indenture mortgage, indebtedness, or instrument to which the Investor is a party, or to the Investor's knowledge, result in a violation of any law, rule, regulation, order, judgment, or decree (including federal and state securities laws and regulations) applicable to the Investor or by which any property or asset of the Investor is bound or affected.

(F) OPPORTUNITY TO DISCUSS. The Investor has received all materials relating to the Company's business, finance and operations, which it has requested. The Investor has had an opportunity to discuss the business, management, and financial affairs of the Company and the terms and conditions of this Agreement and the merits and risks of

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investing in the Securities with the Company's management sufficient to enable it to evaluate its investment. The Investor has had the opportunity to obtain such additional information that the Company possesses or can acquire without unreasonable effort or expense that is necessary to make an informed investment decision with respect to the investment.

(G) INVESTMENT PURPOSES. The Investor is purchasing the Securities for its own account for investment purposes and not with a view towards distribution and agrees to resell or otherwise dispose of the Securities solely in accordance with the registration provisions of the 1933 Act (or pursuant to an exemption from such registration provisions).

(H) NO REGISTRATION AS A DEALER. The Investor is not and will not be required to be registered as a "dealer" under the 1934 Act, either as a result of its execution and performance of its obligations under this Agreement or otherwise.

(I) GOOD STANDING. The Investor is a corporation, duly formed, validly existing, and in good standing in the State of Maryland.

(J) TAX LIABILITIES. The Investor understands that it is liable for its own tax liabilities.

(K) REGULATION M. The Investor will comply with Regulation M under the 1934 Act, if applicable.

(L) INVESTOR FUNDS. The Investor has, and will have at each Closing, all funds or financing in place necessary to pay and deliver to the Company the cash Purchase Price as contemplated hereby.

SECTION 4. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

Except as set forth in the Schedules attached hereto, or as may be disclosed from time to time by the Company to the Investor in writing after the Execution Date, the Company represents and warrants to the Investor, and covenants, as follows:

(A) ORGANIZATION AND QUALIFICATION. The Company is a corporation duly organized and validly existing in good standing under the laws of the State of Maryland, and has the requisite corporate power and authorization to own its properties and to carry on its business as now being conducted. Both the Company and the companies it owns or

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controls (“Subsidiaries”) are duly qualified to do business and are in good standing in every jurisdiction in which its ownership of property or the nature of the business conducted by it makes such qualification necessary, except to the extent that the failure to be so qualified or be in good standing would not have a Material Adverse Effect. As used in this Agreement, “Material Adverse Effect” means any material adverse effect on the business, properties, assets, operations, results of operations, financial condition or prospects of the Company and its Subsidiaries, if any, taken as a whole, or on the transactions contemplated hereby or by the agreements and instruments to be entered into in connection herewith, or on the authority or ability of the Company to perform its obligations under any of the Equity Line Transaction Documents.

(B) AUTHORIZATION; ENFORCEMENT; COMPLIANCE WITH OTHER INSTRUMENTS.

(I) The Company has the requisite corporate power and authority to enter into and perform this Agreement and the other Equity Line Transaction Documents to issue the Securities in accordance with the terms hereof and thereof.

(II) The execution and delivery of the Equity Line Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby, including, without limitation, the reservation for issuance and the issuance of the Securities pursuant to this Agreement, have been duly and validly authorized by the Company’s Board of Directors, and no further consent or authorization is required by the Company, its Board of Directors or its shareholders.

(III) The Equity Line Transaction Documents have been duly and validly executed and delivered by the Company.

(IV) The Equity Line Transaction Documents constitute the valid and binding obligations of the Company enforceable against the Company in accordance with their terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of creditors’ rights and remedies.

(C) CAPITALIZATION.

Except as disclosed in Schedule 4(C) and as may be disclosed by the Company to the Investor in writing after the Execution Date:

- (I) No shares of the Company's capital stock are subject to preemptive rights or any other similar rights or any liens or encumbrances suffered or permitted by the Company;
- (II) There are no outstanding debt securities and there is no other indebtedness for borrowed money;
- (III) There are no outstanding shares of capital stock, options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, any shares of capital stock of the Company or any of its Subsidiaries, or contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to issue additional shares of capital stock of the Company or any of its Subsidiaries or options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, any shares of capital stock of the Company or any of its Subsidiaries;
- (IV) There are no agreements or arrangements under which the Company or any of its Subsidiaries is obligated to register the sale of any of their securities under the 1933 Act;
- (V) There are no outstanding securities of the Company or any of its Subsidiaries which contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to redeem a security of the Company or any of its Subsidiaries;
- (VI) There are no securities or instruments containing anti-dilution or similar provisions that will be triggered by the issuance of the Securities as described in this Agreement;
- (VII) The Company does not have any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement; and
- (VIII) There is no dispute as to the classification of any shares of the Company's capital stock.

The Company has furnished to the Investor true and correct copies of the Company's Certificate of Incorporation, as in effect on the date hereof (the "Certificate of

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Incorporation”), and the Company’s By-laws, as in effect on the date hereof (the “By-laws”), and the terms of all securities convertible into or exercisable for Common Stock and the material rights of the holders thereof in respect thereto.

(D) ISSUANCE OF SHARES. The Company agrees to reserve adequate Shares for issuance pursuant to this Agreement, which have been duly authorized and reserved for issuance pursuant to this Agreement (subject to adjustment pursuant to the Company’s covenant set forth in Section 5(F)). Upon issuance in accordance with this Agreement, the Securities will be validly issued, fully paid for and non-assessable and free from all taxes, liens and charges with respect to the issue thereof. In the event the Company cannot reserve a sufficient number of Shares for issuance pursuant to this Agreement, the Company will use its best efforts to authorize and reserve for issuance the number of Shares required for the Company to perform its obligations hereunder as soon as reasonably practicable.

(E) NO CONFLICTS. The execution, delivery, and performance of the Equity Line Transaction Documents by the Company and the consummation by the Company of the transactions contemplated hereby and thereby will not: (I) result in a violation of the Certificate of Incorporation, any Certificate of Designations, Preferences and Rights of any outstanding series of preferred stock of the Company, or the By-laws; or (II) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration, or cancellation of, any material agreement, contract, indenture mortgage, indebtedness, or instrument to which the Company or any of its Subsidiaries is a party, or to the Company’s knowledge result in a violation of any law, rule, regulation, order, judgment, or decree (including federal and state securities laws and regulations and the rules and regulations of the Principal Market or principal securities exchange or trading market on which the Common Stock is to be traded or listed) applicable to the Company or any of its Subsidiaries or by which any property or asset of the Company or any of its Subsidiaries is bound or affected. Except as disclosed in Schedule 4(E), neither the Company nor its Subsidiaries is in violation of any term of, or in default under, the Certificate of Incorporation, any Certificate of Designations, Preferences and Rights of any outstanding series of preferred stock of the Company or the By-laws or their organizational charter or by-laws, respectively, or any contract, agreement, mortgage, indebtedness, indenture, instrument, judgment, decree, or order or any statute, rule, or regulation applicable to the Company or its Subsidiaries, except for possible conflicts, defaults, terminations, amendments, accelerations, cancellations, and violations that would not individually or in the aggregate have or constitute a Material Adverse Effect. The business of the Company and its Subsidiaries is not being conducted, and shall not be conducted, in violation of any law, statute, ordinance, rule, order, or regulation of any governmental authority or agency, regulatory or self-regulatory agency, or court, except for possible violations the sanctions for which either individually or in the aggregate would not have a Material Adverse Effect. Except as specifically contemplated by this Agreement and as required under the 1933 Act, the 1934 Act, or any securities laws of

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any states, to the Company's knowledge, the Company is not required to obtain any consent, authorization, permit or order of, or make any filing or registration with, any court, governmental authority or agency, regulatory or self-regulatory agency, or other third party in order for it to execute, deliver, or perform any of its obligations under, or contemplated by, the Equity Line Transaction Documents in accordance with the terms hereof or thereof. All consents, authorizations, permits, orders, filings, and registrations which the Company is required to obtain pursuant to the preceding sentence have been obtained or effected on or prior to the date hereof and are in full force and effect as of the date hereof or are pending. Except as disclosed in Schedule 4(E), the Company and its Subsidiaries are unaware of any facts or circumstances which might give rise to any of the foregoing. The Company will not be in violation of the listing requirements of the Principal Market as in effect on the date hereof and on each of the Closing Dates and is not aware of any facts which would reasonably lead to delisting of the Common Stock by the Principal Market in the foreseeable future.

(F) ABSENCE OF CERTAIN CHANGES. The Company does not intend to and has not taken any actions to change the business operations of the Company in any material way. The Company is "solvent" within the meaning given to such term and similar terms under applicable laws relating to fraudulent conveyances and transfers. The Company has not taken any steps, and does not currently expect to take any steps, to seek protection pursuant to any bankruptcy law nor does the Company or its Subsidiaries have any knowledge or reason to believe that its creditors intend to initiate involuntary bankruptcy proceedings. Except as previously disclosed to the Investor in writing, there have been no material adverse results or consequences arising in connection with any clinical trial testing the efficacy of any product for which the Company owns or licenses the applicable patent(s).

(G) ABSENCE OF LITIGATION AND/OR REGULATORY PROCEEDINGS. Except as set forth in Schedule 4(G), there is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company or any of its Subsidiaries, threatened against or affecting the Company, the Common Stock or any of the Company's Subsidiaries or any of the Company's or the Company's Subsidiaries' officers or directors in their capacities as such.

(H) ACKNOWLEDGMENT REGARDING INVESTOR'S PURCHASE OF SHARES. The Company acknowledges and agrees that the Investor is acting solely in the capacity of an arm's length purchaser with respect to the Equity Line Transaction Documents and the transactions contemplated hereby and thereby. The Company further acknowledges that the Investor is not acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to the Equity Line Transaction Documents and the transactions contemplated hereby and thereby and any advice given by the Investor or any of its respective representatives or agents in connection with the Equity Line Transaction Documents and the transactions contemplated hereby and thereby is merely

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incidental to the Investor's purchase of the Securities, and is not being relied on by the Company. The Company further represents to the Investor that the Company's decision to enter into the Equity Line Transaction Documents has been based solely on the independent evaluation by the Company and its representatives.

(I) EMPLOYEE RELATIONS. Neither the Company nor any of its Subsidiaries is involved in any union labor dispute, nor, to the knowledge of the Company or any of its Subsidiaries, is any such dispute threatened. Neither the Company nor any of its Subsidiaries is a party to a collective bargaining agreement, and the Company and its Subsidiaries believe that relations with their employees are good. No executive officer (as defined in Rule 501(f) of the 1933 Act) has notified the Company that such officer intends to leave the Company's employ or otherwise terminate such officer's employment with the Company.

(J) INTELLECTUAL PROPERTY RIGHTS. The Company and its Subsidiaries own or possess adequate rights or licenses to use all trademarks, trade names, service marks, service mark registrations, service names, patents, patent rights, copyrights, inventions, licenses, approvals, governmental authorizations, trade secrets, and rights necessary to conduct their respective businesses as now conducted. Except as set forth in Schedule 4(J), none of the Company's trademarks, trade names, service marks, service mark registrations, service names, patents, patent rights, copyrights, inventions, licenses, approvals, government authorizations, trade secrets, or other intellectual property rights necessary to conduct its business as now or as proposed to be conducted have expired or terminated, or are expected to expire or terminate within two (2) years from the date of this Agreement. The Company and its Subsidiaries do not have any knowledge of any infringement by the Company or its Subsidiaries of trademark, trade name rights, patents, patent rights, copyrights, inventions, licenses, service names, service marks, service mark registrations, trade secret, or other similar rights of others, or of any such development of similar or identical trade secrets or technical information by others and, except as set forth in the Schedule 4(J), there is no claim, action or proceeding being made or brought against, or to the Company's knowledge, being threatened against, the Company or its Subsidiaries regarding trademark, trade name, patents, patent rights, invention, copyright, license, service names, service marks, service mark registrations, trade secret or other infringement; and the Company and its Subsidiaries are unaware of any facts or circumstances which might give rise to any of the foregoing. The Company and its Subsidiaries have taken commercially reasonable security measures to protect the secrecy, confidentiality, and value of all of their intellectual properties.

(K) ENVIRONMENTAL LAWS. The Company and its Subsidiaries (I) are, to the knowledge of the management and directors of the Company and its Subsidiaries after due inquiry, in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("Environmental Laws"); (II) have, to the knowledge of the management and directors of

the Company after due inquiry, received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses; and (III) are in compliance, to the knowledge of the management and directors of the Company after due inquiry, with all terms and conditions of any such permit, license or approval where, in each of the three (3) foregoing cases, the failure to so comply would have, individually or in the aggregate, a Material Adverse Effect.

(L) TITLE. The Company and its Subsidiaries have good and marketable title to all personal property owned by them which is material to the business of the Company and its Subsidiaries, in each case free and clear of all liens, encumbrances, and defects except such as are described in Schedule 4(L) or such as do not materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company or any of its Subsidiaries. Any real property and facilities held under lease by the Company or any of its Subsidiaries are held by them under valid, subsisting, and enforceable leases with such exceptions as are not material and do not interfere with the use made and proposed to be made of such property and buildings by the Company and its Subsidiaries.

(M) INSURANCE. The Company and each of its Subsidiaries, where applicable, are or will be insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as is typical and customary in the businesses in which the Company and its Subsidiaries are engaged. Neither the Company nor any of its Subsidiaries has been refused any insurance coverage sought or applied for and neither the Company nor its Subsidiaries has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect.

(N) COMPLIANCE WITH LAWS; REGULATORY PERMITS. Neither the Company nor any of its Subsidiaries is in violation of any applicable laws, rules, regulations, executive orders or codes which violation(s) could, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. Without limitation of the foregoing, the Company and its Subsidiaries have in full force and effect all certificates, approvals, authorizations, and permits from the appropriate federal, state, local, or foreign regulatory authorities and comparable foreign regulatory agencies, necessary to own, lease, or operate their respective properties and assets and conduct their respective businesses, and neither the Company nor any such Subsidiary has received any notice of proceedings relating to the revocation or modification of any such certificate, approval, authorization or permit, except for such certificates, approvals, authorizations, or permits which if not obtained, or such revocations or modifications which, could not reasonably be expected have a Material Adverse Effect.

(O) TAX STATUS. Except as set forth on Schedule 4(O), the Company and each of its Subsidiaries has made or filed all United States federal and state income and all other tax returns, reports, and declarations required by any jurisdiction to which it is subject (unless and only to the extent that the Company and each of its Subsidiaries has set aside on its books provisions reasonably adequate for the payment of all unpaid and unreported taxes) and has paid all taxes and other governmental assessments and charges that are Material in Amount, shown or determined to be due on such returns, reports, and declarations, except those being contested in good faith and has set aside on its books provision reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. Except as set forth on Schedule 4(O), there are no unpaid taxes in any Material Amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company know of no basis for any such claim.

(P) CERTAIN TRANSACTIONS. Except as set forth in Schedule 4(P), or disclosed to the Investor by the Company in writing at least ten (10) days prior to the first Option Notice, and except for arm's length transactions pursuant to which the Company makes payments in the ordinary course of business upon terms no less favorable than the Company could obtain from disinterested third parties, none of the officers, directors, or employees of the Company is presently a party to any transaction with the Company or any of its Subsidiaries (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any officer, director, or such employee or, to the knowledge of the Company, any corporation, partnership, trust, or other entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee, or partner.

(Q) DILUTIVE EFFECT. The Company understands and acknowledges that the number of shares of Common Stock issuable upon purchases pursuant to this Agreement will increase in certain circumstances. The Company's executive officers and directors have studied and fully understand the nature of the transactions contemplated by this Agreement and recognize that they have a potential dilutive effect on the shareholders of the Company. The Board of Directors of the Company has concluded, in its good faith business judgment, and with full understanding of the implications, that such issuance is in the best interests of the Company. The Company specifically acknowledges that, subject to such limitations as are expressly set forth in the Equity Line Transaction Documents, its obligation to issue shares of Common Stock upon purchases pursuant to this Agreement is absolute and unconditional regardless of the dilutive effect that such issuance may have on the ownership interests of other shareholders of the Company.

(R) [INTENTIONALLY OMITTED]

(S) NO GENERAL SOLICITATION. Neither the Company, nor any of its affiliates, nor any person acting on its behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with the offer or sale of the Common Stock to be offered as set forth in this Agreement.

(T) NO BROKERS, FINDERS OR FINANCIAL ADVISORY FEES OR COMMISSIONS. No brokers, finders, or financial advisory fees or commissions will be payable by the Company, its agents or Subsidiaries, with respect to the transactions contemplated by this Agreement, except as otherwise disclosed in this Agreement.

SECTION 5. COVENANTS OF THE COMPANY

(A) COMMERCIALY REASONABLE EFFORTS. The Company shall use all commercially reasonable efforts to timely satisfy each of the conditions set forth in Sections 5 and 7 of this Agreement.

(B) BLUE SKY. The Company shall, at its sole cost and expense, on or before each of the Closing Dates, take such action as the Company shall reasonably determine is necessary to qualify the Securities for, or obtain exemption for the Securities for, sale to the Investor at each of the Closings pursuant to this Agreement under applicable securities or "Blue Sky" laws of such states of the United States, and shall provide evidence of any such action so taken to the Investor on or prior to the Closing Date.

(C) REPORTING STATUS. If the Company shall become registered pursuant to Section 12 of the 1934 Act, or if the Company becomes subject to the 1934 Act reporting requirements pursuant to Section 15(d) of the 1933 Act, the Company shall file all reports required to be filed with the SEC pursuant to the 1934 Act, and the Company shall not terminate its status, or take an action or fail to take any action, which would terminate its status as a reporting company under the 1934 Act, until one of the following occurs: (i) this Agreement terminates pursuant to Section 8 and the Investor has the right to sell all of the Securities without restrictions pursuant to Rule 144(b) promulgated under the 1933 Act or another applicable exemption, or (ii) the date on which the Investor has sold all the Securities and this Agreement has been terminated pursuant to Section 8.

(D) USE OF PROCEEDS. The Company will use the proceeds from the sale of the Shares (excluding amounts paid by the Company for fees as set forth in Section 10(B)) for general corporate and working capital purposes and acquisitions or assets, businesses or operations or for other purposes that the Board of Directors, in its good faith deem to be in the best interest of the Company.

(E) FINANCIAL INFORMATION. If the Company shall become registered pursuant to Section 12 of the 1934 Act, or if the Company becomes subject to the 1934 Act reporting requirements pursuant to Section 15(d) of the 1933 Act, the Company agrees to make available to the Investor via EDGAR or other electronic means the following documents and information on the forms set forth: (I) within ten (10) Trading Days after the filing thereof with the SEC, a copy of its Annual Reports on Form 10-K, its Quarterly Reports on Form 10-Q, any Current Reports on Form 8-K and any registration statements or amendments filed pursuant to the 1933 Act; (II) copies of any notices and other information made available or given to the shareholders of the Company generally, contemporaneously with the making available or giving thereof to the shareholders; and (III) within ten (10) calendar days of filing or delivery thereof, copies of all documents filed with, and all correspondence sent to, the Principal Market, any securities exchange or market, or the National Association of Securities Dealers, Inc., unless such information is material nonpublic information.

(F) RESERVATION OF SHARES. The Company shall take all action necessary to at all times have authorized, and reserved for the purpose of issuance, a sufficient number of shares of Common Stock to provide for the issuance of the Securities to the Investor as required hereunder. In the event that the Company determines that it does not have a sufficient number of authorized shares of Common Stock to reserve and keep available for issuance as described in this Section 5(F), the Company shall use all commercially reasonable efforts to increase the number of authorized shares of Common Stock by seeking shareholder approval for the authorization of such additional shares.

(G) TRANSACTIONS WITH AFFILIATES. The Company shall not, and shall cause each of its Subsidiaries not to, enter into, amend, modify, or supplement, or permit any Subsidiary to enter into, amend, modify, or supplement, any agreement, transaction, commitment, or arrangement with any of its or any Subsidiary's officers, directors, persons who were officers or directors at any time during the previous two (2) years, shareholders who beneficially own 5% or more of the Common Stock, or Affiliates or with any individual related by blood, marriage or adoption to any such individual or with any entity in which any such entity or individual owns a 5% or more beneficial interest (each a "Related Party"), except for (I) customary employment arrangements and benefit programs on reasonable terms, (II) any agreement, transaction, commitment, or arrangement on an arms-length basis on terms no less favorable than terms which would have been obtainable from a disinterested third party other than such Related Party, or (III) any agreement, transaction, commitment or arrangement which is approved by a majority of the disinterested directors of the Company. For purposes hereof, any director who is also an officer of the Company or any Subsidiary of the Company shall not be a disinterested director with respect to any such agreement, transaction, commitment, or arrangement. "Affiliate" for purposes hereof means, with respect to any person or entity, another person or entity that, directly or indirectly, (I) has a 5% or more equity interest in that person or entity, (II) has 5% or more common ownership with that person or entity, (III) controls that person or entity, or (IV) is under common control with that person or

entity. "Control" or "Controls" for purposes hereof means that a person or entity has the power, directly or indirectly, to conduct or govern the policies of another person or entity.

(H) CORPORATE EXISTENCE. The Company shall use all commercially reasonable efforts to preserve and continue the corporate existence of the Company.

(I) ACKNOWLEDGEMENT OF TERMS. The Company hereby represents and warrants to the Investor that: (i) it is voluntarily entering into this Agreement of its own freewill, (ii) it is not entering this Agreement under economic duress, (iii) the terms of this Agreement are reasonable and fair to the Company, and (iv) the Company has had independent legal counsel of its own choosing review this Agreement, advise the Company with respect to this Agreement, and represent the Company in connection with this Agreement.

(J) REIMBURSEMENT. If (i) the Investor becomes involved in any capacity in any action, proceeding or investigation brought by any shareholder of the Company, in connection with or as a result of the consummation of the transactions contemplated by the Equity Line Transaction Documents, or if the Investor is impleaded in any such action, proceeding or investigation by any person (other than as a result of a breach of the Investor's representations and warranties set forth in this Agreement); or (ii) the Investor becomes involved in any capacity in any action, proceeding or investigation brought by the SEC against or involving the Company or in connection with or as a result of the consummation of the transaction contemplated by the Equity Line Transaction Documents (other than as a result of a breach of the Investor's representations and warranties set forth in this Agreement), or if this Investor is impleaded in any such action, proceeding or investigation by any person, then in any such case, the Company will reimburse the Investor for its reasonable legal and other expenses (including the costs of any investigation and preparation) incurred in connection therewith, as such expenses are incurred. In addition, other than with respect to any matter in which the Investor is a named party, the Company will pay to the Investor the charges, as reasonably determined by the Investor, for the time of any officers or employees of the Investor devoted to appearing and preparing to appear as witnesses, assisting in preparation for hearings, trial or retrial matters, or otherwise with respect to inquiries, hearing, trials, and other proceedings relating to the subject matter of this Agreement. The reimbursement obligations of the Company under this Section shall be in addition to any liability which the Company may otherwise have, shall extend upon the same terms and conditions to any affiliates of the Investor that are actually named in such action, proceeding or investigation, and partners, directors, agents, employees, attorneys, accountants, auditors and controlling persons (if any), as the case maybe, of Investor and any such affiliate, and shall be binding upon and inure to the benefit of any successors of the Company, the Investor and any such affiliate and any such person.

SECTION 6. CONDITIONS OF THE COMPANY'S OBLIGATION TO SELL.

The obligation hereunder of the Company to issue and sell the Securities to the Investor is further subject to the satisfaction, at or before each Closing Date, of each of the following conditions set forth below. These conditions are for the Company's sole benefit and may be waived by the Company at any time in its sole discretion.

(A) The Investor shall have executed this Agreement and delivered the same to the Company.

(B) The Investor shall have delivered to the Company the Purchase Price for the Securities being purchased by the Investor.

(C) The representations and warranties of the Investor shall be true and correct in all material respects as of the date when made and as of the applicable Closing Date as though made at that time and the Investor shall have performed, satisfied, and complied in all material respects with the covenants, agreements, and conditions required by the Equity Line Transaction Documents to be performed, satisfied, or complied with by the Investor on or before such Closing Date.

(D) No statute, rule, regulation, executive order, decree, ruling, or injunction shall have been enacted, entered, promulgated, or endorsed by any court or governmental authority of competent jurisdiction which prohibits the consummation of any of the transactions contemplated by this Agreement.

SECTION 7. FURTHER CONDITIONS OF THE INVESTOR'S OBLIGATION TO PURCHASE.

In addition to the other conditions set forth in this Agreement and in the other Equity Line Transaction Documents, the obligation of the Investor hereunder to purchase Shares is subject to the satisfaction, on or before each Closing Date, of each of the following conditions set forth below. These conditions are for the Investor's sole benefit and may be waived by the Investor at any time in its sole discretion (but only in writing).

(A) The Company shall have executed the Equity Line Transaction Documents and delivered the same to the Investor.

(B) The Common Stock shall be authorized for quotation on the Principal Market and trading in the Common Stock shall not have been suspended by the Principal Market or the SEC, at any time beginning on the date hereof and through and including the

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respective Closing Date (excluding suspensions of not more than one (1) Trading Day resulting from business announcements by the Company, provided that such suspensions occur prior to the Investor's delivery of the Option Notice related to such Closing).

(C) The representations and warranties of the Company contained in this Agreement and in the other Equity Line Transaction Documents shall be true and correct as of the date when made and as of the applicable Closing Date as though made at that time and the Company shall have performed, satisfied and complied with the covenants, agreements, and conditions required by this Agreement and the other Equity Line Transaction Documents to be performed, satisfied or complied with by the Company on or before such Closing Date. An officer of the Company shall deliver to the Investor on the Closing Date a certificate certifying that (I) the conditions set forth in this Section 7(C) have been fulfilled, and (II) the Company shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by the Company on or before such Closing Date.

(D) The Company shall have executed and delivered to the Investor the certificates representing, or have executed electronic book-entry transfer of, the Securities (in such denominations as the Investor shall request) being purchased by the Investor at such Closing.

(E) The Board of Directors of the Company shall have adopted resolutions consistent with Section 4(B)(II) above (the "Resolutions") and such Resolutions shall not have been amended or rescinded prior to such Closing Date.

(F) No statute, rule, regulation, executive order, decree, ruling, or injunction shall have been enacted, entered, promulgated, or endorsed by any court or governmental authority of competent jurisdiction, which prohibits the consummation of any of the transactions contemplated by this Agreement.

SECTION 8. TERMINATION.

A. This Agreement shall terminate when the Investor has purchased an aggregate of five million dollars (\$5,000,000) in the Common Stock of the Company pursuant to this Agreement.

B. This Agreement may terminate upon any of the following events:

(I) Termination for Default. In the event that either party commits a material breach of its obligations hereunder, the other party may, at its option, terminate this Agreement by written notice of termination specifying such material breach; provided, however, that if such default is subject to cure, then such notice shall be subject to a twenty (20) day cure period from the date thereof, and if the defaulting party cures such default prior to expiration of such period, termination shall not take place.

(II) Termination for Insolvency. Either party hereto may, at its option, upon five (5) days written notice, terminate this Agreement should the other party hereto (i) admit in writing its inability to pay its debts generally as they become due; (ii) make a general assignment for the benefit of creditors; (iii) institute proceedings to be adjudicated a voluntary bankrupt, or consent to the filing of a petition of bankruptcy against it; (iv) be adjudicated by a court of competent jurisdiction as being bankrupt or insolvent; (v) seek reorganization under any bankruptcy act, or consent to the filing of a petition seeking such reorganization, or (vi) have a decree entered against it by a court of competent jurisdiction appointing a receiver, liquidator, trustee or assignee in bankruptcy or in insolvency covering all or substantially all of such party's property or providing for the liquidation of such party's property or business affairs.

C. Survival of Termination. The obligations of the parties under this Agreement that by their nature would continue beyond expiration, termination or cancellation of this Agreement (including, without limitation, the representations and warranties, indemnification obligations, confidentiality requirements and ownership and property rights) shall survive any such expiration, termination or cancellation.

SECTION 9. INDEMNIFICATION.

(A) The Company (in such capacity, an "Indemnitor") shall defend, protect, indemnify, and hold harmless the Investor and all of the Investor's officers, trustees, employees, counsel, and direct or indirect investors and any of the foregoing person's agents or other representatives (including, without limitation, those retained in connection with the transactions contemplated by this Agreement) (collectively, the "Indemnitees") from and against any and all actions, causes of action, suits, claims, losses, costs, penalties, fees, liabilities, and damages, and reasonable expenses in connection therewith (irrespective of whether any such Indemnitee is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys' fees and disbursements (the "Indemnified Liabilities"), incurred by any Indemnitee as a result of, or arising out of, or relating to (I) any misrepresentation or breach of any representation or warranty made by the Indemnitor or any other certificate, instrument, or document contemplated hereby or thereby; (II) any breach of any

covenant, agreement, or obligation of the Indemnitor contained in the Equity Line Transaction Documents or any other certificate, instrument, or document contemplated hereby or thereby; or (III) any cause of action, suit, or claim brought or made against such Indemnitee by a third party and arising out of or resulting from the execution, delivery, performance, or enforcement of the Equity Line Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, except insofar as any such misrepresentation, breach or any untrue statement, alleged untrue statement, omission or alleged omission is made in reliance upon and in conformity with information furnished to Indemnitor which is specifically intended for use in the preparation of any such registration statement, preliminary prospectus, prospectus or amendments to the prospectus. To the extent that the foregoing undertaking by the Indemnitor may be unenforceable for any reason, the Indemnitor shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities which is permissible under applicable law. The indemnity provisions contained herein shall be in addition to any cause of action or similar rights Indemnitor may have, and any liabilities to which the Indemnitor or the Indemnitees may be subject.

- (B) Promptly after receipt by an Indemnitee under this Section 9 of notice of any action or proceeding (including any governmental action or proceeding) involving an indemnifiable claim, such Indemnitee shall, if a claim in respect thereof is to be made against Indemnitor under this Section 9, deliver to Indemnitor a written notice thereof, and Indemnitor shall have the right to participate in, and, to the extent Indemnitor so desires to assume control of the defense thereof with counsel mutually satisfactory to Indemnitor and Indemnitee; provided, however, that an Indemnitee, shall have the right to retain its own counsel with the fees and expenses to be paid by Indemnitor, if, in the reasonable opinion of counsel retained by Indemnitee, the representation by counsel of Indemnitee and Indemnitor would be inappropriate due to actual or potential differing interests between such Indemnitee and any other party represented by such counsel in such proceeding. Indemnitor shall pay for only one (1) separate legal counsel for Indemnitee(s), as applicable selected by it. Indemnitee shall cooperate fully with Indemnitor in connection with any negotiation or defense of any such action or claim by Indemnitor and shall furnish to Indemnitor all information reasonably available to Indemnitee which relates to such action or claim. Indemnitor shall keep Indemnitee fully apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. Indemnitor shall not be liable for any settlement of any action, claim or proceeding affected without its written consent; provided, however, that Indemnitor shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the consent of Indemnitee, consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnitee of a release from all liability in respect to such claim. Following indemnification as provided for hereunder, Indemnitor shall be subrogated to all rights of Indemnitee with respect to all third

parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to Indemnitor within a reasonable time of the commencement of any such action shall not relieve Indemnitor of any liability to Indemnitee under this Section 9, except to the extent that Indemnitor is prejudiced in its ability to defend such action.

SECTION 10. GOVERNING LAW.

(A) **GOVERNING LAW.** All disputes arising under this agreement shall be governed by and interpreted in accordance with the laws of the State of Maryland, without regard to principles of conflict of laws.

(B) **LEGAL FEES AND MISCELLANEOUS FEES.** The Company shall pay the fees and expenses of its own counsel and advisors and all other expenses incurred by the Company, as well as the reasonable fees and expenses of the Investor's counsel (which shall not exceed \$10,000 without the prior written consent of the Company) and all other reasonable expenses incurred by the Investor, in each case which are incident to or incurred by it in connection with the negotiation, preparation, execution, delivery, and performance of this Agreement. Any attorneys' fees and expenses incurred by either the Company or the Investor relating to the enforcement of the rights of any party, after the occurrence of any breach of the terms of this Agreement by another party or any default by another party in respect of the transactions contemplated hereunder, shall be paid on demand by the party which breached the Agreement and/or defaulted, as the case may be. The Company shall pay all stamp and other taxes and duties levied in connection with the issuance of any Securities.

(C) **COUNTERPARTS.** This Agreement may be executed in two or more identical counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party; provided, however, that a .PDF signature shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original signature.

(D) **HEADINGS; SINGULAR/PLURAL.** The headings of this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement. Whenever required by the context of this Agreement, the singular shall include the plural and masculine shall include the feminine.

(E) **SEVERABILITY.** If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction.

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(F) ENTIRE AGREEMENT; AMENDMENTS. This Agreement is the final agreement between the Company and the Investor with respect to the terms and conditions set forth herein, and, the terms of this Agreement may not be contradicted by evidence of prior, contemporaneous, or subsequent oral agreements of the Parties. No provision of this Agreement may be amended other than by an instrument in writing signed by the Company and the Investor, and no provision hereof may be waived other than by an instrument in writing signed by the party against whom enforcement is sought. The execution and delivery of the Equity Line Transaction Documents shall not alter the force and effect of any other agreements between the Parties, and the obligations under those agreements.

(G) NOTICES. Any notices or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered (I) upon receipt, when delivered personally; (II) upon receipt, when sent by facsimile (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); or (III) one (1) day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses and facsimile numbers for such communications shall be:

If to the Company:

Vaccinogen, Inc.
5300 Westview Drive, Suite 406
Frederick, MD 21703
Fax: (301) 631-2970

with a copy (which shall not constitute notice) to:

Indeglia & Carney
1900 Main Street, Suite 300
Irvine, CA 92614
marc@indegliacarney.com
Fax: (949) 861-3324

If to the Investor:

The Abell Foundation, Inc.
111 South Calvert Street, Suite 2300
Baltimore, MD 21202
Fax:

with a copy (which shall not constitute notice) to:

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Hogan Lovells US LLP
100 International Drive, Suite 2000
Baltimore, MD 21202
Attn: Kevin G. Gralley, Esq.
kevin.gralley@hoganlovells.com
Fax: (410) 659-2701

Each party shall provide five (5) days prior written notice to the other party of any change in address, facsimile number, or e-mail address.

(H) NO ASSIGNMENT. This Agreement may not be assigned.

(I) NO THIRD PARTY BENEFICIARIES. This Agreement is intended for the benefit of the parties hereto and is not for the benefit of, nor may any provision hereof be enforced by, any other person, except that the Company acknowledges that the rights of the Investor may be enforced by its general partner.

(J) SURVIVAL. The representations and warranties of the Company and the Investor contained in Sections 2 and 3, the agreements and covenants set forth in Sections 4 and 5, and the indemnification provisions set forth in Section 9, shall survive each of the Closings and the termination of this Agreement.

(K) PUBLICITY. The Company and the Investor shall consult with each other in issuing any press releases or otherwise making public statements with respect to the transactions contemplated hereby and no party shall issue any such press release or otherwise make any such public statement without the prior consent of the other party, which consent shall not be unreasonably withheld or delayed, except that no prior consent shall be required if such disclosure is required by law, in which such case the disclosing party shall provide the other party with prior notice of such public statement. Notwithstanding the foregoing, the Company shall not publicly disclose the name of the Investor without the prior consent of the Investor, except to the extent required by law. The Investor acknowledges that this Agreement and all or part of the Equity Line Transaction Documents may be deemed to be "material contracts" as that term is defined by Item 601(b)(10) of Regulation S-K, and that the Company may therefore be required to file such documents as exhibits to reports or registration statements filed under the 1933 Act or the 1934 Act. The Investor further agrees that the status of such documents and materials as material contracts shall be determined solely by the Company, in consultation with its counsel.

(L) FURTHER ASSURANCES. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments, and documents, as the other party may

reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

(M) NO STRICT CONSTRUCTION. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party, as the parties mutually agree that each has had a full and fair opportunity to review this Agreement and seek the advice of counsel on it. The normal rule that ambiguities shall be interpreted against the drafting party shall not apply in the instant case.

(N) REMEDIES. The Investor shall have all rights and remedies set forth in this Agreement and the other Equity Line Transaction Documents and all rights and remedies which such holders have been granted at any time under any other agreement or contract and all of the rights which the Investor has by law. Any person having any rights under any provision of this Agreement shall be entitled to enforce such rights specifically (without posting a bond or other security), to recover damages by reason of any default or breach of any provision of this Agreement, including the recovery of reasonable attorney's fees and costs, and to exercise all other rights granted by law.

(O) PAYMENT SET ASIDE. To the extent that the Company makes a payment or payments to the Investor hereunder or under any of the other Equity Line Transaction Documents, or the Investor enforces or exercises its rights hereunder or thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other person under any law (including, without limitation, any bankruptcy law, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

SECTION 11. NON-DISCLOSURE OF NON-PUBLIC INFORMATION.

(A) Once the Company has secured, initiated, and maintained the listing or quotation of the Shares on the Principal Market and each other national securities exchange and automated quotation system, the Company shall not disclose material non-public information to the Investor, its advisors, or its representatives.

(B) Nothing herein shall require the Company, once it has secured, initiated, and maintained the listing of the Shares on the Principal Market and each other national securities exchange and automated quotation system, to disclose material non-public information to the Investor or its advisors or representatives, and the Company represents

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that it does not disseminate material non-public information to any investors who purchase stock in the Company in a public offering, to money managers or to securities analysts. Nothing contained in this Section 13 shall be construed to mean that such persons or entities other than the Investor (without the written consent of the Investor prior to disclosure of such information) may not obtain material non-public information in the course of conducting due diligence in accordance with the terms of this Agreement.

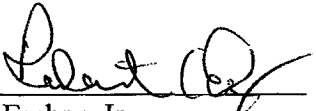
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SIGNATURE PAGE OF INVESTMENT AGREEMENT

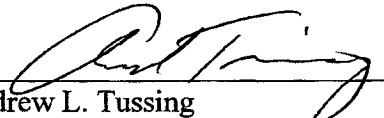
Your signature on this Signature Page evidences your agreement to be bound by the terms and conditions of the Investment Agreement as of the date first written above.


The undersigned signatory hereby certifies that he has read and understands the Investment Agreement, and the representations made by the undersigned in this Investment Agreement are true and accurate, and agrees to be bound by its terms.

THE ABELL FOUNDATION, INC.

By: 
Robert C. Embry, Jr.
President

VACCINOGEN, INC.

By: 
Andrew L. Tussing
President & Chief Operating Officer

By: 
Michael G. Hanna, Jr., Ph.D.
Chairman & Chief Executive Officer

LIST OF EXHIBITS

EXHIBIT A Put Notice

EXHIBIT A

Date:

RE: Option Notice Number ____

Dear [_____],

This is to inform you that as of today, The Abell Foundation, Inc., a Maryland nonstock corporation (the "Investor"), hereby elects to exercise its right pursuant to the Investment Agreement to require Vaccinogen, Inc. to sell shares of its common stock. The Investor hereby certifies the following:

The amount of this option is \$_____.

Regards,

Robert C. Embry, Jr.
President

EXHIBIT 6.7

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

REGISTRATION RIGHTS AGREEMENT

THIS REGISTRATION RIGHTS AGREEMENT (hereinafter referred to as the “Agreement”), dated July 18, 2012 by and between Vaccinogen, Inc., a Maryland Corporation (hereinafter referred to as the “Company”) and Kodiak Capital Group, LLC, a Delaware Limited Liability Company, with its principal office at 260 Newport Center Drive, Suite 100, Newport Beach CA 92660 (hereinafter referred to as the “Investor”).

WHEREAS, in connection with the Investment Agreement by and between the Company and the Investor of equal date as the Agreement hereto (the “Investment Agreement”), the Company has agreed to issue and sell to the Investor an indeterminate number of shares of the Company’s Common Stock, \$0.0001 par value per share (the “Common Stock”), to be purchased pursuant to the terms and subject to the conditions set forth in the Investment Agreement, which is hereby incorporated by reference; and

WHEREAS, to induce the Investor to execute and deliver the Investment Agreement, the Company has agreed to provide certain registration rights under the Securities Act of 1933, as amended, and the rules and regulations thereunder, or any similar successor statute (collectively, the “1933 Act”), and applicable state securities laws, with respect to the shares of Common Stock issuable pursuant to the Investment Agreement.

NOW THEREFORE, in consideration of the foregoing promises and the mutual covenants contained hereinafter and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and the Investor hereby agree as follows:

Section 1. DEFINITIONS.

As used in this Agreement, the following terms shall have the following meanings:

“**Effective Date**” means the date that the Registration Statement is filed with the SEC.

“**Execution Date**” means the date of this Agreement set forth above.

“**Investor**” means Kodiak Capital Group, LLC, a Delaware limited liability company.

“**Person**” means a corporation, a limited liability company, an association, a partnership, an organization, a business, an individual, a governmental or political subdivision thereof or a governmental agency.

“**Principal Market**” shall mean the American Stock Exchange, Inc., the National Association of Securities Dealers, Inc. Over-the-Counter Bulletin Board, the NASDAQ National Market System or the NASDAQ SmallCap Market, whichever is the principal market on which the Common Stock will be listed pursuant to the Company’s plans to become a fully-reporting publicly-listed Company on a Principal Market.

“**Register**,” “**Registered**,” and “**Registration**” refer to the Registration effected by preparing and filing one (1) or more Registration Statements in compliance with the 1933 Act and pursuant to Rule 415 under the 1933 Act or any successor rule providing for offering securities on a continuous basis (hereinafter referred to as “**Rule 415**”), and the declaration or ordering of effectiveness of such Registration Statement(s) by the United States Securities and Exchange Commission (hereinafter referred to as the “**SEC**”).

“**Registrable Securities**” means (i) the shares of Common Stock issued or issuable pursuant to the Investment Agreement, and (ii) any shares of capital stock issued or issuable with respect to such shares of Common Stock, if any, as a result of any stock split, stock dividend, recapitalization, exchange, or similar event or otherwise, which have not been (x) included in the Registration Statement that has been declared effective by the SEC, or (y) sold under circumstances meeting all of the applicable conditions of Rule 144 (or any similar provision then in force) under the 1933 Act.

“**Registration Statement**” means the registration statement or statements of the Company filed under the 1933 Act covering the Registrable Securities.

All capitalized terms used in this Agreement and not otherwise defined herein shall have the same meaning ascribed to them as in the Investment Agreement.

Section 2. REGISTRATION.

(a) The Company shall use commercially reasonable efforts to, within ninety (90) days after the date of this Agreement, file with the SEC the Registration Statement or Registration Statements (as is necessary) on Form S-1 (or, if such form is unavailable for such a registration, on such other form as is available for such registration), covering the resale of all of the Registrable Securities, which Registration Statement(s) shall state that, in accordance with Rule 416 promulgated under the 1933 Act, such Registration Statement also covers such indeterminate number of additional shares of Common Stock as may become issuable upon stock splits, stock dividends or similar transactions. The Company shall initially register for resale not less than 5,000,000 shares of Common Stock which would be issuable on the date preceding the filing of the Registration Statement based on the closing bid price of the Company’s Common Stock on such date and the amount reasonably calculated that represents Common Stock issuable to other parties as set forth in the Investment Agreement except to the extent that the SEC requires the share amount to be reduced as a condition of effectiveness.

(b) The Company shall use all commercially reasonable efforts to have the Registration Statement(s) declared effective by the SEC within one hundred twenty (120) calendar days after the Execution Date.

(c) The Company agrees not to include any other securities in the Registration Statement covering the Registrable Securities without the Investor’s prior written consent, which the Investor may withhold in its sole discretion. Furthermore, the Company agrees that it will not

file any other Registration Statement for other securities until thirty calendar days after the Registration Statement for the Registrable Securities is declared effective by the SEC.

Section 3. RELATED OBLIGATIONS.

At such time as the Company is obligated to prepare and file the Registration Statement with the SEC pursuant to Section 2(a), the Company will use commercially reasonable efforts to effectuate the registration of the Registrable Securities in accordance with the intended method of disposition thereof and, with respect thereto, the Company shall have the following obligations:

(a) The Company shall use all commercially reasonable efforts to cause such Registration Statement relating to the Registrable Securities to become effective within one hundred twenty (120) days after the Execution Date and shall keep such Registration Statement effective until the earlier to occur of the date on which (A) the Investor shall have sold all the Registrable Securities; or (B) the Company has no right to Put to the Investor any additional shares of Common Stock under the Investment Agreement (hereinafter referred to as the “**Registration Period**”). The Registration Statement (including any amendments or supplements thereto and prospectuses contained therein) shall not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading. The Company shall use all commercially reasonable efforts to respond to all SEC comments within fifteen (15) business days from receipt of such comments by the Company. The Company shall use all commercially reasonable efforts to cause the Registration Statement relating to the Registrable Securities to become effective no later than five (5) business days after notice from the SEC that the Registration Statement may be declared effective. The Investor agrees to provide all information which it is required by law to provide to the Company, including, without limitation, the intended method of disposition of the Registrable Securities, and the Company’s obligations set forth above shall be conditioned on the receipt of such information.

(b) The Company shall prepare and file with the SEC such amendments (including post-effective amendments) and supplements to the Registration Statement and the prospectus used in connection with such Registration Statement, which prospectus is to be filed pursuant to Rule 424 promulgated under the 1933 Act, as may be necessary to keep such Registration Statement effective during the Registration Period, and, during such period, comply with the provisions of the 1933 Act with respect to the disposition of all Registrable Securities of the Company covered by such Registration Statement until such time as all of such Registrable Securities shall have been disposed of in accordance with the intended methods of disposition by the Investor thereof as set forth in such Registration Statement. In the event the number of shares of Common Stock covered by the Registration Statement filed pursuant to this Agreement is at any time insufficient to cover all of the Registrable Securities, the Company shall amend such Registration Statement, or file a new Registration Statement (on the short form available therefor, if applicable), or both, so as to cover all of the Registrable Securities, in each case, as soon as practicable, but in any event within thirty (30) calendar days after the necessity therefor arises (based on the then Purchase Price of the Common Stock and other relevant factors on which the Company reasonably elects to rely), assuming the Company has sufficient authorized shares at that time,

and if it does not, within thirty (30) calendar days after such shares are authorized. The Company shall use commercially reasonable efforts to cause such amendment and/or new Registration Statement to become effective as soon as practicable following the filing thereof.

(c) The Company shall make available to the Investor whose Registrable Securities are included in any Registration Statement and its legal counsel without charge:

- (i) promptly after the same is prepared and filed with the SEC at least one (1) copy of such Registration Statement and any amendment(s) thereto, including financial statements and schedules, all documents incorporated therein by reference and all exhibits, the prospectus included in such Registration Statement (including each preliminary prospectus) and, with regards to such Registration Statement(s), any correspondence by or on behalf of the Company to the SEC or the staff of the SEC and any correspondence from the SEC or the staff of the SEC to the Company or its representatives; and
- (ii) upon the effectiveness of any Registration Statement, the Company shall make available copies of the prospectus, via EDGAR, included in such Registration Statement and all amendments and supplements thereto; and
- (iii) such other documents, including copies of any preliminary or final prospectus, as the Investor may reasonably request from time to time in order to facilitate the disposition of the Registrable Securities.

(d) The Company shall use commercially reasonable efforts to:

- (i) register and qualify the Registrable Securities covered by the Registration Statement under such other securities or “blue sky” laws of such states in the United States as the Investor reasonably requests;
- (ii) prepare and file in those jurisdictions, such amendments (including post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain the effectiveness thereof during the Registration Period;
- (iii) take such other actions as may be necessary to maintain such registrations and qualifications in effect at all times during the Registration Period, and
- (iv) take all other actions reasonably necessary or advisable to qualify the Registrable Securities for sale in such jurisdictions; *provided, however,* that the Company shall not be required in connection therewith or as a condition thereto to do any of the following:
 - a. qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(d), or
 - b. subject itself to general taxation in any such jurisdiction.

The Company shall promptly notify the Investor who holds Registrable Securities of the receipt by the Company of any notification with respect to the suspension of the registration or qualification of any of the Registrable Securities for sale under the securities or “blue sky” laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threatening of any proceeding for such purpose.

(e) As promptly as practicable after becoming aware of such event, the Company shall notify the Investor in writing of the happening of any event as a result of which the prospectus included in the Registration Statement, as then in effect, includes an untrue statement of a material fact or omission to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading (hereinafter referred to as “**Registration Default**”) and use all diligent efforts to promptly prepare a supplement or amendment to such Registration Statement and take any other necessary steps to cure the Registration Default (which, if such Registration Statement is on Form S-3, may consist of a document to be filed by the Company with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the 1934 Act (as defined below) and to be incorporated by reference in the prospectus) to correct such untrue statement or omission, and make available copies of such supplement or amendment to the Investor. The Company shall also promptly notify the Investor of the following:

- (i) when a prospectus or any prospectus supplement or post-effective amendment has been filed, and when the Registration Statement or any post-effective amendment has become effective;
- (ii) of any request by the SEC for amendments or supplements to the Registration Statement or related prospectus or related information;
- (iii) of the Company’s reasonable determination that a post-effective amendment to the Registration Statement would be appropriate;
- (iv) in the event the Registration Statement is no longer effective; and / or
- (v) if the Registration Statement is stale as a result of the Company’s failure to timely file its financials or otherwise.

If a Registration Default occurs during the period commencing on the Put Notice Date and ending on the Closing Date, the Company acknowledges that its failure to cure the Registration Default within three (3) business days will cause the Investor to suffer damages in an amount that will be difficult to ascertain. Accordingly, the parties agree that it is appropriate to include a provision for liquidated damages. The parties acknowledge and agree that the liquidated damages provision set forth in the Investment Agreement represents the parties’ good faith effort to quantify such damages and, as such, agree that the form and amount of such liquidated damages are reasonable and will not constitute a penalty. It is the intention of the parties that interest payable under any of the terms of this Agreement shall not exceed the maximum amount permitted under any applicable law. If a law, which applies to this Agreement, which sets the

maximum interest amount, is finally interpreted so that the interest in connection with this Agreement exceeds the permitted limits, then: (1) any such interest shall be reduced by the amount necessary to reduce the interest to the permitted limit; and (2) any sums already collected (if any) from the Company which exceed the permitted limits will be refunded to the Company.

The Investor may choose to make this refund by reducing the amount that the Company owes under this Agreement or by making a direct payment to the Company. If a refund reduces the amount that the Company owes the Investor, the reduction will be treated as a partial payment.

(f) The Company shall use all commercially reasonable efforts to prevent the issuance of any stop order or other suspension of effectiveness of the Registration Statement, or the suspension of the qualification of any of the Registrable Securities for sale in any jurisdiction and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension at the earliest possible moment and to notify the Investor holding Registrable Securities being sold of the issuance of such order and the resolution thereof or its receipt of actual notice of the initiation or threat of any proceeding concerning the effectiveness of the Registration Statement.

(g) The Company shall permit the Investor and one (1) legal counsel, designated by the Investor, to review and comment upon the Registration Statement and all amendments and supplements thereto at least one (1) calendar day prior to their filing with the SEC. However, any postponement of a filing of a Registration Statement or any postponement of a request for acceleration or any postponement of the Effective Date or effectiveness of a Registration Statement by written request of the Investor (collectively, the "Investor's Delay") shall not act to trigger any penalty of any kind or any cash amount due or any in-kind amount due the Investor from the Company under any and all agreements of any nature or kind between the Company and the Investor. The event(s) of an Investor's Delay shall act to suspend all obligations of any kind or nature of the Company under any and all agreements of any nature or kind between the Company and the Investor.

(h) At the request of the Investor, the Company's counsel shall furnish to the Investor an opinion letter in form and substance reasonable and customary for transactions of this nature confirming the effectiveness of the registration statement. Such opinion letter shall be issued as of the date of the effectiveness of the registration statement and be in a form suitable to the Investor.

(i) The Company shall hold in confidence and not make any disclosure of information concerning the Investor unless:

- (i) disclosure of such information is necessary to comply with federal or state securities laws;
- (ii) disclosure of such information is necessary in order to obtain effectiveness of a Registration Statement;
- (iii) disclosure of such information is necessary to avoid or correct a misstatement or omission in any Registration Statement;

- (iv) the release of such information is ordered pursuant to a subpoena or other final, non-appealable order from a court or governmental body of competent jurisdiction;
- (v) such information has been made generally available to the public other than by disclosure in violation of this Agreement or any other agreement;
or
- (vi) the Investor has consented to such disclosure.

The Company agrees that it shall, upon learning that disclosure of such information concerning the Investor is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt written notice to the Investor and allow the Investor, at the Investor's expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order covering such information.

(j) The Company shall use all commercially reasonable efforts to maintain designation and quotation of all the Registrable Securities covered by any Registration Statement on the Principal Market. If, despite the Company's commercially reasonable efforts, the Company is unsuccessful in satisfying the preceding sentence, it shall use commercially reasonable efforts to cause all the Registrable Securities covered by any Registration Statement to be listed on each other national securities exchange and automated quotation system, if any, on which securities of the same class or series issued by the Company are then listed, if any, if the listing of such Registrable Securities is then permitted under the rules of such exchange or system. The Company shall pay all fees and expenses in connection with satisfying its obligation under this Section 3(j).

(k) The Company or its designee shall cooperate with the Investor to facilitate the prompt preparation and delivery of certificates representing the Registrable Securities to be offered pursuant to the Registration Statement and enable such certificates to be in such denominations or amounts, as the case may be, as the Investor may reasonably request (and after any sales of such Registrable Securities by the Investor, such certificates not bearing restrictive legend).

(l) RESERVED.

(m) If requested by the Investor, the Company shall:

- (i) as soon as reasonably practical, incorporate in a prospectus supplement or post-effective amendment such information as the Investor reasonably determines should be included therein relating to the sale and distribution of Registrable Securities, including, without limitation, information with respect to the offering of the Registrable Securities to be sold in such offering;

- (ii) make all required filings of such prospectus supplement or post-effective amendment as soon as reasonably possible after being notified of the matters to be incorporated in such prospectus supplement or post-effective amendment; and
- (iii) supplement or make amendments to any Registration Statement if reasonably requested by the Investor.

(n) The Company shall use all commercially reasonable efforts to cause the Registrable Securities covered by the applicable Registration Statement to be registered with or approved by such other governmental agencies or authorities as may be necessary to facilitate the disposition of such Registrable Securities.

(o) The Company shall otherwise use all commercially reasonable efforts to comply with all applicable rules and regulations of the SEC in connection with any registration hereunder.

(p) Within one (1) business day after the Registration Statement which includes Registrable Securities is declared effective by the SEC, the Company shall deliver to the transfer agent for such Registrable Securities, with copies to the Investor, confirmation that such Registration Statement has been declared effective by the SEC.

(q) The Company shall take all other reasonable actions necessary to expedite and facilitate disposition by the Investor of Registrable Securities pursuant to the Registration Statement.

Section 4. OBLIGATIONS OF THE INVESTOR.

(a) At least five (5) calendar days prior to the first anticipated filing date of the Registration Statement, the Company shall notify the Investor in writing of the information the Company requires from the Investor for the Registration Statement. It shall be a condition precedent to the obligations of the Company to complete the Registration pursuant to this Agreement with respect to the Registrable Securities, and the Investor agrees to furnish to the Company, that information regarding itself, the Registrable Securities, and the intended method of disposition of the Registrable Securities as shall reasonably be required to effect the registration of the resale of such Registrable Securities, and the Investor shall execute such documents in connection with such registration as the Company may reasonably request. The Investor covenants and agrees that, in connection with any sale of Registrable Securities by it pursuant to the Registration Statement, it shall comply with the "Plan of Distribution" section of the then current prospectus relating to such Registration Statement.

(b) The Investor, by its acceptance of the Registrable Securities, agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of any Registration Statement hereunder, unless the Investor has notified the Company in writing of an election to exclude all of the Investor's Registrable Securities from such Registration Statement.

(c) The Investor agrees that, upon receipt of written notice from the Company of the happening of any event of the kind described in Section 3(f) or the first sentence of Section 3(e), the Investor will immediately discontinue disposition of Registrable Securities pursuant to any Registration Statement(s) covering the resale of such Registrable Securities until the Investor's receipt of the copies of the supplemented or amended prospectus contemplated by Section 3(f) or the first sentence of Section 3(e).

Section 5. EXPENSES OF REGISTRATION.

All reasonable expenses, other than underwriting discounts and commissions and other than as set forth in the Investment Agreement, incurred in connection with or in any way related to registrations including comments, filings, or qualifications pursuant to Sections 2 and Section 3, including, without limitation, all registration, listing, and qualifications fees, printing and accounting fees, and fees and disbursements of counsel for the Company shall be paid by the Company.

Section 6. INDEMNIFICATION.

In the event any Registrable Securities are included in the Registration Statement under this Agreement:

(a) To the fullest extent permitted by law, the Company, under this Agreement, will, and hereby does, indemnify, hold harmless, and defend the Investor who holds Registrable Securities, the directors, officers, partners, employees, counsel, agents, representatives of, and each Person, if any, who controls, the Investor within the meaning of the 1933 Act or the Securities Exchange Act of 1934, as amended (hereinafter referred to as the "1934 Act") (each, hereinafter referred to as an "Indemnified Person"), against any losses, claims, damages, liabilities, judgments, fines, penalties, charges, costs, attorneys' fees, amounts paid in settlement or expenses, joint or several (collectively, hereinafter referred to as "Claims"), incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency, body or the SEC, whether pending or threatened, whether or not an indemnified party is or may be a party thereto (hereinafter referred to as "Indemnified Damages"), to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon:

- (i) Any untrue statement or alleged untrue statement of a material fact in the Registration Statement or any post-effective amendment thereto or in any filing made in connection with the qualification of the offering under the securities or other "blue sky" laws of any jurisdiction in which the Investor has requested in writing that the Company register or qualify the Shares (hereinafter referred to as "Blue Sky Filing"), or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which the statements therein were made, not misleading;

- (ii) Any untrue statement or alleged untrue statement of a material fact contained in the final prospectus (as amended or supplemented, if the Company files any amendment thereof or supplement thereto with the SEC) or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in light of the circumstances under which the statements therein were made, not misleading, or
- (iii) Any violation or alleged violation by the Company of the 1933 Act, the 1934 Act, any other law, including, without limitation, any state securities law, or any rule or regulation thereunder relating to the offer or sale of the Registrable Securities pursuant to the Registration Statement (the matters in the foregoing clauses (i) through (iii) being, collectively, hereinafter referred to as “Violations”).

Subject to the restrictions set forth in Section 6(c), the Company shall reimburse the Investor and each such controlling person, promptly as such expenses are incurred and are due and payable, for any reasonable legal fees or other reasonable expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a):

- 1) Shall not apply to a Claim arising out of or based upon a Violation which is due to the inclusion in the Registration Statement of the information furnished to the Company by any Indemnified Person expressly for use in connection with the preparation of the Registration Statement or any such amendment thereof or supplement thereto;
- 2) Shall not be available to the extent such Claim is based on:
 - a. A failure of the Investor to deliver or to cause to be delivered the prospectus made available by the Company; or
 - b. The Indemnified Person’s use of an incorrect prospectus despite being promptly advised in advance by the Company in writing not to use such incorrect prospectus; or
 - c. Any claims based on the manner of sale of the Registrable Securities by the Investor or of the Investor’s failure to register as a dealer under applicable securities laws; or
 - d. Any omission of the Investor to notify the Company of any material fact that should be stated in the Registration Statement or prospectus relating to the Investor or the manner of sale; or
 - e. Any amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld. Such indemnity shall remain in full force and effect

regardless of any investigation made by or on behalf of the Indemnified Person and shall survive the resale of the Registrable Securities by the Investor pursuant to the Registration Statement.

(b) In connection with any Registration Statement in which Investor is participating, the Investor agrees to severally and jointly indemnify, hold harmless and defend, to the same extent and in the same manner as is set forth in Section 6(a), the Company, each of its directors, each of its officers who signs the Registration Statement, each Person, if any, who controls the Company within the meaning of the 1933 Act or the 1934 Act and the Company's agents (collectively and together with an Indemnified Person, hereinafter referred to as an "Indemnified Party"), against any Claim or Indemnified Damages to which any of them may become subject, under the 1933 Act, the 1934 Act or otherwise, insofar as such Claim or Indemnified Damages arise out of or are based upon any Violation, in each case to the extent, and only to the extent, that such Violation is due to the inclusion in the Registration Statement of the written information furnished to the Company by the Investor expressly for use in connection with such Registration Statement. Subject to Section 6(c), the Investor will reimburse any legal or other expenses reasonably incurred by them in connection with investigating or defending any such Claim; *provided, however,* that the indemnity agreement contained in this Section 6(b) and the agreement with respect to contribution contained in Section 7 shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Investor, which consent shall not be unreasonably withheld; provided, further, however, that the Investor shall only be liable under this Section 6(b) for that amount of a Claim or Indemnified Damages as does not exceed the net proceeds to such Investor as a result of the sale of Registrable Securities pursuant to such Registration Statement. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such Indemnified Party and shall survive the resale of the Registrable Securities by the Investor pursuant to the Registration Statement. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(b) with respect to any preliminary prospectus shall not inure to the benefit of any Indemnified Party if the untrue statement or omission of material fact contained in the preliminary prospectus were corrected on a timely basis in the prospectus, as then amended or supplemented. This indemnification provision shall apply separately to each Investor and liability hereunder shall not be joint and several.

(c) Promptly after receipt by an Indemnified Person or Indemnified Party under this Section 6 of notice of the commencement of any action or proceeding (including any governmental action or proceeding) involving a Claim, such Indemnified Person or Indemnified Party shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Indemnified Person or the Indemnified Party, as the case may be; provided, however, that an Indemnified Person or Indemnified Party shall have the right to retain its own counsel with the fees and expenses to be paid by the indemnifying party, if, in the reasonable opinion of counsel retained by the Indemnified Person or Indemnified Party, the representation by counsel of the Indemnified Person or Indemnified Party and the indemnifying party would be inappropriate due

to actual or potential differing interests between such Indemnified Person or Indemnified Party and any other party represented by such counsel in such proceeding. The indemnifying party shall pay for only one (1) separate legal counsel for the Indemnified Persons or the Indemnified Parties, as applicable, and such counsel shall be selected by the Investor, if the Investor is entitled to indemnification hereunder, or the Company, if the Company is entitled to indemnification hereunder, as applicable. The Indemnified Party or Indemnified Person shall cooperate fully with the indemnifying party in connection with any negotiation or defense of any such action or Claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Indemnified Party or Indemnified Person which relates to such action or Claim. The indemnifying party shall keep the Indemnified Party or Indemnified Person fully apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding affected without its written consent, provided, however, that the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the consent of the Indemnified Party or Indemnified Person, consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party or Indemnified Person of a release from all liability in respect to such Claim. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Indemnified Party or Indemnified Person with respect to all third parties, firms, or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Indemnified Person or Indemnified Party under this Section 6, except to the extent that the indemnifying party is prejudiced in its ability to defend such action.

(d) The indemnity agreements contained herein shall be in addition to (i) any cause of action or similar right of the Indemnified Party or Indemnified Person against the indemnifying party or others, and (ii) any liabilities the indemnifying party may be subject to pursuant to the law.

Section 7. CONTRIBUTION.

To the extent any indemnification by an indemnifying party is prohibited or limited by law, the indemnifying party agrees to make the maximum contribution with respect to any amounts for which it would otherwise be liable under Section 6 to the fullest extent permitted by law; *provided, however*, that: (i) no contribution shall be made under circumstances where the maker would not have been liable for indemnification under the fault standards set forth in Section 6; (ii) no seller of Registrable Securities guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) shall be entitled to contribution from any seller of Registrable Securities who was not guilty of fraudulent misrepresentation; and (iii) contribution by any seller of Registrable Securities shall be limited in amount to the net amount of proceeds received by such seller from the sale of such Registrable Securities.

Section 8. REPORTS UNDER THE 1934 ACT.

With a view to making available to the Investor the benefits of Rule 144 promulgated under the 1933 Act or any other similar rule or regulation of the SEC that may at any time permit the Investor to sell securities of the Company to the public without registration ("Rule 144"), provided that the Investor holds any Registrable Securities are eligible for resale under Rule 144(b), the Company agrees to:

- (a) Make and keep public information available, as those terms are understood and defined in Rule 144;
- (b) File with the SEC in a timely manner all reports and other documents required of the Company under the 1933 Act and the 1934 Act so long as the Company remains subject to such requirements (it being understood that nothing herein shall limit the Company's obligations under Section 5(c) of the Investment Agreement) and the filing of such reports and other documents is required for the applicable provisions of Rule 144; and
- (c) Furnish to the Investor, promptly upon request:
 - a. A written statement by the Company that it has complied with the reporting requirements of Rule 144, the 1933 Act, and the 1934 Act,
 - b. A copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and
 - c. such other information as may be reasonably requested to permit the Investor to sell such securities pursuant to Rule 144 without registration.

Section 9. NO ASSIGNMENT OF REGISTRATION RIGHTS.

The rights and obligations under this Agreement shall not be assignable.

Section 10. AMENDMENT OF REGISTRATION RIGHTS.

The provisions of this Agreement may be amended only with the written consent of the Company and Investor.

Section 11. MISCELLANEOUS.

(a) Any notices or other communications required or permitted to be given under the terms of this Agreement that must be in writing will be deemed to have been delivered (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by facsimile (provided a confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); or (iii) one (1) day after deposit with a nationally recognized overnight delivery

service, in each case properly addressed to the party to receive the same. The addresses and facsimile numbers for such communications shall be:

If to the Company:

Vaccinogen, Inc.
5300 Westview Drive, Suite 406
Frederick, MD 21703
Fax: (301) 631-2970

with a copy to:

Indeglia & Carney
1900 Main Street, Suite 300
Irvine, CA 92614
marc@indegliacarney.com
Fax: (949) 861-3324

If to the Investor:

Kodiak Capital Group, LLC
260 Newport Center Drive, Suite 100
Newport Beach, CA 92660
ryan@kodiak-capital.com

Each party shall provide five (5) business days prior notice to the other party of any change in address, phone number, facsimile number, or e-mail address.

- (b) Failure of any party to exercise any right or remedy under this Agreement or otherwise, or delay by a party in exercising such right or remedy, shall not operate as a waiver thereof.
- (c) This Agreement and the Equity Line Transaction Documents constitute the entire agreement among the parties hereto with respect to the subject matter hereof and thereof. There are no restrictions, promises, warranties, or undertakings, other than those set forth or referred to herein and therein.
- (d) This Agreement and the Equity Line Transaction Documents supersede all prior agreements and understandings among the parties hereto with respect to the subject matter hereof and thereof.
- (e) The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof. Whenever required by the context of this Agreement, the singular shall include the plural and masculine shall include the feminine. This Agreement shall not be construed as if it had been prepared by one of the parties, but rather as if all the parties had prepared the same.

(f) This Agreement may be executed in two or more identical counterparts, each of which shall be deemed an original but all of which shall constitute one and the same agreement. This Agreement, once executed by a party, may be delivered to the other party hereto by .PDF of a copy of this Agreement bearing the signature of the party so delivering this Agreement.

(g) Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments, and documents, as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

(h) In case any provision of this Agreement is held by a court of competent jurisdiction to be excessive in scope or otherwise invalid or unenforceable, such provision shall be adjusted rather than voided, if possible, so that it is enforceable to the maximum extent possible, and the validity and enforceability of the remaining provisions of this Agreement will not in any way be affected or impaired thereby. The normal rule of construction and contractual interpretation that ambiguities should be held against the drafting party is not operative under this agreement.

Section 12. GOVERNING LAW

All disputes arising under this agreement shall be governed by and interpreted in accordance with the laws of the State of New York without regard to principles of conflict of laws.

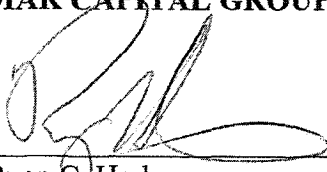
[Remainder of page intentionally left blank.]

SIGNATURE PAGE OF REGISTRATION RIGHTS AGREEMENT

Your signature on this Signature Page evidences your agreement to be bound by the terms and conditions of the Investment Agreement and the Registration Rights Agreement as of the date first written above. The undersigned signatory hereby certifies that he has read and understands the Registration Rights Agreement, and the representations made by the undersigned in this Registration Rights Agreement are true and accurate, and agrees to be bound by its terms.


KODIAK CAPITAL GROUP, LLC

By: _____


Ryan C. Hodson
Managing Director

VACCINOGEN, INC.

By: _____


Andrew L. Tussing
President & Chief Operating Officer

By: _____



Michael G. Hanna, Jr., Ph.D.
Chairman & Interim Chief Executive Officer

EXHIBIT 6.8

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

REGISTRATION RIGHTS AGREEMENT

THIS REGISTRATION RIGHTS AGREEMENT is made as of the 24th day of June, 2010, by and among Vaccinogen, Inc., a Delaware corporation (the "**Company**"), and each of the investors listed on Schedule A hereto, each of which is referred to in this Agreement as "**Investor**".

RECITALS

WHEREAS, the Company and the Investors are parties to the Stock Exchange Agreement of even date herewith (the "**Exchange Agreement**"), and the Company and Intracel Holdings Corporation, a Delaware corporation ("**Intracel**") are parties to the Asset Transfer Agreement of even date herewith (the "**Asset Transfer Agreement**"); and

WHEREAS, in order to induce the Company and the Investors to enter into the Exchange Agreement and the Asset Transfer Agreement, the Investors and the Company hereby agree that this Agreement shall govern the rights of the Investors to cause the Company to register shares of Common Stock issuable to the Investors as set forth in this Agreement.

NOW, THEREFORE, the parties hereby agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person.

1.2 "**Common Stock**" means shares of the Company's common stock, par value \$0.0001 per share.

1.3 "**Damages**" means any loss, damage, or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, or liability (or any action in respect thereof) arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus, free writing prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.4 "**Exchange Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.5 **“Excluded Registration”** means (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.6 **“FINRA”** means the Financial Industry Regulatory Authority, Inc.

1.7 **“Form S-1”** means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.8 **“Form S-3”** means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.9 **“Holder”** means any holder of Registrable Securities who is a party to this Agreement.

1.10 **“Immediate Family Member”** means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships, of a natural person referred to herein.

1.11 **“Initiating Holders”** means, collectively, Holders who properly initiate a registration request under this Agreement.

1.12 **“IPO”** means the Company’s first underwritten public offering of its Common Stock under the Securities Act resulting in cash proceeds to the Company of at least \$10 million, net of Selling Expenses.

1.13 **“Person”** means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.14 **“Registrable Securities”** means (i) the Common Stock issuable or issued upon conversion of the Series B Preferred Stock; and (ii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clauses (i) above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Section 3.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Section 2.12 of this Agreement.

1.15 **“Registrable Securities then outstanding”** means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable

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Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.16 “**Restricted Securities**” means the securities of the Company required to bear the legend set forth in Section 2.11 hereof.

1.17 “**SEC**” means the Securities and Exchange Commission.

1.18 “**SEC Rule 144**” means Rule 144 promulgated by the SEC under the Securities Act.

1.19 “**SEC Rule 145**” means Rule 145 promulgated by the SEC under the Securities Act.

1.20 “**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.21 “**Selling Expenses**” means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Section 2.6.

1.22 “**Series B Preferred Stock**” means shares of the Company’s Series B Preferred Stock, par value \$0.0001 per share.

2. Registration Rights. The Company covenants and agrees as follows:

2.1 Demand Registration.

(a) Form S-1 Demand. If at any time after one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from Holders of forty percent (40%) of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to at least forty percent (40%) of the Registrable Securities then outstanding, then the Company shall (i) within ten (10) days after the date such request is given, give notice thereof (the “**Demand Notice**”) to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within sixty (60) days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Section 2.1(c) and Section 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least ten percent (10%) of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least \$5 million, then the

Company shall (i) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Section 2.1(c) and Section 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Section 2.1 a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the Company's Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than one hundred eighty (180) days after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right more than twice in any twelve (12) month period ; and provided further that the Company shall not register any securities for its own account or that of any other stockholder during such one hundred eighty (180) day period other than an Excluded Registration

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2.1(a) (i) during the period that is ninety (90) days before the Company's good faith estimate of the date of filing of, and ending on a date that is one hundred eighty (180) days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected one registration pursuant to Section 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Section 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2.1(b) (i) during the period that is forty-five (45) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two registrations pursuant to Section 2.1(b) within the twelve (12) month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Section 2.1(d) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Section 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Section 2.1(d).

2.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its Common Stock under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Section 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Section 2.6.

2.3 Underwriting Requirements.

(a) If, pursuant to Section 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Section 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Company and shall be reasonably acceptable to a majority in interest of the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Section 2.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Section 2.3, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Section 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities,

including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares. Notwithstanding the foregoing, in no event shall the number of Registrable Securities included in the offering be reduced below twenty-five percent (25%) of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above. For purposes of the provision in this Section 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

(c) For purposes of Section 2.1(a), a registration shall not be counted as "effected" if an underwriter exercises the underwriter's cutback provisions in Section 2.3(a).

2.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such one hundred twenty (120) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration, and (ii) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such one hundred twenty (120) day period shall be extended for up to sixty (60) days, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any managing underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

2.5 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of

such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements, not to exceed \$20,000, of one counsel for the selling Holders ("**Selling Holder Counsel**"), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Section 2.1(a) or Section 2.1(b), as the case may be; provided further that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Section 2.1(a) or Section 2.1(b). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such

Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Sections 2.8(b) and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Section 2.8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Section 2.8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Section 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent

jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Section 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Section 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case, (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Section 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Section 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Section 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) use commercially reasonable efforts to make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company; and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10 "Market Stand-off" Agreement. Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the registration by the Company of shares of its Common Stock or any other equity securities under the Securities Act on a registration statement on Form S-1 or Form S-3, and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days in the case of the IPO, which period may be extended upon the request of the managing underwriter, to the extent required by any FINRA rules, for an additional period of up to fifteen (15) days if the Company issues or proposes to issue an earnings or other public release within fifteen (15) days of the expiration of the 180-day lockup period, or (y) ninety (90) days in the case of any registration other than the IPO, which period may be extended upon the request of the managing underwriter, to the extent required by any FINRA rules, for an additional period of up to fifteen (15) days if the Company issues or proposes to issue an earnings or other public release within fifteen (15) days of the expiration of the 90-day lockup period), (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock (whether such shares or any such securities are then owned by the Holder or are thereafter acquired) or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Section 2.10, shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, and shall be applicable to the Holders only if all officers and directors are subject to the same restrictions. The underwriters in connection with such registration are intended third-party beneficiaries of this Section 2.10 and shall have the right, power, and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably

requested by the underwriters in connection with such registration that are consistent with this Section 2.10 or that are necessary to give further effect thereto. Any discretionary waiver or termination of the restrictions of any or all of such agreements by the Company or the underwriters shall apply pro rata to all Holders subject to such agreements, based on the number of shares subject to such agreements, except that, notwithstanding the foregoing, the Company and the underwriters may, in their sole discretion, waive or terminate these restrictions with respect to up to 50,000 shares of the Common Stock.

2.11 Restrictive Legend. A copy of this Agreement shall be filed with the Secretary of the Company and shall be kept at its principal executive office. Upon the execution of this Agreement, each certificate or instrument representing (i) the Series B Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall be stamped or otherwise imprinted with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF THE INVESTORS' RIGHTS AGREEMENT AND THE REGISTRATION RIGHTS AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

2.12 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Section 2.1 or Section 2.2 shall terminate upon the earliest to occur of:

- (a) the closing of a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation;
- (b) when all of such Holder's Registrable Securities could be sold without restriction under SEC Rule 144; and
- (c) the three (3) year anniversary of the IPO.

3. Miscellaneous.

3.1 Successors and Assigns. This Agreement and the rights and obligations of the parties hereunder shall inure to the benefit of, and be binding upon, the parties' respective successors, permitted assigns and legal representatives, provided that no party hereto may assign such Person's rights or delegate such Person's obligations hereunder, except in connection with a sale, pledge or other transfer of any such Person's Registrable Securities in accordance with the

provisions of the Investors Rights Agreement of even date herewith by and among the Company and the Investors.

3.2 Governing Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of law.

3.3 Counterparts; Facsimile. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Agreement may also be executed and delivered by facsimile or electronic mail transmission of a scanned “.pdf” signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

3.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

3.5 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient’s normal business hours, and if not sent during normal business hours, then on the recipient’s next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Section 6.5. If notice is given to the Company, a copy shall also be sent to Venable LLP, 750 E. Pratt Street, Suite 900, Baltimore, MD 21202, ATTN: Bryson L. Cook, Esq.

3.6 Amendments; Waivers; Certain Construction; and Waivers. This Agreement may not be amended modified or supplemented except by a written agreement of the Company and the Holders of a majority of the Registrable Securities. Any amendment, modification, termination or waiver so effected shall be binding upon the Company and all the Holders and all of their respective successors and permitted assigns whether or not such party, assignee or other shareholder entered into or approved such amendment, modification, termination or waiver. Notwithstanding the foregoing, this Agreement may not be amended, modified or terminated and the observance of any term hereunder may not be waived with respect to any Holder without the written consent of such Holder unless such amendment, modification, termination or waiver applies to all such Holders. No provision of this Agreement shall be construed against or interpreted to the disadvantage of any party hereto by reason of such party’s or such Person’s counsel having or being deemed to have structured or drafted such provision. Any agreement on the part of a party hereto to any extension or waiver of any obligation of any other party hereunder shall be valid only if set forth in an instrument in writing signed on behalf of such party. A waiver by one party hereto of the performance of any

covenant, agreement, obligation, condition, representation or warranty shall not be construed as a waiver of any other covenant, agreement, obligation, condition, representation or warranty or as a waiver by any other party. A waiver by any party of the performance of any act shall not constitute a waiver of the performance of any other act or an identical act required to be performed at a later time.

3.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

3.8 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

3.9 Entire Agreement. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.

3.10 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the federal and state courts located within the State of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the federal and state courts located within the State of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court. Each party will bear its own costs in respect of any disputes arising under this Agreement. Each of the parties to this Agreement consents to personal jurisdiction for any equitable action sought in any federal or state courts located within the State of Delaware having subject matter jurisdiction.

EACH OF THE PARTIES TO THIS AGREEMENT HEREBY IRREVOCABLY WAIVES, AND AGREES TO CAUSE ITS AFFILIATES TO WAIVE, ALL RIGHT TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.


3.11 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such

breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

VACCINOGEN, INC.

By: 
Name: Michael G. Hanna, Jr.
Title: President and Chief Executive Officer

INVESTORS:
INTRACEL HOLDINGS CORPORATION

By: _____
Name: Daniel Kane
Title: Chairman of the Board of Directors

DANIEL FITZGERALD

Name: Daniel Fitzgerald

INTRACEL INVESTMENT LLC

By: _____
Name: _____
Title: _____

DUBLIND PARTNERS

By: _____
Name: _____
Title: _____

K. SCHMIDT

Name: _____

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

VACCINOGEN, INC.

By: _____
Name: Michael G. Hanna, Jr.
Title: President and Chief Executive Officer

INVESTORS:

INTRACEL HOLDINGS CORPORATION

By: *Daniel Kane*
Name: Daniel Kane
Title: Chairman of the Board of Directors

DANIEL FITZGERALD

Name: Daniel Fitzgerald

INTRACEL INVESTMENT LLC

By: *Daniel Kane*
Name: Daniel Kane
Title: managing member

DUBLIND PARTNERS

By: _____
Name:
Title:

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

VACCINOGEN, INC.

By: _____
Name: Michael G. Hanna, Jr.
Title: President and Chief Executive Officer

INVESTORS:
INTRACEL HOLDINGS CORPORATION

By: _____
Name: Daniel Kane
Title: Chairman of the Board of Directors

DANIEL FITZGERALD

Name: Daniel Fitzgerald

INTRACEL INVESTMENT LLC

By: _____
Name: _____
Title: _____

DUBLIND PARTNERS

By: _____
Name: _____
Title: _____

K. SCHMIDT

Kenneth M. Schmidt

Name:

ALLIANCE EQUITIES

By: _____
Name:
Title:

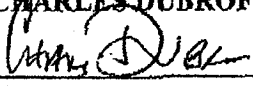
CHARLES LINDSAY

Name: Charles Lindsay

CURTIS PARTNERSHIP

By: _____
Name:
Title:

CHARLES DUBROFF



Name:

3V SOURCEONE

By: _____
Name:
Title:

ALAN COHEN


Name: Alan Cohen

DANIEL KANE

Name: Daniel Kane

ALBERT NASSI

Name: Albert Nassi

SQ VENTURES

By: _____
Name:
Title:

CHRIS HUBER

Name: Chris Huber

ALAN COHEN

Name: Alan Cohen

DANIEL KANE

Name: Daniel Kane

ALBERT NASSI



Name: Albert Nassi

SQ VENTURES

By: _____
Name:
Title:

CHRIS HUBER



Name: Chris Huber

ALAN COHEN

Name: Alan Cohen

DANIEL KANE



Name: Daniel Kane

ALBERT NASSI

Name: Albert Nassi

SQ VENTURES

By: _____
Name:
Title:

CHRIS HUBER

Name: Chris Huber

SCHEDULE A

Investors

<u>Name, Address, Email and Fax</u>
Intracel Holdings Corporation 550 Highland Street Frederick, Maryland 21701 Attention: Daniel Kane Fax: _____ Email: <u>DKane@NassiGroup.com</u>
Daniel Fitzgerald Email:
Dublind Partners Email:
[K. Schmidt] Email:
Alliance Equities Email:
Charles Linsay Email:
Cutis Partnership Email:

Charles Dubroff
Email:
3V Sourceone
Email:
Alan Cohen
Email:
Daniel Kane
Email:
Albert Nassi
Email:
SQ Ventures
Email:
Chris Huber
Email:

EXHIBIT 6.9

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

**AMENDED AND RESTATED REGISTRATION RIGHTS
AGREEMENT**

THIS AMENDED AND RESTATED REGISTRATION RIGHTS AGREEMENT (this “**Agreement**”) is made as of the ____ day of _____, 2010, by and among Vaccinogen, Inc., a Maryland corporation (the “**Company**”), and each of the investors listed on Schedule A hereto, each of which is referred to in this Agreement as an “**Investor**.”

RECITALS

WHEREAS, the initial Investors, as noted on Schedule A hereto (the “**Initial Investors**”), entered into the Registration Rights Agreement dated February 5, 2010 with the Company in connection with their acquisition of Series AA Preferred Stock (the “**Initial Registration Rights Agreements**”);

WHEREAS, in accordance with Section 3.6 of the Initial Registration Rights Agreement, the Initial Investors and the Company have agreed to amend and restate the Initial Registration Rights Agreement in the manner provided by this Agreement, as evidenced by the Consent to Amendment of the Initial Investors and the Company of even date herewith;

WHEREAS, the Company and the Investors are parties to the Amended and Restated Series AA Preferred Stock Purchase Agreement of even date herewith (the “**Purchase Agreement**”); and

WHEREAS, in order to induce the Company to enter into the Purchase Agreement and to induce the Investors to invest funds in the Company pursuant to the Purchase Agreement, the Investors and the Company hereby agree that this Agreement shall govern the rights of the Investors to cause the Company to register shares of Common Stock issuable to the Investors as set forth in this Agreement.

NOW, THEREFORE, the parties hereby agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 “**Affiliate**” means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person.

1.2 “**Common Stock**” means shares of the Company’s common stock, par value \$0.0001 per share.

1.3 “**Damages**” means any loss, damage, or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, or liability (or any action in respect thereof)

arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus, free writing prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.4 **“Exchange Act”** means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.5 **“Excluded Registration”** means (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.6 **“FINRA”** means the Financial Industry Regulatory Authority, Inc.

1.7 **“Form S-1”** means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.8 **“Form S-3”** means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.9 **“Holder”** means any holder of Registrable Securities who is a party to this Agreement.

1.10 **“Immediate Family Member”** means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships, of a natural person referred to herein.

1.11 **“Initiating Holders”** means, collectively, Holders who properly initiate a registration request under this Agreement.

1.12 **“IPO”** means the Company’s first underwritten public offering of its Common Stock under the Securities Act resulting in cash proceeds to the Company of at least \$10 million, net of Selling Expenses.

1.13 **“Person”** means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.14 “**Registrable Securities**” means (i) the Common Stock issuable or issued upon conversion of the Series AA Preferred Stock; and (ii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clauses (i) above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Section 3.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Section 2.12 of this Agreement.

1.15 “**Registrable Securities then outstanding**” means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.16 “**Restricted Securities**” means the securities of the Company required to bear the legend set forth in Section 2.11 hereof.

1.17 “**SEC**” means the Securities and Exchange Commission.

1.18 “**SEC Rule 144**” means Rule 144 promulgated by the SEC under the Securities Act.

1.19 “**SEC Rule 145**” means Rule 145 promulgated by the SEC under the Securities Act.

1.20 “**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.21 “**Selling Expenses**” means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Section 2.6.

1.22 “**Series AA Preferred Stock**” means shares of the Company’s Series AA Preferred Stock, par value \$0.0001 per share.

2. Registration Rights. The Company covenants and agrees as follows:

2.1 Demand Registration.

(a) Form S-1 Demand. If at any time after one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from Holders of forty percent (40%) of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to at least forty percent (40%) of the Registrable Securities then outstanding, then the Company shall (i) within ten (10) days after the date such request is given, give notice thereof (the “**Demand Notice**”) to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within sixty (60) days after the date such request is given by the Initiating Holders, file a Form S-1 registration

statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Section 2.1(c) and Section 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least ten percent (10%) of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least \$5 million, then the Company shall (i) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Section 2.1(c) and Section 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Section 2.1 a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the Company's Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than one hundred eighty (180) days after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right more than twice in any twelve (12) month period; and provided further that the Company shall not register any securities for its own account or that of any other stockholder during such one hundred eighty (180) day period other than an Excluded Registration

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2.1(a) (i) during the period that is ninety (90) days before the Company's good faith estimate of the date of filing of, and ending on a date that is one hundred eighty (180) days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected one registration pursuant to Section 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Section 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2.1(b) (i) during the period that is

forty-five (45) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two registrations pursuant to Section 2.1(b) within the twelve (12) month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Section 2.1(d) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Section 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Section 2.1(d).

2.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its Common Stock under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Section 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Section 2.6.

2.3 Underwriting Requirements.

(a) If, pursuant to Section 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Section 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Company and shall be reasonably acceptable to a majority in interest of the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Section 2.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Section 2.3, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting

shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Section 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, or (ii) the number of Registrable Securities included in the offering be reduced below twenty-five percent (25%) of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering. For purposes of the provision in this Section 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

(c) For purposes of Section 2.1(a), a registration shall not be counted as "effected" if an underwriter exercises the underwriter's cutback provisions in Section 2.3(a).

2.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such one hundred twenty (120) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration, and (ii) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such one hundred twenty (120) day period shall be extended for up to sixty (60) days, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any managing underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the

selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

2.5 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements, not to exceed \$20,000, of one counsel for the selling Holders ("**Selling Holder Counsel**"), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Section 2.1(a) or Section 2.1(b), as the case may be; provided further that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Section 2.1(a) or Section 2.1(b). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Sections 2.8(b) and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to

assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Section 2.8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Section 2.8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Section 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Section 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Section 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case, (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Section 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Section 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Section 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) use commercially reasonable efforts to make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company; and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10 “Market Stand-off” Agreement. Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the registration by the Company of shares of its Common Stock or any other equity securities under the Securities Act on a registration statement on Form S-1 or Form S-3, and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days in the case of the IPO, which period may be extended upon the request of the managing underwriter, to the extent required by any FINRA rules, for an additional period of up to fifteen (15) days if the Company issues or proposes to issue an earnings or other public release within fifteen (15) days of the expiration of the 180-day lockup period, or (y) ninety (90) days in the case of any registration other than the IPO, which period may be extended upon the request of the managing underwriter, to the extent required by any FINRA rules, for an additional period of

up to fifteen (15) days if the Company issues or proposes to issue an earnings or other public release within fifteen (15) days of the expiration of the 90-day lockup period), (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock (whether such shares or any such securities are then owned by the Holder or are thereafter acquired) or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Section 2.10, shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, and shall be applicable to the Holders only if all officers and directors are subject to the same restrictions. The underwriters in connection with such registration are intended third-party beneficiaries of this Section 2.10 and shall have the right, power, and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Section 2.10 or that are necessary to give further effect thereto. Any discretionary waiver or termination of the restrictions of any or all of such agreements by the Company or the underwriters shall apply pro rata to all Holders subject to such agreements, based on the number of shares subject to such agreements, except that, notwithstanding the foregoing, the Company and the underwriters may, in their sole discretion, waive or terminate these restrictions with respect to up to 50,000 shares of the Common Stock.

2.11 Restrictive Legend. A copy of this Agreement shall be filed with the Secretary of the Company and shall be kept at its principal executive office. Upon the execution of this Agreement, each certificate or instrument representing (i) the Series AA Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall be stamped or otherwise imprinted with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF THE AMENDED AND RESTATED SERIES AA PREFERRED STOCK INVESTOR RIGHTS AGREEMENT AND THE AMENDED AND RESTATED REGISTRATION RIGHTS AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

2.12 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Section 2.1 or Section 2.2 shall terminate upon the earliest to occur of:

(a) the closing of a Deemed Liquidation Event, as such term is defined in the Company's Articles of Incorporation;

(b) when all of such Holder's Registrable Securities could be sold without restriction under SEC Rule 144; and

(c) the three (3) year anniversary of the IPO.

3. Miscellaneous.

3.1 Successors and Assigns. This Agreement and the rights and obligations of the parties hereunder shall inure to the benefit of, and be binding upon, the parties' respective successors, permitted assigns and legal representatives, provided that no party hereto may assign such Person's rights or delegate such Person's obligations hereunder, except in connection with a sale, pledge or other transfer of any such Person's Registrable Securities in accordance with the provisions of the Amended and Restated Series AA Preferred Stock Investor Rights Agreement between the Company and the Investors of even date herewith.

3.2 Governing Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of law.

3.3 Counterparts; Facsimile. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Agreement may also be executed and delivered by facsimile or electronic mail transmission of a scanned ".pdf" signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

3.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

3.5 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Section 3.5. If notice is

given to the Company, a copy shall also be sent to Venable LLP, 750 E. Pratt Street, Suite 900, Baltimore, MD 21202, ATTN: Bryson L. Cook, Esq.

3.6 Amendments; Waivers; Certain Construction; and Waivers. This Agreement may not be amended modified or supplemented except by a written agreement of the Company and the Holders of a majority of the Registrable Securities. Any amendment, modification, termination or waiver so effected shall be binding upon the Company and all the Holders and all of their respective successors and permitted assigns whether or not such party, assignee or other shareholder entered into or approved such amendment, modification, termination or waiver. Notwithstanding the foregoing, this Agreement may not be amended, modified or terminated and the observance of any term hereunder may not be waived with respect to any Holder without the written consent of such Holder unless such amendment, modification, termination or waiver applies to all such Holders. No provision of this Agreement shall be construed against or interpreted to the disadvantage of any party hereto by reason of such party's or such Person's counsel having or being deemed to have structured or drafted such provision. Any agreement on the part of a party hereto to any extension or waiver of any obligation of any other party hereunder shall be valid only if set forth in an instrument in writing signed on behalf of such party. A waiver by one party hereto of the performance of any covenant, agreement, obligation, condition, representation or warranty shall not be construed as a waiver of any other covenant, agreement, obligation, condition, representation or warranty or as a waiver by any other party. A waiver by any party of the performance of any act shall not constitute a waiver of the performance of any other act or an identical act required to be performed at a later time.

3.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

3.8 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

3.9 Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's Series AA Preferred Stock after the date hereof, whether pursuant to the Purchase Agreement or otherwise, any purchaser of such shares of Series AA Preferred Stock may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

3.10 Entire Agreement. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with

respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.

3.11 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the federal and state courts located within the State of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the federal and state courts located within the State of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court. Each party will bear its own costs in respect of any disputes arising under this Agreement. Each of the parties to this Agreement consents to personal jurisdiction for any equitable action sought in any federal or state courts located within the State of Delaware having subject matter jurisdiction.

EACH OF THE PARTIES TO THIS AGREEMENT HEREBY IRREVOCABLY WAIVES, AND AGREES TO CAUSE ITS AFFILIATES TO WAIVE, ALL RIGHT TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

3.12 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

VACCINOGEN, INC.

By: _____
Name: Andrew L. Tussing
Title: Chief Operating Officer

INVESTOR:

By: _____
Name: _____
Title: _____

SCHEDULE A

Investors

*Peter and Vasiliki Vrettakos, Tenants by Entirety
*Alan and Susan Reed, Tenants by the Entirety
*Michael D. and Anne Marie Hudak, Tenants by the Entirety
*The Donna M. Smith Revocable Trust (Donna M. Smith)
*Walter A. Romans, Jr.
*Bretton J. and Kimberly Bolt, Tenants by the Entirety
*Stephen and Jeanne Robinson, Tenants by the Entirety
*Timothy Evankovich
*Malinda Dice Shah
Anita G. Miller
Jeremy J. Reed
Matthew B. Jeffries
Michael N. Kennedy
Jonathan D. Bell
James L. Railey, Jr.
Cheshire Holdings Inc., Ian Goodall, Authorized Signatory
Daniel Raymond O'Madigan
Herbert P. and Sheran R. Wilkins
George Jeffrey Popham

*Initial Investors

EXHIBIT 6.10

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

ADVISORY AGREEMENT

THIS ADVISORY AGREEMENT made this 1st day of May, 2009 by and between ALMS and ASSOCIATES, INC. (hereinafter referred to as the ADVISOR) and VACCINOGEN, INC. (hereinafter referred to as the CLIENT), collectively hereinafter referred to as the Parties.

WITNESSETH

WHEREAS: the Client is desirous of obtaining private office planning services from the Advisor.

WHEREAS: the Client is in need of certain guidance and advice with respect to these areas;

NOW THEREFORE, in consideration of the mutual covenants and promises contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, it is hereby agreed as follows:

1. INFORMATION. The Client hereby agrees to continually submit to the Advisor any and all pertinent data with respect to the said Client's financial and business situation so that the Advisor may study, analyze the data and make recommendations within the scope of this engagement.

2. CONFIDENTIALITY. It is hereby agreed by the Advisor that any and all data submitted in accordance with paragraph one, above, shall be treated on a strictly confidential basis and shall not be disclosed to third parties, except as may be necessary to aid in the work of the Advisor, as agreed upon in writing or required by law. Advisor, is authorized by Client to disclose, provide copies of and communicate information obtained from Client to companies affiliated with the Advisor. It is also agreed by the Advisor that the Client may make information, or recommendations and advice given by the Advisor available to any professional Advisor employed or retained by the Client to assist in the implementation of the recommendations and advice given by the Advisor.

3. ADVISORY SERVICES.

A. The Advisor hereby agrees to study and analyze the Client's business, including but not limited to areas such as venture growth plans, tax planning.

B. The Advisor hereby agrees to establish with the Client goals and develop with appropriate and approved collaborative advisors or tactical advisors engaged for a specific project a strategic plan to implement and accomplish these goals. The Advisor agrees to then provide, on an ongoing basis, implementation, monitoring and auditing of the collaborative advisors or tactical advisors, and their project work. Advisor shall attend all relevant meetings, conference calls, review all written material as is necessary to facilitate the strategic plan and functional operations of the private office.

C. The Client understands that the Advisor is not qualified to practice law, provide investment advice, insurance advice or accounting services directly. The reports and analysis created, and provided by Advisor may contain general information in regard to such matters or contain suggestions for discussion with Client's attorney, accountant, or other professionals. Client must, however, rely upon the opinion of Client's attorney, accountant or other professional advisor in regard to the consequences of any action implemented. It shall be further agreed by and between the Parties hereto that the Advisor shall not take possession or control of any securities of the Client unless and only specifically for a Bill Pay Account.

D. The Advisor may provide the Client, on an ongoing basis, the following services: advisory, consolidated statement, property management, bill pay and vault & encryption services.

4. IMPLEMENTATION.

A. The Client may choose any party to implement the strategies developed by the Advisor's planning process. This Agreement does not lock the Client into using Advisor's service providers that maybe recommended by the Advisor.

B. It is expressly agreed by and between the Parties that the Client is free to follow, or disregard, in whole or in part, any recommendations, suggestions, or advice made by the Advisor to the Client.

5. FEES. The Client acknowledges the fact that:

A. The Advisor has fully explained the entire structure upon which this contractual relationship is based.

B. The fee for the services outlined shall be TWENTY THOUSAND DOLLARS (\$20,000.00) per month beginning in the month in which the services commenced. However; the fee for the services shall be reduced to TEN THOUSAND DOLLARS (\$10,000.00) until such time as the Series A round of financing has been fulfilled and funded. At that time the full monthly payment of TWENTY THOUSAND DOLLARS (\$20,000.00) shall be required going forward. During the time frame from execution of this Agreement and Series A round completion, the difference between the TWENTY THOUSAND DOLLARS (\$20,000.00) Agreement amount and the reduced fee to TEN THOUSAND DOLLARS (10,000.00) shall be accrued to be paid upon completion of the Series A funding round. Any accrued unpaid balance can be paid at the discretion of both Parties in the form of warrants, stocks, and or cash.

C. That in the event there has been an overpayment by the Client, this overage shall be refunded.

D. As is customary, Client will be responsible for out-of-pocket expenses including cost of travel, lodging, food, meeting expenses, materials and other appropriate disbursements. No unusual expenses will be incurred without consulting and approval from the

Client.

6. TERMINATION OF AGREEMENT. Client has the right to terminate this agreement without any obligation to continue under this agreement with thirty (30) days written notice prior to the end of a calendar quarter. Written notice shall be delivered to: Alms and Associates, Inc., 9256 Bendix Road, Suite 300, Columbia, MD 21045.

7. OUTSIDE CONSULTANTS. Should outside consultants such as attorneys and accountants be required in areas of special expertise, their fees and/or time charges will be in addition to the Advisor's fees. These services will be contracted directly by the Client. The Advisor will use its best efforts to create discounts or reduced fee schedules for such work and will disclose such discounts to the Client prior to finalization of an engagement.

8. GENERAL PROVISIONS.

A. It is understood by the Client that the Advisor is a MARYLAND CORPORATION registered as an advisor with the State of Maryland and that the Advisor has fully complied with The Investment Advisor's Act of 1940, 15 U.S.C. Section 80-b-i et. Seq., and requirements, both state and/or local.

B. The Advisor hereby retains the express right for whatever reason, to terminate its relationship with Client. However; the Client shall have the same express right for whatever the reason, to terminate its relationship with the Advisor.

C. The Advisor has delivered information-providing disclosures regarding the Advisor's background and business practices. The Client acknowledges receipt of such information at least forty-eight (48) hours prior to the signing of this Agreement.

D. It is hereby agreed by and between the Parties that this Agreement shall only apply to advice and recommendations contained in the scope of this Agreement for the Client and shall have nothing to do with any advice given by any other advisor or professional counselor, whether recommended by the Advisor or an existing Client advisor.

E. It is agreed by and between the Parties hereto that this Agreement encompasses and embodies all terms, understandings and agreements by and between that Parties and the terms may not be amended except in writing by the Parties hereto. This Agreement may be amended or revised only in writing signed by both Parties.

F. This Agreement shall be considered a MARYLAND contract and shall be construed and interpreted according to the laws of the STATE OF MARYLAND.

G. Advisor reserves the right to access a late charge in the amount of 9% per annum (or the maximum allowable contract rate under state statutes) on any unpaid balance that is more than (30) days past due, computed on the unpaid delinquent balance until the account is paid in full. The Client also agrees to pay reasonable legal fees and other costs incurred for collection.

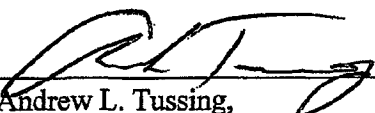
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9. LIMITATION OF LIABILITY

In the event that the Client shall implement any advice, suggestion, proposal, or plan advanced by Advisor or developed as a result of interaction between the Client, Advisor and/or any other advising professionals, Advisor shall not be liable to the Client for any loss, liability, costs or expenses which the Client may incur as a result thereof in excess of the actual amount of fees paid to Advisor by the Client under this Agreement for a one (1) year period.

IN WITNESSS WHEREOF, the Parties have executed this Advisory agreement this 1st day of May, 2009 in Columbia, Maryland.

VACCINOGEN, INC.


By: Andrew L. Tussing, 5-1-09
Co-Founder, Chief Operating Officer Date


By: Michael G. Hanna, Jr., Ph.D. 5/1/09
Founder, Chairman & CEO Date

ALMS AND ASSOCIATES, INC.



By: Steven P. Alms, 5/1/09
President Date

EXHIBIT 6.11

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement



Dr Joy Barton
Managing Partner and CEO
Marquant Partners Ltd
145 - 157 St John St, EC1V 4PY
London, UK

Effective Date 01 October 2012
Dr. Michael G. Hanna Jr.
Chairman and CEO
Vaccinogen Inc.

Dear Mike:

We are pleased that Vaccinogen (the "Company") has chosen to engage Marquant Partners LLC (the "Advisors", "we" or "us"), to act as its advisor with respect to the Company's partnering of HuMabs (Diagnostics and Therapy) – each project being a 'Strategic Transaction'.

We look forward to working with you on this engagement, and have set forth below the agreed upon terms of our engagement.

As part of our engagement, we will, if appropriate and if requested, and within the time schedule to be agreed upon:

- (a) design an appropriate partnering strategy for partnering HuMabs for which that the Company may ask for our assistance;
- (b) review and suggest improvements for presentation materials used in dialogue associated with a Strategic Transaction;
- (c) if requested, assist you in analyzing and evaluating the business, operations and financial position of the Company as part of preparing for a potential Strategic Transaction;
- (d) assist you in preparing descriptive materials regarding the Company for distribution and presentation to potential partners as part of exploring a Strategic Transaction;
- (d) assist you in the preparation and implementation of a plan to have discussions with prospective partners;
- (e) assist you in identifying and screening interested prospective partners;
- (f) assist you in coordinating potential partners' due diligence investigations;
- (g) assist you in evaluating proposals received from potential partners as part of any Strategic Transaction;
- (h) assist you in structuring and negotiating the financial aspects of any Strategic Transaction; and

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(i) be available at your request to meet with your Board of Directors to discuss the proposed Strategic Transaction and its financial implications.

You, the Company will, of course, retain complete control and discretion over whether and when to proceed with any Strategic Transaction including the terms thereof.

The work on this project will be led by Dr. Joy Barton, who will be your primary contact. In connection with Advisors' engagement, the Company will furnish Advisors with all information concerning the Company which Advisors reasonably deems appropriate and will provide Advisors with access to the Company's officers, directors, employees, accountants, counsel and other representatives (collectively, the "Representatives"), it being understood that Advisors will rely solely upon such information supplied by the Company and its Representatives without assuming any responsibility for independent investigation or verification thereof.

All non-public information concerning the Company that is given to Advisors in connection with this engagement will be used solely in the course of the performance of our services hereunder and will be treated as Confidential and governed under the terms of the Confidentiality Agreement executed between the parties and attached hereto.

As compensation for our services hereunder, the Company agrees to pay Advisors the following aggregate compensation to be allocated between them as they determine:

- (1) a monthly retainer in the amount of US\$10,000 (ten thousand dollars)
- (2) a Success Fee equal to eight percent (8%) of the total Transaction Value received by Company and/or its shareholders in respect of a Strategic Transaction.

For the avoidance of doubt, under (1) above, no payment shall be due and payable until the earlier of either (i) Company closes a financing round and raises at least 10 million US\$, or (ii) Company closes a Strategic Transaction, as contemplated in this agreement. Upon Company's request, invoices may be issued to support financial tracking activities.

The Success Fee is payable at the closing of the Strategic Transaction, except where the Strategic Transaction is payable with an upfront and future contingent payments, in which case the Success Fee is payable at the same time that the consideration is paid to Company.

No Success Fee will be due to the Advisor on any Strategic Transaction that is consummated during the period of this agreement that was initiated by the Company prior to the date of this agreement unless the Advisor has been requested by the Company to assist the Company and participate in the negotiations of the specific Strategic Transaction.. A list of those companies already contacted by the Company shall be included as Annex B to this agreement.

For purposes of this Letter Agreement, "Transaction Value" shall mean the total consideration paid or payable (e.g., cash, property, stock, options, warrants or other securities, consulting agreements, non-compete provisions, earnouts, excluded assets, that are intended as purchase consideration, and deferred or escrowed consideration) to the Company and/or its shareholders.

The Company has no obligation to pay any Success Fee if a Strategic Transaction is not consummated.

Promptly upon request and regardless of whether a Financing and/or a Strategic Transaction occurs, the Company agrees to reimburse Advisors in cash for all of Advisor's reasonable out-of-pocket expenses (provided that a detailed overview of these expenses is provided to the Company). Such expenses are not to be incurred without the Company's prior consent and such payment to be made within 30 days of request. In no case will the total of reimbursed expenses exceed \$10,000 for the term of this agreement unless any additional expenses over \$10,000 are agreed to in writing (email) by both parties. For the purposes of this agreement, the term

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"Strategic Transaction" shall be defined to include, whether in one or a series of transactions, any of the following events that are the result of the activities and efforts of

the Advisors as are assigned by the terms of this agreement (except transactions otherwise excluded in this Agreement): (a) any partnering activity (including but not limited to licensing, co-development and option structures), concerning HuMabs, that the Company requests and (b) any merger, consolidation or other business combination pursuant to which the business of the Company is combined with that of any other person (any such person, together with its subsidiaries and affiliates a "Strategic partner"); (c) any other transaction in which a Strategic Partner(s) acquires thirty percent (30%) or more of the capital stock of the Company whether by way of merger, business combination, stock purchase, tender offer, restructuring or reorganization or any similar transaction regardless of whether the Company is the surviving entity and (d) any activity whereby Company is financed for the development of HuMabs or its analogues whether in one or a series of transactions.

The Company acknowledges that, subject to the prior written approval of the Company, Advisors may, at its option and expense, and after Company's announcement of the Strategic Transaction, place announcements and advertisements or otherwise publicize the Strategic Transaction, unless otherwise prohibited by law or agreement among the parties to the Strategic Transaction. Furthermore, if requested by Advisors and not otherwise prohibited, the Company shall include a mutually acceptable reference to Advisors in any press release or other public announcement made by the Company regarding the matters described in this letter.

The Company will indemnify Advisors and hold them harmless for any action, claim, suit, investigation or proceeding, actual or threatened, brought by any person, including stockholders of the Company, against Advisors, based on any representations made by the Company, on which representations Advisors in good faith have relied; provided, however, that the Company will not indemnify Advisors and hold them harmless with respect to claims arising out of Advisors' fraud or intentional misrepresentation. If any claim or demand is made against Advisors as to which the Company may be obligated to provide reimbursement, indemnification or contribution hereunder, Advisors, within 5 working days after receipt of such claim or demand, shall notify the Company in writing and in reasonable detail of such claim or demand. Thereafter, the Company shall have the right to assume and control the defense and settlement of any such claim or demand.

Advisors engagement hereunder may be terminated at any time, with or without cause, by either Advisors or the Company upon thirty days' prior written notice thereof to the other party; *provided, however*, that in the event of any termination by the Company in the absence of a material breach by Advisors, Advisors will continue to be entitled to their full Success Fee provided for herein in the event that at any time prior to the expiration of twelve months after any such termination of this Agreement the Company consummates a Strategic Transaction with a party introduced to the Company by the Advisors.

In no case shall termination of the Advisors engagement hereunder affect the Company's obligations to pay any other fees and expenses to the extent provided for herein.

This agreement contains the entire agreement of the parties with respect to the subject matter hereof and supersedes and take precedence over all prior agreements or understandings, whether oral or written, between Advisors and the Company.

This agreement cannot be modified or changed, nor can any of its provisions be waived, except by written agreement signed by both parties. The benefits of this agreement shall inure to the respective successors and assigns of the parties hereto and of the indemnified parties hereunder and their successors and assigns and representatives, and the obligations and liabilities assumed in agreement by the parties hereto shall be binding upon their respective successors and assigns.

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This agreement may not be assigned by any party without prior written consent of the other party hereto.

The invalidity or unenforceability of any provision of this letter agreement shall not affect the validity or enforceability of any other provisions of this agreement, which shall remain in full force and effect.

This agreement may be executed in two or more counterparts, all of which together shall be considered a single instrument. This letter agreement may not be amended or modified except in writing signed by each of the parties hereto.

All aspects of the relationship created by this agreement shall be governed by and construed in accordance with the laws of State of Maryland.

We are delighted to accept this engagement and look forward to working with you on this assignment. Please confirm that the foregoing is in accordance with your understanding by signing and returning to us the enclosed duplicate of this agreement.

Very truly yours,

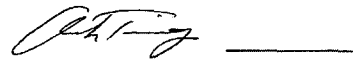
Joy Barton



Accepted and agreed to as of the date first written above:

By: 

Michael G. Hanna, Jr., Ph.D.
Chairman & Chief Executive Officer

By: 

Andrew L. Tussing
President & Chief Operating Officer

Annex A
Insert Executed CDA

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ANNEX B

Companies List

Merck; One Merck Drive; P.O. Box 100; Whitehouse Station, NJ 08889-0100 USA

-END-

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EXHIBIT 6.12

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT (the "Agreement") is effective as of February 1, 2010 (the "Effective Date"), by and between VACCINOGEN, INC. (the "Company"), and MICHAEL G. HANNA, JR., PH.D. (the "Executive").

WHEREAS, the Company and the Executive are currently parties to an employment letter agreement dated OCTOBER 15, 2007, and mutually agree that this Agreement supersedes in its entirety such earlier employment letter agreement;

WHEREAS, the Company recognizes the value and importance of the Executive's services to the Company's success, and therefore wishes to enter into this new Employment Agreement with the Executive; and

WHEREAS, the Executive recognizes and acknowledges the Company's legitimate purposes of protecting its Confidential Information (as defined herein), assets, business relationships, and goodwill by avoiding for limited times competition as described herein and by avoiding unauthorized disclosure of the Company's Confidential Information at any time.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth in this Agreement, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, hereby agree as follows:

1. **Employment.** The Company hereby employs the Executive, upon the terms and conditions set forth herein, as CHAIRMAN OF THE BOARD AND CHIEF EXECUTIVE OFFICER of the Company. The Executive agrees to devote his full working time and effort to the business and affairs of the Company and its affiliates and to perform all services and acts necessary or advisable to fulfill the duties and responsibilities as are commensurate and consistent with the Executive's position as may be assigned to him from time to time by the Company and to perform such duties to the best of his ability. Notwithstanding the foregoing, (i) the Executive with the prior approval of the Company, may serve as a director on other corporate boards, provided that such activities do not interfere with the performance of his duties under this Agreement or create a conflict of interest or appearance of a conflict of interest with the performance of his duties under this Agreement; and (ii) the Executive may tend to his own investments, and pursue civic activities on a volunteer basis, provided that none of such activities interferes with the performance of his duties under this Agreement. Executive will report directly to the Board of Directors of the Company, and at all times during the Term (as defined herein) shall be the senior-most officer of the Company.

2. **Initial Term and Additional Term.** The term of the Executive's employment hereunder shall commence on the Effective Date, and, unless terminated earlier pursuant to Section 4 hereof, shall (i) continue until December 31, 2012 (the

“Initial Term”), and (ii) thereafter be extended for additional two (2) year periods (each, an “Additional Term”), unless either party, in its or his sole discretion, provides written notice of an intention to not renew the Agreement at the end of the Term at least one hundred and twenty (120) days prior to the end of the Term. As used in this Agreement, “Term” shall refer to the Initial Term and any Additional Term.

3. **Base Salary, Bonuses, and Benefits.**

(a) **Base Salary.** During the Term, the Company agrees to pay to the Executive an annual base salary of Three Hundred and Fifty Thousand Dollars (\$350,000) (the actual amount payable from time to time hereunder is referred to as the “Base Salary”); provided, however, that the Base Salary may from time to time be increased (but not reduced) by the Company’s Board of Directors, at their sole discretion. The Base Salary, less all amounts required to be withheld under applicable law, shall be payable in equal periodic installments in accordance with the practice of the Company in effect from time to time for the payment of salaries to executives of the Company, but in no event less frequently than monthly.

(b) **Signing Bonus.** The Company shall pay the Executive a signing bonus of Two Hundred Thousand Dollars (\$200,000) by March 15, 2010.

(c) **Annual Bonus.** For any calendar year during the Term, the Executive may earn a bonus of up to seventy-five percent (75%) of the Executive’s Base Salary for such calendar year (“Annual Bonus”), depending on the satisfaction of performance criteria for such calendar year, which shall be determined as follows. No later than February 1st of each calendar year, the Executive shall submit to the Company’s Board of Directors proposed performance goals for the calendar year. No later than March 1st of each calendar year, the Board of Directors shall approve performance goals for the calendar year (either as presented by the Executive, or with reasonable modifications desired by the Board). Such approved performance goals shall indicate the manner in which the Executive’s Annual Bonus (if any) will be determined upon partial satisfaction of one or more of the goals. Any Annual Bonus due (less all amounts required to be withheld under applicable law) shall be paid to the Executive by the March 15th of the calendar year following the calendar year for which it is payable.

(d) **Equity Grants.** The Company shall grant to the Executive equity (or phantom equity) that provides the Executive with the economic equivalent of 5% of the appreciation of the Company on a fully diluted basis, based on the Company’s valuation as of a benchmark date within 12 months before or after the Effective Date. The terms and conditions of the grant shall be set forth in separate grant documentation.

(e) **Benefits.** During the Term, the Company shall provide the Executive with the following benefits:

(1) The Executive shall be entitled to participate in any employee benefit programs that the Company may provide to similarly-situated executives of the Company, including medical and dental coverage, life insurance, 401(k) plan, short-term and long-term disability coverage, and paid-time off.

(2) The Executive shall be entitled to a Pinnacle Care membership (top membership level) covering the Executive and the Executive's family (or a similar medical concierge membership selected by the Company).

(3) The Executive shall be entitled to reimbursement by the Company for expenses incurred in a calendar year with respect to tax, financial, family office and legal planning services (including tax return preparation), up to a maximum of \$10,000 per calendar month during the Term.

(4) The Executive shall be entitled to receive reimbursement from the Company for necessary business expenses reasonably incurred by him in performing his duties hereunder during the Term. The Company acknowledges that extensive travel, including international travel, is an integral part of the Executive's duties, and acknowledges that it is important for the Company's purposes for the Executive to be provided with travel conditions that are safe and comfortable, to enable the Executive to properly perform his duties.

Notwithstanding anything herein to the contrary, any taxable reimbursements provided under this Section 3(e) shall be subject to the following requirements: (i) no reimbursement shall affect the expenses eligible for reimbursement in any other calendar year; (ii) the Executive shall submit to the Company such statements and other evidence supporting the expenses to be reimbursed no later than as the Company may reasonably require; provided, however, that the reimbursement deadlines for the Executive shall not be shorter than the deadlines that apply to similarly-situated executives of the Company; (iii) all reimbursements shall be made no later than December 31 of the calendar year following the calendar year in which such related expenses were incurred; and (iv) the right to any reimbursements shall not be subject to liquidation or exchange for another benefit.

(f) **Effect of a Change in Control.** In the event of a Change in Control (as defined in Section 3(g)), then the Executive shall vest in any outstanding equity (or phantom equity) awards granted under Section 3(d) in accordance with the terms of such awards. If, as the result of this Agreement, Executive becomes liable for payment of taxes under Section 4999 of the Code, Company shall pay Executive a tax-gross up payment in an amount, that, after payment of federal, state and local income and employment taxes, equals the amount of the taxes payable by Executive under Section 4999 of the Code. Such tax gross-up payment shall be made by the Company no later than the end of the calendar year following the calendar year in which Executive remits the respective taxes to the Internal Revenue Service.

(g) **Change in Control Defined.** "Change in Control" shall mean (except as provided below) the occurrence of an event described in (1), (2), (3) or (4) below:

(1) upon any "person," as such term is used in Section 13(d) and 14(d) of the Securities Exchange Act of 1934 (other than any shareholder of Company as of the date of this Agreement, an entity controlled by, controlling or under common control with such shareholder, the Company, any trustee or other fiduciary holding securities under any employee benefit plan of the Company, or any company owned, directly or indirectly, by the shareholders of the Company in substantially the same proportions as their ownership of the Company), becoming the beneficial owners (as defined in Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of securities of the Company representing 50% or more of the combined voting power of the Company's then outstanding securities;

(2) upon any shareholder, as of the date of this Agreement, of the Company or an entity controlled by, controlling or under common control with such shareholder, becoming the beneficial owner (as defined in Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of securities of the Company representing 60% or more of the combined voting power of the Company's then outstanding securities;

(3) a merger or consolidation of the Company or a subsidiary thereof with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than 50% of the combined voting power of the voting securities of the Company or such surviving entity or such surviving entity's parent outstanding immediately after such merger or consolidation;

(4) upon the approval by the security holders of the Company of a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets other than an incorporation transaction; or

(5) an initial public offering of the Company.

4. **Termination.**

(a) **General.** The employment of the Executive hereunder (and the Agreement) shall terminate upon expiration of the Term pursuant to Section 2 hereof, unless earlier terminated in accordance with the provisions of this Section 4.

(b) **Termination Upon Death of Executive.** The employment of the Executive hereunder (and the Agreement) shall terminate as of the date of the

Executive's death, in which event the Company shall have no further obligations or liabilities under this Agreement (including, without limitation, Section 3 hereof) except to pay to the Executive's designated beneficiary (or estate or his personal representative, as the case may be, if no beneficiary has been designated) (i) that portion, if any, of the Base Salary that remains unpaid for the period prior to the date of death, and (ii) a lump sum cash payment equal to one (1) times the Base Salary, plus an Annual Bonus equal to seventy-five percent (75%) of the Executive's Base Salary. Such payment shall be made thirty (30) days following the date of the Executive's death. Upon the Executive's death, he shall vest in any outstanding equity (or phantom equity) awards granted under Section 3(d) in accordance with the terms of such awards.

(c) Termination Upon Disability of Executive.

(1) The employment of the Executive hereunder (and the Agreement) shall terminate as of the date of the Executive's Disability (as defined below), in which event the Company shall have no further obligations or liabilities under this Agreement (including, without limitation, Section 3 hereof) except to pay to the Executive (i) that portion, if any, of the Base Salary that remains unpaid for the period prior to the date of Disability, and (ii) a lump sum cash payment equal to one (1) times the Base Salary, plus an Annual Bonus equal to seventy-five percent (75%) of the Executive's Base Salary. Such payment shall be made thirty (30) days after the Executive incurs a Separation from Service (within the meaning of Section 409A(a)(2)(A)(i) of the Internal Revenue Code) (a "Separation from Service") due to Disability. If the Executive becomes disabled, he shall vest in any outstanding equity (or phantom equity) awards granted under Section 3(d) in accordance with the terms of such awards.

(2) For purposes of the Agreement, "Disability" shall mean that, pursuant to the written determination by two physicians (one selected by the Company and one selected by the Executive), because of a medically determinable disease, condition, injury, or other physical or mental disability, the Executive is unable to substantially perform the duties of the Executive required hereby, and that such disability is determined or reasonably expected to last for a continuous period of one-hundred and eighty (180) days; provided that, in the event such physicians fail to agree on such determination, such determination shall be made by a third physician selected by mutual agreement of the first two physicians.

(d) Termination By Company for Cause.

(1) The employment of the Executive hereunder (and the Agreement) shall be terminated, at the option of the Company, for "Cause" (as defined herein), upon written notice to Executive specifying in reasonable detail the reason therefor, in which event the Company shall have no further obligations or liabilities under the Agreement (including, without limitation, Section 3 hereof) except to

pay to the Executive that portion, if any, of the Base Salary that remains unpaid for the period prior to the date of termination.

(2) For purposes of the Agreement, "Cause" shall mean: (i) willful misconduct (including but not limited to misappropriation of a material Company business opportunity, material violation of a confidentiality or non-competition obligation, or abuse of drugs or alcohol that results in the Executive being materially adversely affected in the performance of his job duties), or fraud by the Executive; (ii) conviction of (including a plea of guilty or nolo contendere to) a felony which has a material effect on the Company or the Executive's performance; or (iii) the failure to comply with any material obligation imposed upon the Executive pursuant to the Agreement; provided, however, that if such failure under clause (i) or (iii) is susceptible of cure, "Cause" shall be deemed to exist only after the failure has remained uncured for thirty (30) days following receipt by the Executive of written notice from the Company of the failure). Notwithstanding the foregoing, if the Executive disagrees with the good faith determination of the Company that there is no cure after the 30-day cure period, the Executive may request that such determination be submitted to binding arbitration before a single arbitrator in accordance with the then existing Employment Dispute Resolution Rules of the American Arbitration Association (with the each party responsible for its own fees and costs). If the Executive makes such a request for arbitration, the termination of the Executive shall not become effective unless and until it is upheld by a final decision issued through such arbitration process; provided, that the Company shall have the right, in its sole discretion, to relieve the Executive of all or any portion of his duties during such arbitration period pending the arbitration decision so long as the Company continues to pay and provide to the Executive on a timely basis the compensation and benefits that it would otherwise owe to the Executive during such period under this Agreement.

(e) **Voluntary Resignation by Executive.** If the Executive voluntarily terminates employment other than for Good Reason during the Term, the Company shall have no further obligations or liabilities under the Agreement (including, without limitation, Section 3 hereof) except to pay to the Executive that portion, if any, of the Base Salary that remains unpaid for the period prior to the date of termination.

(f) Termination by Company Other than for Cause.

(1) If the Executive incurs an involuntary Separation from Service for reasons other than for Cause, including nonrenewal of this Agreement pursuant to Section 2 herein, then subject to the Executive meeting the release requirements described in Section 4(f)(2) below, the Executive shall receive the following payments and benefits:

(A) Continued payments for the greater of (i) the remainder of the Term (not including any renewal terms that have not yet begun, even if the notice period for nonrenewal has expired), or (ii) one (1) year (the greater of such two periods, the "Severance Period"), to be paid as follows:

(i) Payments that would otherwise have been made within the 90-day period following the Executive's Separation from Service (had they commenced with the first regularly scheduled paydate following the Executive's Separation from Service) shall be paid in a lump sum on the final regularly scheduled paydate preceding the end of such ninety (90) day period (unless the Company, in its discretion, decides to make such lump sum payment on an earlier date within such 90-day period).

(ii) Payments that are not due to be made until after the 90-day period following the Executive's Separation from Service (based on the Company's regular payroll schedule) shall be made when due, based on such regular payroll schedule.

(iii) Each payment under this Section 4(f)(1)(A) shall be equal to one-hundred and seventy-five percent (175%) of the Executive's per-pay period Base Salary amount as of such Separation from Service.

(B) Continued medical and dental benefits as provided by the Company from time to time for its employees, at the Company's expense, for the period of time equal to the shorter of the Severance Period or the maximum period of COBRA continuation coverage provided under Section 4980B(f) of the Internal Revenue Code (with such coverage to be treated as COBRA coverage); provided, however, that the Company shall not subsidize COBRA continuation coverage to the extent that the Executive is eligible for the COBRA subsidy under the American Recovery and Reinvestment Act of 2009.

(2) The Executive complies with this requirements of this Section 4(f)(2), and becomes entitled to the payments and benefits described in Section 4(f)(1), only if the Executive executes a release of claims in favor of the Company in connection with the Executive's employment in a form to be provided by the Company that is similar to the model release of claims attached as Schedule B to this Agreement, and any revocation period with respect to such release expires, by the final regularly scheduled paydate preceding the end of the ninety (90) day period following the Executive's Separation from Service.

(g) Resignation for Good Reason. The Executive may resign his employment under this Agreement for Good Reason as set forth below.

(1) "Good Reason" means one or more of the following conditions arising without the consent of the Executive, upon which the Executive resigns and incurs a Separation from Service within six (6) months following the initial existence of the condition:

(i) A reduction in the Executive's base compensation.

(ii) A diminution in the Executive's authority, duties, or responsibilities.

(iii) A requirement that the Executive report to a Company officer or employee instead of reporting directly to the Board.

(iv) A change in the geographic location at which the Executive must perform the services.

(v) Any other action or inaction that constitutes a material breach by the Company of this Agreement.

(2) When the Executive becomes aware of a condition that constitutes what Executive regards as Good Reason under Section 4(g)(1)), the Executive shall provide the Company with written notice of the basis for Good Reason with sufficient specificity to enable the Company to understand any attempt to cure the situation. The Company shall then have thirty (30) business days from receipt of the notice to cure the situation. The Executive may extend such thirty (30) day cure period, in his sole and absolute discretion. If the Company fails to cure the situation within such cure period, the Executive may resign from employment for Good Reason. In the event that Company cures the situation(s) that constitutes the basis of the Good Reason as identified in the notice of Good Reason, the Executive may not terminate based on said notice of Good Reason. If the Company asserts that it has cured the situation, but the Executive does not agree with such assertion, the Executive may request that such determination be submitted to binding arbitration before a single arbitrator in accordance with the then existing Employment Dispute Resolution Rules of the American Arbitration Association (with the each party responsible for its own fees and costs). If the Executive makes such a request for arbitration, the Executive may not terminate his employment for Good Reason unless and until the Executive's position (that Good Reason was not cured) is upheld by a final decision issued through such arbitration process. The Executive must provide said notice of Good Reason within ninety (90) days of the initial existence of the condition that constitutes what Executive regards as Good Reason.

(3) In the event that the Company cures the matter(s) that constitute(s) the basis of the Good Reason as identified in the Notice of Good Reason, Executive may not resign for Good Reason based on said Notice of Good Reason. A resignation of his employment by the Executive after the Good Reason has been cured shall be deemed to be a voluntary resignation without Good Reason under Section 4(e).

(4) Upon a Separation from Service by the Executive for Good Reason, the Company shall pay to Executive the compensation and benefits described in Section 4(f), as though the Executive had incurred an involuntary Separation from Service without Cause.

5. **Non-Solicitation, Non-Competition, and Confidentiality.**

(a) **Non-Solicitation and Non-Competition**

(1) During the Restriction Period (as defined below), Executive will not, without the written consent of the Company, in each instance directly or indirectly, conduct or engage in a Competing Business (as defined below). A "Competing Business" shall mean a business that provides vaccine-based treatment for colon cancer.

(2) The "Restriction Period" shall be determined as follows:

(A) If the employment of the Executive is terminated for Cause, or if the Executive resigns without Good Reason, the Restriction Period shall be three (3) years.

(B) If the employment of the Executive terminates upon non-renewal of this Agreement pursuant to Section 2, the Restriction Period shall be one (1) year.

(C) If the employment of the Executive is involuntarily terminated without Cause, or if the Executive terminates employment for Good Reason, there shall be no Restricted Period.

(3) The term "carry on or participate in a business" shall include engaging in any of the following activities, directly or indirectly, other than carrying on or engaging in activities expressly permitted under this Agreement:

(A) Carrying on or engaging in a Competing Business as a principal, or on Executive's own account, or solely or jointly with others as a director, officer, agent, employee, consultant or partner, or stockholder, limited partner or other interest holder owning more than five (5) percent of the stock or equity interests or securities convertible into more than five (5) percent of the stock or equity interests in any entity that is carrying on or engaging in a Competing Business.

(B) As agent or principal, carrying on or engaging in any activities or negotiations with respect to the acquisition or disposition of a Competing Business.

(C) Extending credit for the purpose of establishing or operating a Competing Business.

(D) Lending or allowing the Executive's name or reputation to be used in a Competing Business.

(E) Otherwise allowing the Executive's skill, knowledge or experience to be used in a Competing Business.

(4) During the Restriction Period, the Executive will not, without the written consent of the Company or for the Company's benefit, in each case directly or indirectly, solicit, raid, entice, induce or offer, any person who is then employed by the Company, to leave the Company's employment or to become employed by any person or entity in any business, whether or not it is a Competing Business.

(5) During the Restriction Period, the Executive will not, without the written consent of the Company, in each case directly or indirectly, solicit business for a Competing Business from any person or entity that is then a customer of the Company or that is being solicited by the Company.

(6) During the Restriction Period, the Executive will not, without the written consent of the Company, in each case directly or indirectly, provide, or arrange for or assist in the provision of services by a Competing Business to any person or entity that is then a customer of the Company or that is being solicited by the Company.

(7) If the Executive breaches this Agreement, the Company shall be entitled to injunctive relief, both *pendente lite* and permanently, against the Executive, as a remedy at law would be inadequate. In addition, the Company shall be entitled to such damages as it can show it has sustained, directly or indirectly, by reason of such a breach, and neither the Company nor any of its subsidiaries or affiliates shall be limited in such damages to the consideration paid to the Executive pursuant to this Agreement. Nothing in this Agreement shall be construed as limiting the Company's remedies in any way.

(8) To the extent that any provision of this Agreement shall be determined to be invalid or unenforceable, the invalid or unenforceable portion of such provision shall be deleted from this Agreement, and the validity and enforceability of the remainder of such provision and of this Agreement shall be unaffected. In furtherance and not in limitation of the foregoing, it is expressly agreed that, should the duration of, or geographical extent of, or business activities covered by, the covenants contained in this Agreement be determined to be in excess of that which is valid or enforceable under applicable law, then such covenants shall be construed to cover only that duration or geographical extent or those activities that may be validly covered and enforced; provided, however, that to the full extent that the provisions of any applicable law may be waived by the Executive, they are hereby waived, such that this

Agreement may be deemed to be valid and enforceable to the greatest possible extent. The Executive acknowledges the uncertainty of the law in this respect and expressly stipulate that this Agreement shall be construed in a manner that renders its provisions valid and enforceable to the maximum extent possible under applicable law.

(b) Confidentiality and Non-Disclosure.

(1) Except as permitted or directed by the Company or in connection with the Executive's employment by the Company or one of its subsidiaries or affiliates, the Executive agrees to keep confidential and not to divulge or use any Confidential Information (as defined below) which the Executive has acquired or become acquainted with during the Executive's employment with the Company or any of its subsidiaries or affiliates, whether developed by the Executive or by others. The Executive agrees to use Confidential Information only in carrying out the duties and responsibilities related to the Executive's employment and, except in connection therewith, the Executive will not at any time disclose Confidential Information to any person or use the same for another person's benefit, or the benefit of anyone other than the Company. The Executive shall take all reasonable precautions to safeguard Confidential Information which is entrusted to the Executive.

(2) For purposes of this agreement, "Confidential Information" shall mean:

(A) Any non-public information of the Company that is designated as confidential or proprietary, that, due to its character and nature, a reasonable person employed by the Company would know was confidential or proprietary, or that derives independent value from not being generally known to the public.

(B) Non-public information regarding or comprising the Company's customers and customer lists, suppliers and supplier lists, procurement programs, customer and "net-net" pricing, financial matters, rebates and allowances, business matters, business policies, sales, marketing, processes, techniques, know-how, strategic, tactical or development plans, personnel information, or means of doing business.

(C) Other non-public Company information obtained directly or indirectly by the Executive in the course of the Executive's employment.

(3) The Executive shall be not liable for disclosure of Confidential Information if made in response to a valid order of a court or authorized agency of government; provided that, if available, five days' notice first be given to the Company so a protective order, if appropriate, may be sought.

(4) The Executive acknowledges that the Company's Confidential Information constitutes a unique and valuable asset of the Company and represents a substantial investment of time and expense by the Company and that any disclosure or use of such Confidential Information other than for the sole benefit of the Company or any of its subsidiaries or affiliates would be wrongful and would cause irreparable harm to the Company and/or its subsidiaries and affiliates.

(5) The Executive agrees to return to the Company at any time the Executive separates from the Company's employment, or earlier if so requested by the Company, all Confidential Information in the Executive's possession, including any copies made by the Executive, and the relevant documents, diskettes, files, hardware, computers, devices, memories, software and generally all other materials or devices which contain or embody the same.

(6) The terms of this Confidentiality and Non-disclosure agreement shall be applicable to the Executive at all times during the Executive's employment with the Company and shall survive the termination of such employment forever.

6. **Key Person Life Insurance.** The Company shall maintain key person life insurance (under which the Company would be owner and beneficiary of a policy insuring the Executive's life), the Executive agrees to fully cooperate with the Company's efforts to secure such coverage, including but not limited to, accurately completing any insurance applications and undergoing any medical examinations required in connection with policy underwriting, and to provide such consent as is necessary for the Company to obtain favorable tax treatment under Section 101(j) of the Internal Revenue Code (as amended from time to time).

7. **Remedies.** The Executive and the Company acknowledge and agree that if the Executive or the Company breach any of the provisions of this Agreement, the Executive or the Company, as the case may be, may suffer immediate and irreparable harm for which monetary damages alone will not be a sufficient remedy, and that, in addition to all other remedies that the Executive or the Company, as the case may be, may have, the Executive or the Company, as the case may be, shall be entitled to seek injunctive relief, specific performance or any other form of equitable relief to remedy a breach or threatened breach of this Agreement by the Executive or the Company, as the case may be, and to enforce the provisions of this Agreement, and the Executive and the Company hereby waive any and all defenses they may have on the grounds of lack of jurisdiction or competence of a court to grant such an injunction or other equitable relief. The existence of this right shall not preclude or otherwise limit the applicability or exercise of any other rights and remedies which the Executive or the Company may have at law or in equity.

8. Interpretation; Severability.

(a) The Executive has carefully considered the possible effects on the Executive of the covenants not to compete and other obligations contained in this Agreement, and the Executive (i) recognizes that the Company has made every effort to limit the restrictions placed upon the Executive to those that are reasonable and necessary to protect the Company's and its affiliates' legitimate business interests, and (ii) acknowledges and agrees that the restrictions set forth in this Agreement are reasonable and necessary in order to protect the Company's and its affiliates' legitimate business interests.

(b) It is the intention of the parties hereto that the covenants, provisions, and agreements contained herein shall be enforceable to the fullest extent allowed by law. If any covenant, provision, or agreement contained herein is found by a court having jurisdiction to be unreasonable in duration, geographic scope, or character of restrictions, such covenant, provision, or agreement shall not be rendered unenforceable thereby, but rather the duration, geographic scope, or character of restrictions of such covenant, provision, or agreement shall be deemed reduced or modified with retroactive effect to render such covenant, provision, or agreement reasonable, and such covenant, provision, or agreement shall be enforced as modified. If the court having jurisdiction will not revise the covenant, provision, or agreement, the parties hereto shall mutually agree to a revision having an effect as close as permitted by applicable law to the provision declared unenforceable. The parties hereto agree that if a court having jurisdiction determines, despite the express intent of the parties hereto, that any portion of the covenants, provisions, or agreements contained herein are not enforceable, the remaining covenants, provisions, and agreements herein shall be valid and enforceable. Moreover, to the extent that any provision is declared unenforceable, the Company shall have any and all rights under applicable statutes, civil law, or common law to enforce its rights with respect to any and all Confidential Information or unfair competition by the Executive.

9. Representation and Warranty. The Executive hereby represents and warrants to the Company that he is not a party to (or otherwise subject to or bound by) any contract, agreement, or other obligation of any kind limiting the freedom of the Executive to (i) engage, directly or indirectly, in any business activity (including without limitation, the Business), (ii) compete, directly or indirectly, with any person or entity, or (iii) be employed by, provide services to, or own any interest in, the Company.

10. Applicable Law; Jurisdiction. The parties shall use their best efforts to resolve amicably any and all disputes relating to this Agreement ("Disputes"). Subject to preemption by federal law, all Disputes arising under this Agreement shall be determined pursuant to the laws of the State of Maryland, regardless of applicable principles of conflicts of laws. The parties irrevocably submit to the exclusive jurisdiction of (1) the courts of the State of Maryland and (2) if federal jurisdiction exists, to the United States District Court of Maryland. **EXECUTIVE AGREES TO WAIVE**

HIS RIGHTS TO A JURY TRIAL OF ANY AND ALL CLAIMS OR CAUSES OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT.

11. **Mitigation and Offset.** Notwithstanding anything herein to the contrary, Executive will not be required to seek other employment if his employment terminates under circumstances that entitle him to benefits under Section 4(f) herein.

12. **Notices.** All notices and communications pursuant to this Agreement shall be in writing and shall be deemed to have been duly given and effective when received if (i) personally delivered, (ii) mailed by registered or certified mail, postage prepaid, return receipt requested, or (iii) sent by other delivery services providing evidence of delivery, to the following:

If to the Executive:

Michael G. Hanna, Jr., Ph.D.
39572 North Cotton Patch Hills Road
Bethany Beach, DE 19930
USA

If to the Company:

Vaccinogen, Inc.
5300 Westview Dr.
Suite 406
Frederick, MD 21703

or to such other address as a party provides (in accordance herewith) to the other party from time to time.

13. **Entire Agreement; Amendment; Waiver.** This Agreement constitutes the entire agreement between the parties pertaining to the subject matter hereof, and supersedes any and all prior and contemporaneous agreements, understandings, negotiations, and discussions of the parties, whether oral or written. No amendment, modification, or waiver of this Agreement shall be binding unless executed in writing by all of the parties hereto, or in the case of a waiver, by the party for whom such benefit was intended. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision of this Agreement, whether or not similar, nor shall such waiver constitute a continuing waiver unless otherwise expressly so provided in writing.

14. **Successors and Assigns.** This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, personal representatives, successors, and assigns; provided, however, that the Executive may not

assign any of his rights or obligations hereunder without the prior written consent of the Company.

15. **Representation by Counsel.** Each of the parties hereto acknowledges that (i) it or he has read the Agreement in its entirety and understands all of its terms and conditions, (ii) it or he has had the opportunity to consult with any individuals of its or his choice regarding its or his agreement to the provisions contained herein, including legal counsel of its or his choice, and any decision not to do so was its or his alone, and (iii) it or he is entering into the Agreement of its or his own free will, without coercion from any source. Venable LLP has represented the Company, not the Executive, in connection with this Agreement.

16. **Indemnification; Insurance; Assistance with Legal Action.**

(a) The Company shall indemnify and hold Executive harmless, to the maximum extent permitted by law, against judgments, fines, amounts paid in settlement and reasonable expenses, including attorneys' fees, incurred by Executive in connection with the defense of, or as a result of any action or proceeding (or any appeal from any action or proceeding) in which Executive is made or is threatened to be made a party by reason of the fact that Executive is or was an officer of the Company.

(b) The Company hereby represents and warrants (a) that Executive is and shall continue to be covered and insured up to the maximum limits provided by all insurance which the Company maintains to indemnify its directors and officers; and (b) that the Company will maintain such insurance, in not less than its present limits, throughout the term of this Agreement.

(c) The Executive agrees that he will, upon reasonable notice, furnish such information and assistance to the Company as may be reasonably required by the Company in connection with any litigation, or governmental inquiry or proceeding, in which it or any of its predecessors, successors, subsidiaries, officers, directors, shareholders, agents, affiliates, investors, and attorneys is, or may become, a party or otherwise involved. The Executive will be entitled to compensation for his reasonable time spent in providing such assistance, at a rate of \$500 per hour (with a cap of \$4,000 per day). The Executive will also be entitled to reimbursement of reasonable expenses incurred in connection with such assistance.

17. **Interpretation.** The parties and their respective legal counsel actively participated in the negotiation and drafting of this Agreement, and in the event of any ambiguity or mistake herein, or any dispute among the parties with respect to the provisions hereto, no provision of this Agreement shall be construed unfavorably against any of the parties on the ground that he, it, or his or its counsel was the drafter thereof.

18. **Survival.** The provisions of Sections 5, 7, 8, and 10 through 16, inclusive, shall survive the termination of this Agreement.

19. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same Agreement.

20. **Section 409A.** The Executive and the Company agree that the terms of this Agreement are intended to be construed in accordance with Section 409A of the Internal Revenue Code ("Section 409A"). To the extent that Section 409A applies to any payment required under this Agreement, such payment shall be made in conformance with the provisions of Section 409A.

IN WITNESS WHEREOF, the Company has caused this Agreement to be executed by its duly authorized representative, and the Executive has executed this Agreement, each as of the Effective Date.

WITNESS/ATTEST:

Willard M. Hankins

COMPANY:

Vaccinogen, Inc.

By: [Signature] (SEAL)
Name: Andrew L. Tussing
Title: Chief Operating Officer

Date: 2-1-10

EXECUTIVE:

Willard M. Hankins

[Signature] (SEAL)
Michael G. Hanna, Jr., Ph.D.

Date: 2/1/10

SCHEDULE A

**[ATTACH FORM OF EQUITY (OR PHANTOM EQUITY)
GRANT AGREEMENT]**

VACCINOGEN

December 21, 2010

Michael G. Hanna, Jr., Ph.D.
Vaccinogen, Inc.
5300 Westview Drive
Suite 406
Frederick, Maryland 21703

Re: Amendment to Employment Agreement

Dear Mike:

I am writing to confirm our recent discussions concerning amendments to the employment agreement between you and Vaccinogen, Inc., effective as of February 1, 2010 (the "Agreement").

In accordance with Section 13 of the Agreement, the Agreement is hereby amended as follows, effective as of December 21, 2010:

1. Section 2 of the Agreement (Term) is amended by deleting the phrase "December 31, 2012" and inserting in its place "December 31, 2011".
2. Section 3(b) of the Agreement (Signing Bonus) is hereby deleted.
3. Section 3(d) of the Agreement (Equity Grants) is hereby deleted.
4. Section 3(g) of the Agreement (Change in Control) is hereby amended by the addition of the following new Section 3(g)(6) at the end thereof: "and; (6) For the avoidance of doubt and notwithstanding the foregoing, the issuance by the Company of Series B Preferred Stock pursuant to Section 4 of that certain Investors' Rights Agreement – Series B Preferred Stock, by and among the Company, the investors listed on Schedule A thereto (the "Investors") and certain Key Holders (as defined therein) causing the Investors to have been issued shares equal to fifty percent (50%) of the total outstanding equity ownership of the Company on a fully-diluted and as-converted basis, shall not be a "Change of Control" for purposes of this Section 3(g)."
5. Sections 4(b) and 4(c)(1) of the Agreement (Death and Disability) are hereby amended by deleting the phrase ", plus an Annual Bonus equal to seventy-five percent (75%) of the Executive's Base Salary".

VACCINOGEN

6. Section 4(f)(1)(A)(iii) of the Agreement (Severance) is hereby amended by deleting the phrase "one-hundred and seventy-five percent (175%) of the Executive's per-pay period Base Salary amount" and inserting in its place "one-hundred percent (100%) of the Executive's per-pay period Base Salary amount."

7. Section 6 of the Agreement (Key Person Life Insurance) is hereby deleted.

8. Schedule A of the Agreement (Form of Equity/Phantom Equity Grant) is hereby deleted.

Except for the amendments noted above, the Agreement remains in full force and effect.

Please sign and date this letter below to indicate your agreement with the terms of this letter.

Very truly yours,

VACCINOGEN, INC.

By: 

Michael Kranda
Chief Executive Officer

I have read this letter, and agree to the changes to the Agreement that are set forth above.



Michael G. Hanna, Jr., Ph.D.

Date: December 21, 2010

EXHIBIT 6.13

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT (the "Agreement") is effective as of February 1, 2010 (the "Effective Date"), by and between VACCINOGEN, INC. (the "Company"), and ANDREW L. TUSSING (the "Executive").

WHEREAS, the Company and the Executive are currently parties to an employment letter agreement dated OCTOBER 17, 2007, and mutually agree that this Agreement supersedes in its entirety such earlier employment letter agreement;

WHEREAS, the Company recognizes the value and importance of the Executive's services to the Company's success, and therefore wishes to enter into this new Employment Agreement with the Executive; and

WHEREAS, the Executive recognizes and acknowledges the Company's legitimate purposes of protecting its Confidential Information (as defined herein), assets, business relationships, and goodwill by avoiding for limited times competition as described herein and by avoiding unauthorized disclosure of the Company's Confidential Information at any time.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth in this Agreement, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, hereby agree as follows:

1. **Employment.** The Company hereby employs the Executive, upon the terms and conditions set forth herein, as CHIEF OPERATING OFFICER of the Company. The Executive agrees to devote his full working time and effort to the business and affairs of the Company and its affiliates and to perform all services and acts necessary or advisable to fulfill the duties and responsibilities as are commensurate and consistent with the Executive's position as may be assigned to him from time to time by the Company and to perform such duties to the best of his ability. Notwithstanding the foregoing, (i) the Executive with the prior approval of the Company, may serve as a director on other corporate boards, provided that such activities do not interfere with the performance of his duties under this Agreement or create a conflict of interest or appearance of a conflict of interest with the performance of his duties under this Agreement; and (ii) the Executive may tend to his own investments, and pursue civic activities on a volunteer basis, provided that none of such activities interferes with the performance of his duties under this Agreement. Executive will report to the Chief Executive Officer of the Company.

2. **Initial Term and Additional Term.** The term of the Executive's employment hereunder shall commence on the Effective Date, and, unless terminated earlier pursuant to Section 4 hereof, shall (i) continue until December 31, 2012 (the "Initial Term"), and (ii) thereafter be extended for additional two (2) year periods (each,

an "Additional Term"), unless either party, in its or his sole discretion, provides written notice of an intention to not renew the Agreement at the end of the Term at least one hundred and twenty (120) days prior to the end of the Term. As used in this Agreement, "Term" shall refer to the Initial Term and any Additional Term.

3. **Base Salary, Bonuses, and Benefits.**

(a) **Base Salary.** During the Term, the Company agrees to pay to the Executive an annual base salary of Two Hundred and Fifty Thousand Dollars (\$250,000) (the actual amount payable from time to time hereunder is referred to as the "Base Salary"); provided, however, that the Base Salary may from time to time be increased (but not reduced) by the Company's Board of Directors, at their sole discretion. The Base Salary, less all amounts required to be withheld under applicable law, shall be payable in equal periodic installments in accordance with the practice of the Company in effect from time to time for the payment of salaries to executives of the Company, but in no event less frequently than monthly.

(b) **Signing Bonus.** The Company shall pay the Executive a signing bonus of One Hundred and Seventy-Five Thousand Dollars (\$175,000) by March 15, 2010.

(c) **Annual Bonus.** For any calendar year during the Term, the Executive may earn a bonus of up to seventy-five percent (75%) of the Executive's Base Salary for such calendar year ("Annual Bonus"), depending on the satisfaction of performance criteria for such calendar year, which shall be determined as follows. No later than February 1st of each calendar year, the Executive shall submit to the Company's President and Chief Executive Officer proposed performance goals for the calendar year. No later than March 1st of each calendar year, the Chief Executive Officer shall approve performance goals for the calendar year (either as presented by the Executive, or with reasonable modifications desired by the Chief Executive Officer). Fifty percent of the bonus will be paid on personal goal achievements. Such approved performance goals shall indicate the manner in which the Executive's Annual Bonus (if any) will be determined upon partial satisfaction of the majority of the goals. The other 50% of the Bonus will be a function of the Companies performance and meeting plan for the Calendar year. Any Annual Bonus due (less all amounts required to be withheld under applicable law) shall be paid to the Executive by the March 15th of the calendar year following the calendar year for which it is payable.

(d) **Equity Grants.** The Company shall grant to the Executive equity (or phantom equity) that provides the Executive with the economic equivalent of 5% of the appreciation of the Company on a fully diluted basis, based on the Company's valuation as of a benchmark date within 12 months before or after the Effective Date. The terms and conditions of the grant shall be set forth in separate grant documentation.

(e) **Benefits.** During the Term, the Company shall provide the Executive with the following benefits:

(1) The Executive shall be entitled to participate in any employee benefit programs that the Company may provide to similarly-situated executives of the Company, including medical and dental coverage, life insurance, 401(k) plan, short-term and long-term disability coverage, and paid-time off.

(2) The Executive shall be entitled to a Pinnacle Care membership (top membership level) covering the Executive and the Executive's family (or a similar medical concierge membership selected by the Company).

(3) The Executive shall be entitled to reimbursement by the Company for expenses incurred in a calendar year with respect to tax, financial, family office and legal planning services (including tax return preparation), up to a maximum of \$10,000 per calendar month during the Term.

(4) The Executive shall be entitled to receive reimbursement from the Company for necessary business expenses reasonably incurred by him in performing his duties hereunder during the Term. The Company acknowledges that extensive travel, including international travel, is an integral part of the Executive's duties, and acknowledges that it is important for the Company's purposes for the Executive to be provided with travel conditions that are safe and comfortable, to enable the Executive to properly perform his duties.

Notwithstanding anything herein to the contrary, any taxable reimbursements provided under this Section 3(e) shall be subject to the following requirements: (i) no reimbursement shall affect the expenses eligible for reimbursement in any other calendar year; (ii) the Executive shall submit to the Company such statements and other evidence supporting the expenses to be reimbursed no later than as the Company may reasonably require; provided, however, that the reimbursement deadlines for the Executive shall not be shorter than the deadlines that apply to similarly-situated executives of the Company; (iii) all reimbursements shall be made no later than December 31 of the calendar year following the calendar year in which such related expenses were incurred; and (iv) the right to any reimbursements shall not be subject to liquidation or exchange for another benefit.

(f) **Effect of a Change in Control.** In the event of a Change in Control (as defined in Section 3(g)), then the Executive shall vest in any outstanding equity (or phantom equity) awards granted under Section 3(d) in accordance with the terms of such awards. If, as the result of this Agreement, Executive becomes liable for payment of taxes under Section 4999 of the Code, Company shall pay Executive a tax-gross up payment in an amount, that, after payment of federal, state and local income and employment taxes, equals the amount of the taxes payable by Executive under Section 4999 of the Code. Such tax gross-up payment shall be made by the Company no later

than the end of the calendar year following the calendar year in which Executive remits the respective taxes to the Internal Revenue Service.

(g) **Change in Control Defined.** "Change in Control" shall mean (except as provided below) the occurrence of an event described in (1), (2), (3) or (4) below:

(1) upon any "person," as such term is used in Section 13(d) and 14(d) of the Securities Exchange Act of 1934 (other than any shareholder of Company as of the date of this Agreement, an entity controlled by, controlling or under common control with such shareholder, the Company, any trustee or other fiduciary holding securities under any employee benefit plan of the Company, or any company owned, directly or indirectly, by the shareholders of the Company in substantially the same proportions as their ownership of the Company), becoming the beneficial owners (as defined in Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of securities of the Company representing 50% or more of the combined voting power of the Company's then outstanding securities;

(2) upon any shareholder, as of the date of this Agreement, of the Company or an entity controlled by, controlling or under common control with such shareholder, becoming the beneficial owner (as defined in Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of securities of the Company representing 60% or more of the combined voting power of the Company's then outstanding securities;

(3) a merger or consolidation of the Company or a subsidiary thereof with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than 50% of the combined voting power of the voting securities of the Company or such surviving entity or such surviving entity's parent outstanding immediately after such merger or consolidation;

(4) upon the approval by the security holders of the Company of a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets other than an incorporation transaction; or

(5) an initial public offering of the Company.

4. **Termination.**

(a) **General.** The employment of the Executive hereunder (and the Agreement) shall terminate upon expiration of the Term pursuant to Section 2 hereof, unless earlier terminated in accordance with the provisions of this Section 4.

(b) Termination Upon Death of Executive. The employment of the Executive hereunder (and the Agreement) shall terminate as of the date of the Executive's death, in which event the Company shall have no further obligations or liabilities under this Agreement (including, without limitation, Section 3 hereof) except to pay to the Executive's designated beneficiary (or estate or his personal representative, as the case may be, if no beneficiary has been designated) (i) that portion, if any, of the Base Salary that remains unpaid for the period prior to the date of death, and (ii) a lump sum cash payment equal to one (1) times the Base Salary, plus an Annual Bonus equal to seventy-five percent (75%) of the Executive's Base Salary. Such payment shall be made thirty (30) days following the date of the Executive's death. Upon the Executive's death, he shall vest in any outstanding equity (or phantom equity) awards granted under Section 3(d) in accordance with the terms of such awards.

(c) Termination Upon Disability of Executive.

(1) The employment of the Executive hereunder (and the Agreement) shall terminate as of the date of the Executive's Disability (as defined below), in which event the Company shall have no further obligations or liabilities under this Agreement (including, without limitation, Section 3 hereof) except to pay to the Executive (i) that portion, if any, of the Base Salary that remains unpaid for the period prior to the date of Disability, and (ii) a lump sum cash payment equal to one (1) times the Base Salary, plus an Annual Bonus equal to seventy-five percent (75%) of the Executive's Base Salary. Such payment shall be made thirty (30) days after the Executive incurs a Separation from Service (within the meaning of Section 409A(a)(2)(A)(i) of the Internal Revenue Code) (a "Separation from Service") due to Disability. If the Executive becomes disabled, he shall vest in any outstanding equity or phantom equity awards granted under Section 3(d) in accordance with the terms of such awards.

(2) For purposes of the Agreement, "Disability" shall mean that, pursuant to the written determination by two physicians (one selected by the Company and one selected by the Executive), because of a medically determinable disease, condition, injury, or other physical or mental disability, the Executive is unable to substantially perform the duties of the Executive required hereby, and that such disability is determined or reasonably expected to last for a continuous period of one-hundred and eighty (180) days; provided that, in the event such physicians fail to agree on such determination, such determination shall be made by a third physician selected by mutual agreement of the first two physicians.

(d) Termination By Company for Cause.

(1) The employment of the Executive hereunder (and the Agreement) shall be terminated, at the option of the Company, for "Cause" (as defined herein), upon written notice to Executive specifying in reasonable detail the

reason therefor, in which event the Company shall have no further obligations or liabilities under the Agreement (including, without limitation, Section 3 hereof) except to pay to the Executive that portion, if any, of the Base Salary that remains unpaid for the period prior to the date of termination.

(2) For purposes of the Agreement, "Cause" shall mean: (i) willful misconduct (including but not limited to misappropriation of a material Company business opportunity, material violation of a confidentiality or non-competition obligation, or abuse of drugs or alcohol that results in the Executive being materially adversely affected in the performance of his job duties), or fraud by the Executive; (ii) conviction of (including a plea of guilty or nolo contendere to) a felony which has a material effect on the Company or the Executive's performance; or (iii) the failure to comply with any material obligation imposed upon the Executive pursuant to the Agreement; provided, however, that if such failure under clause (i) or (iii) is susceptible of cure, "Cause" shall be deemed to exist only after the failure has remained uncured for thirty (30) days following receipt by the Executive of written notice from the Company of the failure). Notwithstanding the foregoing, if the Executive disagrees with the good faith determination of the Company that there is no cure after the 30-day cure period, the Executive may request that such determination be submitted to binding arbitration before a single arbitrator in accordance with the then existing Employment Dispute Resolution Rules of the American Arbitration Association (with the each party responsible for its own fees and costs). If the Executive makes such a request for arbitration, the termination of the Executive shall not become effective unless and until it is upheld by a final decision issued through such arbitration process; provided, that the Company shall have the right, in its sole discretion, to relieve the Executive of all or any portion of his duties during such arbitration period pending the arbitration decision so long as the Company continues to pay and provide to the Executive on a timely basis the compensation and benefits that it would otherwise owe to the Executive during such period under this Agreement.

(e) **Voluntary Resignation by Executive.** If the Executive voluntarily terminates employment other than for Good Reason during the Term, the Company shall have no further obligations or liabilities under the Agreement (including, without limitation, Section 3 hereof) except to pay to the Executive that portion, if any, of the Base Salary that remains unpaid for the period prior to the date of termination.

(f) Termination by Company Other than for Cause.

(1) If the Executive incurs an involuntary Separation from Service for reasons other than for Cause, including nonrenewal of this Agreement pursuant to Section 2 herein, then subject to the Executive meeting the release requirements described in Section 4(f)(2) below, the Executive shall receive the following payments and benefits:

(A) Continued payments for the greater of (i) the remainder of the Term (not including any renewal terms that have not yet begun, even if the notice period for nonrenewal has expired), or (ii) one (1) year (the greater of such two periods, the "Severance Period"), to be paid as follows:

(i) Payments that would otherwise have been made within the 90-day period following the Executive's Separation from Service (had they commenced with the first regularly scheduled paydate following the Executive's Separation from Service) shall be paid in a lump sum on the final regularly scheduled paydate preceding the end of such ninety (90) day period (unless the Company, in its discretion, decides to make such lump sum payment on an earlier date within such 90-day period).

(ii) Payments that are not due to be made until after the 90-day period following the Executive's Separation from Service (based on the Company's regular payroll schedule) shall be made when due, based on such regular payroll schedule.

(iii) Each payment under this Section 4(f)(1)(A) shall be equal to one-hundred and seventy-five percent (175%) of the Executive's per-pay period Base Salary amount as of such Separation from Service.

(B) Continued medical and dental benefits as provided by the Company from time to time for its employees, at the Company's expense, for the period of time equal to the shorter of the Severance Period or the maximum period of COBRA continuation coverage provided under Section 4980B(f) of the Internal Revenue Code (with such coverage to be treated as COBRA coverage); provided, however, that the Company shall not subsidize COBRA continuation coverage to the extent that the Executive is eligible for the COBRA subsidy under the American Recovery and Reinvestment Act of 2009.

(2) The Executive complies with this requirements of this Section 4(f)(2), and becomes entitled to the payments and benefits described in Section 4(f)(1), only if the Executive executes a release of claims in favor of the Company in connection with the Executive's employment in a form to be provided by the Company that is similar to the model release of claims attached as Schedule B to this Agreement, and any revocation period with respect to such release expires, by the final regularly scheduled paydate preceding the end of the ninety (90) day period following the Executive's Separation from Service.

(g) **Resignation for Good Reason.** The Executive may resign his employment under this Agreement for Good Reason as set forth below.

(1) "Good Reason" means one or more of the following conditions arising without the consent of the Executive, upon which the Executive resigns and incurs a Separation from Service within six (6) months following the initial existence of the condition:

(i) A reduction in the Executive's base compensation.

(ii) A diminution in the Executive's authority, duties, or responsibilities.

(iii) A requirement that the Executive report to a Company officer or employee other than the Chief Executive Officer.

(iv) A change in the geographic location at which the Executive must perform the services.

(v) Any other action or inaction that constitutes a material breach by the Company of this Agreement.

(2) When the Executive becomes aware of a condition that constitutes what Executive regards as Good Reason under Section 4(g)(1)), the Executive shall provide the Company with written notice of the basis for Good Reason with sufficient specificity to enable the Company to understand any attempt to cure the situation. The Company shall then have thirty (30) business days from receipt of the notice to cure the situation. The Executive may extend such thirty (30) day cure period, in his sole and absolute discretion. If the Company fails to cure the situation within such cure period, the Executive may resign from employment for Good Reason. In the event that Company cures the situation(s) that constitutes the basis of the Good Reason as identified in the notice of Good Reason, the Executive may not terminate based on said notice of Good Reason. If the Company asserts that it has cured the situation, but the Executive does not agree with such assertion, the Executive may request that such determination be submitted to binding arbitration before a single arbitrator in accordance with the then existing Employment Dispute Resolution Rules of the American Arbitration Association (with the each party responsible for its own fees and costs). If the Executive makes such a request for arbitration, the Executive may not terminate his employment for Good Reason unless and until the Executive's position (that Good Reason was not cured) is upheld by a final decision issued through such arbitration process. The Executive must provide said notice of Good Reason within ninety (90) days of the initial existence of the condition that constitutes what Executive regards as Good Reason.

(3) In the event that the Company cures the matter(s) that constitute(s) the basis of the Good Reason as identified in the Notice of Good Reason, Executive may not resign for Good Reason based on said Notice of Good Reason. A resignation of his employment by the Executive after the Good Reason has

been cured shall be deemed to be a voluntary resignation without Good Reason under Section 4(e).

(4) Upon a Separation from Service by the Executive for Good Reason, the Company shall pay to Executive the compensation and benefits described in Section 4(f), as though the Executive had incurred an involuntary Separation from Service without Cause.

5. Non-Solicitation, Non-Competition, and Confidentiality.

(a) Non-Solicitation and Non-Competition

(1) During the Restriction Period (as defined below), Executive will not, without the written consent of the Company, in each instance directly or indirectly, conduct or engage in a Competing Business (as defined below). A "Competing Business" shall mean a business that provides vaccine-based treatment for colon cancer.

(2) The "Restriction Period" shall be determined as follows:

(A) If the employment of the Executive is terminated for Cause, or if the Executive resigns without Good Reason, the Restriction Period shall be three (3) years.

(B) If the employment of the Executive terminates upon non-renewal of this Agreement pursuant to Section 2, the Restriction Period shall be one (1) year.

(C) If the employment of the Executive is involuntarily terminated without Cause, or if the Executive terminates employment for Good Reason, there shall be no Restricted Period.

(3) The term "carry on or participate in a business" shall include engaging in any of the following activities, directly or indirectly, other than carrying on or engaging in activities expressly permitted under this Agreement:

(A) Carrying on or engaging in a Competing Business as a principal, or on Executive's own account, or solely or jointly with others as a director, officer, agent, employee, consultant or partner, or stockholder, limited partner or other interest holder owning more than five (5) percent of the stock or equity interests or securities convertible into more than five (5) percent of the stock or equity interests in any entity that is carrying on or engaging in a Competing Business.

(B) As agent or principal, carrying on or engaging in any activities or negotiations with respect to the acquisition or disposition of a Competing Business.

(C) Extending credit for the purpose of establishing or operating a Competing Business.

(D) Lending or allowing the Executive's name or reputation to be used in a Competing Business.

(E) Otherwise allowing the Executive's skill, knowledge or experience to be used in a Competing Business.

(4) During the Restriction Period, the Executive will not, without the written consent of the Company or for the Company's benefit, in each case directly or indirectly, solicit, raid, entice, induce or offer, any person who is then employed by the Company, to leave the Company's employment or to become employed by any person or entity in any business, whether or not it is a Competing Business.

(5) During the Restriction Period, the Executive will not, without the written consent of the Company, in each case directly or indirectly, solicit business for a Competing Business from any person or entity that is then a customer of the Company or that is being solicited by the Company.

(6) During the Restriction Period, the Executive will not, without the written consent of the Company, in each case directly or indirectly, provide, or arrange for or assist in the provision of services by a Competing Business to any person or entity that is then a customer of the Company or that is being solicited by the Company.

(7) If the Executive breaches this Agreement, the Company shall be entitled to injunctive relief, both *pendente lite* and permanently, against the Executive, as a remedy at law would be inadequate. In addition, the Company shall be entitled to such damages as it can show it has sustained, directly or indirectly, by reason of such a breach, and neither the Company nor any of its subsidiaries or affiliates shall be limited in such damages to the consideration paid to the Executive pursuant to this Agreement. Nothing in this Agreement shall be construed as limiting the Company's remedies in any way.

(8) To the extent that any provision of this Agreement shall be determined to be invalid or unenforceable, the invalid or unenforceable portion of such provision shall be deleted from this Agreement, and the validity and enforceability of the remainder of such provision and of this Agreement shall be unaffected. In furtherance and not in limitation of the foregoing, it is expressly agreed that, should the duration of, or geographical extent of, or business activities covered by, the covenants contained in this Agreement be determined to be in excess of that which is valid or enforceable under applicable law, then such covenants shall be construed to

cover only that duration or geographical extent or those activities that may be validly covered and enforced; provided, however, that to the full extent that the provisions of any applicable law may be waived by the Executive, they are hereby waived, such that this Agreement may be deemed to be valid and enforceable to the greatest possible extent. The Executive acknowledges the uncertainty of the law in this respect and expressly stipulate that this Agreement shall be construed in a manner that renders its provisions valid and enforceable to the maximum extent possible under applicable law.

(b) Confidentiality and Non-Disclosure.

(1) Except as permitted or directed by the Company or in connection with the Executive's employment by the Company or one of its subsidiaries or affiliates, the Executive agrees to keep confidential and not to divulge or use any Confidential Information (as defined below) which the Executive has acquired or become acquainted with during the Executive's employment with the Company or any of its subsidiaries or affiliates, whether developed by the Executive or by others. The Executive agrees to use Confidential Information only in carrying out the duties and responsibilities related to the Executive's employment and, except in connection therewith, the Executive will not at any time disclose Confidential Information to any person or use the same for another person's benefit, or the benefit of anyone other than the Company. The Executive shall take all reasonable precautions to safeguard Confidential Information which is entrusted to the Executive.

(2) For purposes of this agreement, "Confidential Information" shall mean:

(A) Any non-public information of the Company that is designated as confidential or proprietary, that, due to its character and nature, a reasonable person employed by the Company would know was confidential or proprietary, or that derives independent value from not being generally known to the public.

(B) Non-public information regarding or comprising the Company's customers and customer lists, suppliers and supplier lists, procurement programs, customer and "net-net" pricing, financial matters, rebates and allowances, business matters, business policies, sales, marketing, processes, techniques, know-how, strategic, tactical or development plans, personnel information, or means of doing business.

(C) Other non-public Company information obtained directly or indirectly by the Executive in the course of the Executive's employment.

(3) The Executive shall be not liable for disclosure of Confidential Information if made in response to a valid order of a court or authorized

agency of government; provided that, if available, five days' notice first be given to the Company so a protective order, if appropriate, may be sought.

(4) The Executive acknowledges that the Company's Confidential Information constitutes a unique and valuable asset of the Company and represents a substantial investment of time and expense by the Company and that any disclosure or use of such Confidential Information other than for the sole benefit of the Company or any of its subsidiaries or affiliates would be wrongful and would cause irreparable harm to the Company and/or its subsidiaries and affiliates.

(5) The Executive agrees to return to the Company at any time the Executive separates from the Company's employment, or earlier if so requested by the Company, all Confidential Information in the Executive's possession, including any copies made by the Executive, and the relevant documents, diskettes, files, hardware, computers, devices, memories, software and generally all other materials or devices which contain or embody the same.

(6) The terms of this Confidentiality and Non-disclosure agreement shall be applicable to the Executive at all times during the Executive's employment with the Company and shall survive the termination of such employment forever.

6. **Key Person Life Insurance.** The Company shall obtain and maintain key person life insurance (under which the Company would be owner and beneficiary of a policy insuring the Executive's life), the Executive agrees to fully cooperate with the Company's efforts to secure such coverage, including but not limited to, accurately completing any insurance applications and undergoing any medical examinations required in connection with policy underwriting, and to provide such consent as is necessary for the Company to obtain favorable tax treatment under Section 101(j) of the Internal Revenue Code (as amended from time to time).

7. **Remedies.** The Executive and the Company acknowledge and agree that if the Executive or the Company breach any of the provisions of this Agreement, the Executive or the Company, as the case may be, may suffer immediate and irreparable harm for which monetary damages alone will not be a sufficient remedy, and that, in addition to all other remedies that the Executive or the Company, as the case may be, may have, the Executive or the Company, as the case may be, shall be entitled to seek injunctive relief, specific performance or any other form of equitable relief to remedy a breach or threatened breach of this Agreement by the Executive or the Company, as the case may be, and to enforce the provisions of this Agreement, and the Executive and the Company hereby waive any and all defenses they may have on the grounds of lack of jurisdiction or competence of a court to grant such an injunction or other equitable relief. The existence of this right shall not preclude or otherwise limit the applicability or exercise of any other rights and remedies which the Executive or the Company may have at law or in equity.

8. Interpretation; Severability.

(a) The Executive has carefully considered the possible effects on the Executive of the covenants not to compete and other obligations contained in this Agreement, and the Executive (i) recognizes that the Company has made every effort to limit the restrictions placed upon the Executive to those that are reasonable and necessary to protect the Company's and its affiliates' legitimate business interests, and (ii) acknowledges and agrees that the restrictions set forth in this Agreement are reasonable and necessary in order to protect the Company's and its affiliates' legitimate business interests.

(b) It is the intention of the parties hereto that the covenants, provisions, and agreements contained herein shall be enforceable to the fullest extent allowed by law. If any covenant, provision, or agreement contained herein is found by a court having jurisdiction to be unreasonable in duration, geographic scope, or character of restrictions, such covenant, provision, or agreement shall not be rendered unenforceable thereby, but rather the duration, geographic scope, or character of restrictions of such covenant, provision, or agreement shall be deemed reduced or modified with retroactive effect to render such covenant, provision, or agreement reasonable, and such covenant, provision, or agreement shall be enforced as modified. If the court having jurisdiction will not revise the covenant, provision, or agreement, the parties hereto shall mutually agree to a revision having an effect as close as permitted by applicable law to the provision declared unenforceable. The parties hereto agree that if a court having jurisdiction determines, despite the express intent of the parties hereto, that any portion of the covenants, provisions, or agreements contained herein are not enforceable, the remaining covenants, provisions, and agreements herein shall be valid and enforceable. Moreover, to the extent that any provision is declared unenforceable, the Company shall have any and all rights under applicable statutes, civil law, or common law to enforce its rights with respect to any and all Confidential Information or unfair competition by the Executive.

9. Representation and Warranty. The Executive hereby represents and warrants to the Company that he is not a party to (or otherwise subject to or bound by) any contract, agreement, or other obligation of any kind limiting the freedom of the Executive to (i) engage, directly or indirectly, in any business activity (including without limitation, the Business), (ii) compete, directly or indirectly, with any person or entity, or (iii) be employed by, provide services to, or own any interest in, the Company.

10. Applicable Law; Jurisdiction. The parties shall use their best efforts to resolve amicably any and all disputes relating to this Agreement ("Disputes"). Subject to preemption by federal law, all Disputes arising under this Agreement shall be determined pursuant to the laws of the State of Maryland, regardless of applicable principles of conflicts of laws. The parties irrevocably submit to the exclusive jurisdiction of (1) the courts of the State of Maryland and (2) if federal jurisdiction exists,

to the United States District Court of Maryland. **EXECUTIVE AGREES TO WAIVE HIS RIGHTS TO A JURY TRIAL OF ANY AND ALL CLAIMS OR CAUSES OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT.**

11. **Mitigation and Offset.** Notwithstanding anything herein to the contrary, Executive will not be required to seek other employment if his employment terminates under circumstances that entitle him to benefits under Section 4(f) herein.

12. **Notices.** All notices and communications pursuant to this Agreement shall be in writing and shall be deemed to have been duly given and effective when received if (i) personally delivered, (ii) mailed by registered or certified mail, postage prepaid, return receipt requested, or (iii) sent by other delivery services providing evidence of delivery, to the following:

If to the Executive:

ANDREW L. TUSSING
10212 Little Brick House Ct.
Ellicott City, MD 21042
USA

If to the Company:

Vaccinogen, Inc.
5300 Westview Dr.
Suite 406
Frederick, MD 21703

or to such other address as a party provides (in accordance herewith) to the other party from time to time.

13. **Entire Agreement; Amendment; Waiver.** This Agreement constitutes the entire agreement between the parties pertaining to the subject matter hereof, and supersedes any and all prior and contemporaneous agreements, understandings, negotiations, and discussions of the parties, whether oral or written. No amendment, modification, or waiver of this Agreement shall be binding unless executed in writing by all of the parties hereto, or in the case of a waiver, by the party for whom such benefit was intended. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision of this Agreement, whether or not similar, nor shall such waiver constitute a continuing waiver unless otherwise expressly so provided in writing.

14. **Successors and Assigns.** This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, personal representatives, successors, and assigns; provided, however, that the Executive may not

assign any of his rights or obligations hereunder without the prior written consent of the Company.

15. **Representation by Counsel.** Each of the parties hereto acknowledges that (i) it or he has read the Agreement in its entirety and understands all of its terms and conditions, (ii) it or he has had the opportunity to consult with any individuals of its or his choice regarding its or his agreement to the provisions contained herein, including legal counsel of its or his choice, and any decision not to do so was its or his alone, and (iii) it or he is entering into the Agreement of its or his own free will, without coercion from any source. Venable LLP has represented the Company, not the Executive, in connection with this Agreement.

16. **Indemnification; Insurance; Assistance with Legal Action.**

(a) The Company shall indemnify and hold Executive harmless, to the maximum extent permitted by law, against judgments, fines, amounts paid in settlement and reasonable expenses, including attorneys' fees, incurred by Executive in connection with the defense of, or as a result of any action or proceeding (or any appeal from any action or proceeding) in which Executive is made or is threatened to be made a party by reason of the fact that Executive is or was an officer of the Company.

(b) The Company hereby represents and warrants (a) that Executive is and shall continue to be covered and insured up to the maximum limits provided by all insurance which the Company maintains to indemnify its directors and officers; and (b) that the Company will maintain such insurance, in not less than its present limits, throughout the term of this Agreement.

(c) The Executive agrees that he will, upon reasonable notice, furnish such information and assistance to the Company as may be reasonably required by the Company in connection with any litigation, or governmental inquiry or proceeding, in which it or any of its predecessors, successors, subsidiaries, officers, directors, shareholders, agents, affiliates, investors, and attorneys is, or may become, a party or otherwise involved. The Executive will be entitled to compensation for his reasonable time spent in providing such assistance, at a rate of \$500 per hour (with a cap of \$4,000 per day). The Executive will also be entitled to reimbursement of reasonable expenses incurred in connection with such assistance.

17. **Interpretation.** The parties and their respective legal counsel actively participated in the negotiation and drafting of this Agreement, and in the event of any ambiguity or mistake herein, or any dispute among the parties with respect to the provisions hereto, no provision of this Agreement shall be construed unfavorably against any of the parties on the ground that he, it, or his or its counsel was the drafter thereof.


18. **Survival.** The provisions of Sections 5, 7, 8, and 10 through 16, inclusive, shall survive the termination of this Agreement.

19. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same Agreement.

20. **Section 409A.** The Executive and the Company agree that the terms of this Agreement are intended to be construed in accordance with Section 409A of the Internal Revenue Code ("Section 409A"). To the extent that Section 409A applies to any payment required under this Agreement, such payment shall be made in conformance with the provisions of Section 409A.


IN WITNESS WHEREOF, the Company has caused this Agreement to be executed by its duly authorized representative, and the Executive has executed this Agreement, each as of the Effective Date.

WITNESS/ATTEST:



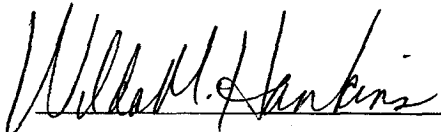
COMPANY:

Vaccinogen, Inc.

By:  (SEAL)
Name: Michael G. Hanna, Jr., Ph.D.
Title: Chief Executive Officer

Date: 2/1/10

EXECUTIVE:



 (SEAL)
ANDREW L. TUSSING

Date: 2-1-10

VACCINOGEN

December 21, 2010

Andrew L. Tussing
Vaccinogen, Inc.
5300 Westview Drive
Suite 406
Frederick, Maryland 21703

Re: Amendment to Employment Agreement

Dear Andy:

I am writing to confirm our recent discussions concerning amendments to the employment agreement between you and Vaccinogen, Inc., effective as of February 1, 2010 (the "Agreement").

In accordance with Section 13 of the Agreement, the Agreement is hereby amended as follows, effective as of December 21, 2010:

1. Section 2 of the Agreement (Term) is amended by deleting the phrase "December 31, 2012" and inserting in its place "December 31, 2011".
2. Section 3(b) of the Agreement (Signing Bonus) is hereby deleted.
3. Section 3(d) of the Agreement (Equity Grants) is hereby deleted.
4. Section 3(g) of the Agreement (Change in Control) is hereby amended by the addition of the following new Section 3(g)(6) at the end thereof: "and; (6) For the avoidance of doubt and notwithstanding the foregoing, the issuance by the Company of Series B Preferred Stock pursuant to Section 4 of that certain Investors' Rights Agreement – Series B Preferred Stock, by and among the Company, the investors listed on Schedule A thereto (the "Investors") and certain Key Holders (as defined therein) causing the Investors to have been issued shares equal to fifty percent (50%) of the total outstanding equity ownership of the Company on a fully-diluted and as-converted basis, shall not be a "Change of Control" for purposes of this Section 3(g)."
5. Sections 4(b) and 4(c)(1) of the Agreement (Death and Disability) are hereby amended by deleting the phrase ", plus an Annual Bonus equal to seventy-five percent (75%) of the Executive's Base Salary".

VACCINOGEN

6. Section 4(f)(1)(A)(iii) of the Agreement (Severance) is hereby amended by deleting the phrase "one-hundred and seventy-five percent (175%) of the Executive's per-pay period Base Salary amount" and inserting in its place "one-hundred percent (100%) of the Executive's per-pay period Base Salary amount."

7. Section 6 of the Agreement (Key Person Life Insurance) is hereby deleted.

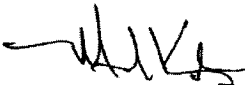
8. Schedule A of the Agreement (Form of Equity/Phantom Equity Grant) is hereby deleted.

Except for the amendments noted above, the Agreement remains in full force and effect.

Please sign and date this letter below to indicate your agreement with the terms of this letter.

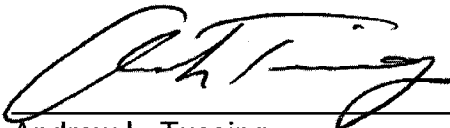
Very truly yours,

VACCINOGEN, INC.

By:  _____

Michael Kranda
Chief Executive Officer

I have read this letter, and agree to the changes to the Agreement that are set forth above.



Andrew L. Tussing

Date: December 21, 2010

EXHIBIT 6.14

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT (this "Patent Security Agreement") is made this ~~18th~~ day of April, 2013, by and between VACCINOGEN, INC., a Maryland corporation ("Grantor"), and THE ABELL FOUNDATION, INC., a Maryland corporation (the "Foundation").

WITNESSETH:

WHEREAS, pursuant to that certain Note and Warrant Purchase Agreement dated as of October 26, 2011 (as amended, restated, supplemented, or otherwise modified from time to time, the "Note Purchase Agreement") by and between Grantor and the Foundation, the Foundation has made certain financial accommodations to the Grantor; and

WHEREAS, pursuant to a certain Security Agreement dated as of October 26, 2011, by and between Grantor and the Foundation (the "Security Agreement"), to secure (among other things) all present and future obligations of Grantor to the Foundation under the promissory note issued by Grantor to the Foundation pursuant to the Note Purchase Agreement, Grantor has granted to the Foundation a security interest in the assets and property of Grantor, including, without limitation, all of its general intangibles; and

WHEREAS, the Foundation is willing to further amend the terms of the Note Purchase Agreement as provided for in that certain Amendment No. 3 to Note and Warrant Purchase Agreement of even date herewith by and between Grantor and the Foundation, but only upon the condition, among others, that Grantor shall have executed and delivered to the Foundation this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantor hereby agrees as follows:

1. DEFINED TERMS. All initially capitalized terms used but not otherwise defined herein have the meanings given to them in the Security Agreement or, if not defined therein, in the Note Purchase Agreement.

2. GRANT OF SECURITY INTEREST IN PATENT COLLATERAL. Grantor hereby unconditionally grants, assigns, and pledges to the Foundation, to secure the Obligations, a continuing security interest (referred to in this Patent Security Agreement as the "Security Interest") in all of Grantor's right, title and interest in and to the following, whether now owned or hereafter acquired or arising (collectively, the "Patent Collateral"):

(a) all of its patents ("Patents") and all patent intellectual property licenses to which it is a party ("Intellectual Property Licenses") including those referred to on Schedule I;

(b) all divisionals, continuations, continuations-in-part, reissues, reexaminations, or extensions of the foregoing; and

(c) all proceeds of the foregoing, including any claim by Grantor against third parties for past, present or future infringement of any Patent or any Patent exclusively licensed under any Intellectual Property License, including the right to receive damages, or right to receive license fees, royalties, and other compensation under any Patent Intellectual Property License.

3. SECURITY FOR OBLIGATIONS. This Patent Security Agreement and the Security Interest created hereby secures the payment and performance of the Obligations, whether now existing or arising hereafter. Without limiting the generality of the foregoing, this Patent Security Agreement secures the payment of all amounts which constitute part of the Obligations and would be owed by Grantor to the Foundation, whether or not they are unenforceable or not allowable due to the existence of any bankruptcy or insolvency proceeding involving Grantor.

4. SECURITY AGREEMENT. The Security Interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interests granted to the Foundation pursuant to the Security Agreement. Grantor hereby acknowledges and affirms that the rights and remedies of the Foundation with respect to the Security Interest in the Patent Collateral made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. To the extent there is any inconsistency between this Patent Security Agreement and the Security Agreement, the Security Agreement shall control.

5. AUTHORIZATION TO SUPPLEMENT. If Grantor shall obtain rights to any new patent application or issued patent or become entitled to the benefit of any patent application or patent for any divisional, continuation, continuation-in-part, reissue, or reexamination of any existing patent or patent application, the provisions of this Patent Security Agreement shall automatically apply thereto. Grantor hereby authorizes the Foundation unilaterally to modify this Patent Security Agreement by amending Schedule I to include any such new patent rights of Grantor, provided that such amendment shall be provided to Grantor prior to unilaterally amending Schedule I. Notwithstanding the foregoing, no failure to so modify this Patent Security Agreement or amend Schedule I shall in any way affect, invalidate or detract from the Foundation's continuing security interest in all Collateral, whether or not listed on Schedule I.

6. COUNTERPARTS. This Patent Security Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, when taken together, shall constitute but one and the same Patent Security Agreement. Delivery of an executed counterpart of this Patent Security Agreement by telefacsimile or other electronic method of transmission shall be equally as effective as delivery of an original executed counterpart of this Patent Security Agreement. Any party delivering an executed counterpart of this Patent Security Agreement by telefacsimile or other electronic method of transmission also shall deliver an original executed counterpart of this Patent Security Agreement but the failure to deliver an original executed counterpart shall not affect the validity, enforceability, and binding effect of this Patent Security Agreement.

7. **CONSTRUCTION.** This Patent Security Agreement is a Document and a Transaction Document. Unless the context of this Patent Security Agreement clearly requires otherwise, references to the plural include the singular, references to the singular include the plural, the terms “includes” and “including” are not limiting, and the term “or” has, except where otherwise indicated, the inclusive meaning represented by the phrase “and/or”. The words “hereof”, “herein”, “hereby”, “hereunder”, and similar terms in this Patent Security Agreement refer to this Patent Security Agreement as a whole and not to any particular provision of this Patent Security Agreement. Section, subsection, clause, schedule, and exhibit references herein are to this Patent Security Agreement unless otherwise specified. Any reference in this Patent Security Agreement to any agreement, instrument, or document shall include all alterations, amendments, changes, extensions, modifications, renewals, replacements, substitutions, joinders, and supplements, thereto and thereof, as applicable (subject to any restrictions on such alterations, amendments, changes, extensions, modifications, renewals, replacements, substitutions, joinders, and supplements set forth herein). The words “asset” and “property” shall be construed to have the same meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, securities, accounts, and contract rights. Any reference herein to the satisfaction, repayment or payment in full of the Obligations shall mean irrevocable satisfaction, repayment or payment in accordance with the terms of the Note Purchase Agreement and the other Transaction Documents. Any reference herein to any person shall be construed to include such person’s successors and permitted assigns.

8. **THE VALIDITY OF THIS PATENT SECURITY AGREEMENT, THE CONSTRUCTION, INTERPRETATION, AND ENFORCEMENT HEREOF, AND THE RIGHTS OF THE PARTIES HERETO WITH RESPECT TO ALL MATTERS ARISING HEREUNDER OR RELATED HERETO SHALL BE DETERMINED UNDER, GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF MARYLAND.**

9. **THE PARTIES AGREE THAT ALL ACTIONS OR PROCEEDINGS ARISING IN CONNECTION WITH THIS PATENT SECURITY AGREEMENT SHALL BE TRIED AND LITIGATED ONLY IN THE STATE AND, TO THE EXTENT PERMITTED BY APPLICABLE LAW, FEDERAL COURTS LOCATED IN BALTIMORE CITY, STATE OF MARYLAND; PROVIDED, HOWEVER, THAT ANY SUIT SEEKING ENFORCEMENT AGAINST ANY COLLATERAL OR OTHER PROPERTY MAY BE BROUGHT, AT THE FOUNDATION’S OPTION, IN THE COURTS OF ANY JURISDICTION WHERE THE FOUNDATION ELECTS TO BRING SUCH ACTION OR WHERE SUCH COLLATERAL OR OTHER PROPERTY MAY BE FOUND. THE FOUNDATION AND GRANTOR WAIVE, TO THE EXTENT PERMITTED UNDER APPLICABLE LAW, ANY RIGHT EACH MAY HAVE TO ASSERT THE DOCTRINE OF FORUM NON CONVENIENS OR TO OBJECT TO VENUE TO THE EXTENT ANY PROCEEDING IS BROUGHT IN ACCORDANCE WITH THIS SECTION 9.**

10. **TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE FOUNDATION AND GRANTOR HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS PATENT SECURITY AGREEMENT OR ANY OF THE**


TRANSACTIONS CONTEMPLATED HEREIN, INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW OR STATUTORY CLAIMS. THE FOUNDATION AND GRANTOR REPRESENT THAT EACH HAS REVIEWED THIS WAIVER AND EACH KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL. IN THE EVENT OF LITIGATION, A COPY OF THIS PATENT SECURITY AGREEMENT MAY BE FILED AS A WRITTEN CONSENT TO A TRIAL BY THE COURT.

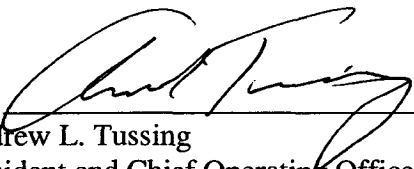
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IN WITNESS WHEREOF, the parties hereto have caused this Patent Security Agreement to be executed and delivered as of the day and year first above written.

GRANTOR:

VACCINOGEN, INC.,
a Maryland corporation

By: 
Michael G. Hanna, Jr., Ph.D.
Chairman and Chief Executive Officer

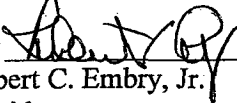
By: 
Andrew L. Tussing
President and Chief Operating Officer

[SIGNATURE PAGE TO PATENT SECURITY AGREEMENT]

ACCEPTED AND ACKNOWLEDGED BY:

THE FOUNDATION:

THE ABELL FOUNDATION, INC.

By: 
Robert C. Embry, Jr.
President

[SIGNATURE PAGE TO PATENT SECURITY AGREEMENT]

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SCHEDULE I
to
PATENT SECURITY AGREEMENT

Patents

Grantor	Country	Patent	Application/ Patent No.	Filing Date
Vaccinogen, Inc.	U.S.A.	US 7,628,996		12/2009
Vaccinogen, Inc.	U.S.A.	US 5,951,985		9/1999

Patent Licenses

[None]

[SCHEDULE I TO PATENT SECURITY AGREEMENT]

EXHIBIT 6.15

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

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VACCINOGEN, INC.

AMENDMENT NO. 3 TO
NOTE AND WARRANT PURCHASE AGREEMENT

THIS AMENDMENT NO. 3 TO NOTE AND WARRANT PURCHASE AGREEMENT is dated as of the ~~19th~~ day of April, 2013, by and between Vaccinogen, Inc., a Maryland corporation (the "**Company**"), and The Abell Foundation, Inc., a Maryland corporation (the "**Purchaser**").

RECITALS

Reference is made to that certain Note and Warrant Purchase Agreement dated October 26, 2011, by and between the Company and the Purchaser, as amended by that certain Amendment No. 1 to Note and Warrant Purchase Agreement dated February 16, 2012, by and between the Company and the Purchaser and as further amended by that certain Amendment No. 2 to Note and Warrant Purchase Agreement dated January 16, 2013, by and between the Company and the Purchaser (the "**Second Amendment**," and such Note and Warrant Purchase Agreement, as amended by the Second Amendment, the "**Existing Agreement**," and the Existing Agreement, as amended by this Amendment No. 3, the "**Agreement**"), pursuant to which the Purchaser agreed to purchase from the Company a promissory note (the "**Existing Note**") in the maximum principal amount of One Million Eight Hundred Thousand Dollars (\$1,800,000.00) and to purchase the "Warrant" as therein defined (the "**Existing Warrant**"). In order to amend the Existing Agreement, *inter alia*, to extend the maturity of the Existing Note, and to modify the terms of the Existing Warrant as hereinafter provided, the parties hereto have entered into this Amendment No. 3.

NOW, THEREFORE, in consideration of the premises and the mutual covenants set forth herein, and such other consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

1. All capitalized terms not otherwise defined herein which are defined in the Agreement shall have the same meanings assigned to them in the Agreement.
2. All references to (a) "this Agreement" in the Agreement shall mean the Existing Agreement as amended by this Amendment No. 3, (b) the "Note" in the Agreement and in the other Transaction Documents shall mean a promissory note in substantially the form attached hereto as Exhibit A (the "**Replacement Note**"), which Exhibit shall replace in its entirety Exhibit A to the Agreement, and (c) the "Warrant" in the Agreement shall mean a warrant to purchase capital stock of the Company in substantially the form attached hereto as Exhibit B, which Exhibit shall replace in its entirety Exhibit B to the Agreement.

3. Section 1.2 of the Agreement is hereby amended to read in its entirety as follows:

1.2 Sale. Subject to the terms and conditions hereof, the Purchaser agrees to purchase from the Company, and the Company agrees to sell and issue to the Purchaser, (i) the Note, and (ii) a warrant which evidences the right of the Purchaser to purchase up to that number of shares of Common Stock of the Company equal to (x) \$1,100,000, divided by (y) eighty-five percent (85%) of the lowest purchase price per share (after taking into account all discounts and other reductions in the purchase price offered to any purchaser) of the Common Stock sold in the Company's Venture Capital Financing (as defined below). "**Venture Capital Financing**" shall mean the first transaction or series of transactions to occur after October 26, 2011 involving the issuance or sale of additional shares of capital stock, or securities directly or indirectly convertible or exchangeable for capital stock, of the Company that would result in at least \$35,000,000 in aggregate gross proceeds to the Company, including by way of the conversion of any outstanding debt.

4. Section 5.10 of the Agreement is hereby amended to read in its entirety as follows:

5.10 Company's Venture Capital Financing. The Company agrees to (a) provide the Purchaser (i) on or before the fifteenth (15th) day of each month, commencing April 15, 2013, with a report in form and detail acceptable to the Purchaser, describing the activities of the Company during the immediately preceding month in connection with the issuance or sale of additional shares of capital stock, or securities directly or indirectly convertible or exchangeable for capital stock, of the Company, and (ii) with reasonable prior notice of the potential closing of the final transaction representing the Company's Venture Capital Financing, and (b) to issue the Warrant to the Purchaser at the closing of the final transaction representing the Company's Venture Capital Financing.

5. To induce the Purchaser to enter into this Amendment No. 3, the Company hereby:

(a) represents and warrants to the Purchaser that (i) the representations and warranties of the Company set forth in Section 3 of the Agreement, and the representations and warranties of the Company set forth in each of the other Transaction Documents, are true and correct in all material respects with the same effect as if made on the date hereof (except that (x) such materiality qualifier shall not be applicable to any representation or warranty that already are qualified or modified by materiality in the text thereof, and (y) any representation and warranty stated to relate solely to an earlier date shall be true and correct as of such earlier date),

it being understood that all references to "this Agreement" and the "Transaction Documents" in Section 3 of the Agreement shall include (without limitation) this Amendment No. 3 and the Warrant, respectively, and (ii) after giving effect to the terms of this Amendment No. 3, the Company is in compliance with all the terms and conditions of the Agreement and the other Transaction Documents, and no Default or Event of Default has occurred and is continuing; and

(b) releases and forever discharges the Purchaser and the officers, employees and trustees thereof, of and from all manner of actions, causes and causes of action, suits, debts, sums of money, account reckonings, bonds, bills, specialties, coverages, judgments, executions, claims, and demands whatsoever, at law or in equity, and particularly, without limiting the generality of the foregoing, all claims relating to the transactions which are the subject of the Transaction Documents, which the Company and its successors and assigns ever had, now has, or may have in the future, for, upon or by reason of any matter, cause, or thing, whatsoever occurring prior to the date hereof and/or arising from facts of which the Company was aware, or reasonably should have been aware, as of the date hereof. Without limitation of the foregoing, the Company waives any and all defenses, offsets, and counterclaims to the Purchaser's enforcement of the Transaction Documents or any action by the Purchaser to foreclose any security interest.

6. This Amendment No. 3 shall become effective on the date upon which the following shall all have occurred:

(a) the Purchaser shall have received each of the following, in form and substance satisfactory to the Purchaser:

(i) a copy of this Amendment No. 3, duly executed and delivered by the Company;

(ii) the Replacement Note, duly executed and delivered by the Company;

(iii) intellectual property security agreements covering all intellectual property of the Company, each duly executed and delivered by the Company; and

(iv) certificate(s) of the Secretary of the Company (A) to the effect that resolutions in form and content satisfactory to the Purchaser authorizing the prior transactions between the Company and the Purchaser in connection with the Second Amendment and those transactions contemplated hereby have been duly adopted and remain in full force and effect, and (B) certifying the incumbency and signatures of the officers of the Company who executed the Second Amendment and who are authorized to execute this Amendment, the Replacement Note and the Warrant; and

(b) the Purchaser shall have executed and delivered to the Company this Amendment No. 3.

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7. The Company and the Purchaser intend that neither this Amendment No. 3, nor the execution and delivery of this Amendment No. 3, the Replacement Note or any other document executed and delivered pursuant to or in connection with this Amendment No. 3, shall constitute or be construed to operate as a novation of the Agreement, the Existing Note, any of the indebtedness of the Company pursuant to the Existing Note, or any lien or security interest heretofore created pursuant to any of the Transaction Documents. The Company and the Purchaser intend that by the execution and delivery of this Amendment No. 3 and the Replacement Note certain of the terms of the note and warrant purchases by the Purchaser shall be modified, restated and replaced in their entireties, but the indebtedness evidenced by the Existing Note and such liens and security interests heretofore created shall not be extinguished or satisfied. Without limitation of the foregoing, the Company specifically acknowledges and agrees that (a) the "Note" as defined in the Security Agreement dated as of October 26, 2011, by and between the Company and the Purchaser (the "Security Agreement") means the Replacement Note, (b) the "Obligations" as defined in the Security Agreement (the "Obligations") include all indebtedness and liabilities of the Company under the Agreement, under the Replacement Note and under the other Transaction Documents, (c) the "Collateral" as defined in the Security Agreement (the "Collateral") secures, without limitation, the payment and performance all of the Obligations, (d) the Obligations represent debt issued in connection with an investment in the Company, (e) the Collateral includes the "Collateral" (the "Organon Collateral") as defined in that certain New Security Agreement (the "Organon Security Agreement") made as of October 31, 2007 by and between (i) Intracell Holdings Corporation (predecessor to the Company) and (ii) Organon BioSciences International B.V. and Organon Teknika Corporation (collectively, "Organon"); provided that the inclusion of such "Collateral" as defined in the Organon Security Agreement is included specifically subject to any liens or rights arising from the terms of the Organon Security Agreement, and (f) to the Company's knowledge there are no liens or security interests in the Collateral except for the security interest of the Purchaser therein and except for the security interest granted to Organon in the Organon Collateral pursuant to the Organon Security Agreement.

8. The Company agrees to pay all out-of-pocket expenses incurred by the Purchaser in connection with the preparation, negotiation, execution and delivery of this Amendment No. 3, the Replacement Note and all other documents executed or to be executed in connection herewith, including, without limitation, the expenses and reasonable fees of its counsel in an amount not to exceed \$5,000.

9. The Purchaser shall be permitted to set-off all amounts owed by it to the Company under the Investment Agreement against all amounts owed to it by the Company with respect to the Note.

10. Except as amended hereby, the Agreement shall remain unchanged, and the Agreement, as so amended, shall continue in full force and effect in accordance with its terms. The breach by the Company of any representation, warranty, covenant or agreement contained in this Amendment No. 3 shall represent an Event of Default.

11. This Amendment No. 3 may be executed in any number of counterparts and by the different parties hereto on separate counterparts, each of which, when so executed and delivered, shall be an original, but all such counterparts shall together constitute one and the same instrument.

12. The Recitals hereto and all of the terms of the Agreement are hereby incorporated into and made a part hereof as though fully set forth herein.

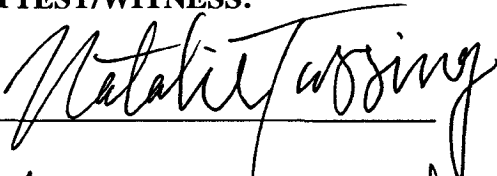
13. This Amendment No. 3 shall be governed by and construed under the laws of the State of Maryland, without regard to the conflicts of laws provisions of the State of Maryland or any other state. Any suit, action or proceeding instituted by either party hereto with respect to any of the obligations of other party hereto may be brought in any State or federal court located in the State of Maryland (in addition to such other courts in which jurisdiction and venue may be appropriate), and each party consents to the in personam jurisdiction of such courts.

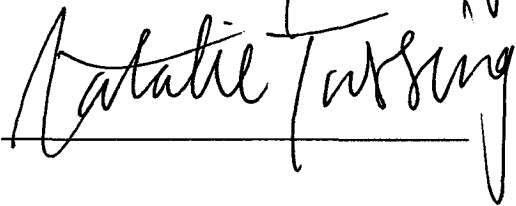
[SIGNATURES CONTAINED ON THE FOLLOWING PAGE]

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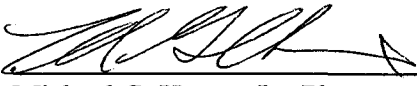
IN WITNESS WHEREOF, the parties have caused this Amendment No. 3 to Note and Warrant Purchase Agreement to be duly executed under seal by their duly authorized respective officers as of the day and year first above written.

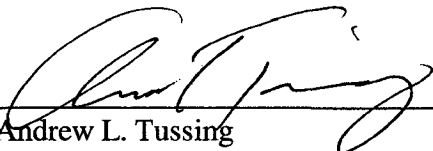
ATTEST/WITNESS:





VACCINOGEN, INC.

By:  (SEAL)
Michael G. Hanna, Jr., Ph.D.
Chairman and Chief Executive Officer

By:  (SEAL)
Andrew L. Tussing
President and Chief Operating Officer

THE ABELL FOUNDATION, INC.

By: _____ (SEAL)
Robert C. Embry, Jr.
President

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IN WITNESS WHEREOF, the parties have caused this Amendment No. 3 to Note and Warrant Purchase Agreement to be duly executed under seal by their duly authorized respective officers as of the day and year first above written.

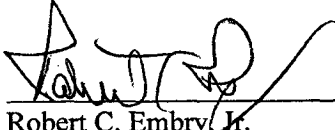
ATTEST/WITNESS:

VACCINOGEN, INC.

By: _____ (SEAL)
Michael G. Hanna, Jr., Ph.D.
Chairman and Chief Executive Officer

By: _____ (SEAL)
Andrew L. Tussing
President and Chief Operating Officer

THE ABELL FOUNDATION, INC.

By:  _____ (SEAL)
Robert C. Embry, Jr.
President

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EXHIBIT A

[Amended and Restated Promissory Note]

4/18/13

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THIS NOTE HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY STATE SECURITIES LAWS, AND MAY NOT BE TRANSFERRED UNLESS THE COMPANY HAS RECEIVED A WRITTEN OPINION FROM COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE COMPANY STATING THAT SUCH TRANSFER IS BEING MADE IN COMPLIANCE WITH ALL APPLICABLE FEDERAL AND STATE SECURITIES LAWS.

THIRD AMENDED AND RESTATED
PROMISSORY NOTE

Frederick, Maryland
April __, 2013

\$1,800,000.00
Due: May 31, 2013

For value received, the undersigned, Vaccinogen, Inc., a Maryland corporation ("**Maker**"), promises to pay to the order of The Abell Foundation, Inc., a Maryland corporation ("**Payee**"), at such place as the holder of this Note may from time to time designate the principal sum of One Million Eight Hundred Thousand Dollars (\$1,800,000.00), together with the interest thereon at the rate hereinafter specified and any and all other sums which may be due and owing to the holder of this Note in accordance with the following terms:

1. **Note Issuance.** This non-negotiable promissory note (this "**Note**") is issued pursuant to the Note and Warrant Purchase Agreement dated as of October 26, 2011, between Maker and Payee, as amended by that certain Amendment No. 1 to Note and Warrant Purchase Agreement February 16, 2012, between Maker and Payee, as further amended by that certain Amendment No. 2 to Note and Warrant Purchase Agreement dated January 16, 2013, by and between the Company and the Purchaser, and as further amended by that certain Amendment No. 3 to Note and Warrant Purchase Agreement dated as of the date hereof between Maker and Payee (as amended, and as the same may be further amended, supplemented or otherwise modified from time to time, the "**Note and Warrant Purchase Agreement**"), and Payee is subject to the terms and entitled to the benefits of this Note and the Note and Warrant Purchase Agreement and may enforce the agreements of Maker contained herein and therein and exercise the remedies provided for hereby and thereby or otherwise available in respect hereto and thereto. Capitalized terms used herein without definition have the meaning assigned thereto in the Note and Warrant Purchase Agreement.

2. **Payment; Interest Rate.** Subject to the further provisions of this Section 2 and of Section 4, the principal amount under this Note shall be due and payable on May 31, 2013 (the "**Maturity Date**"). Simple interest shall accrue from and after the date of this Note on the principal amount outstanding from time to time at a rate of eight percent (8%) per annum and, together with all accrued interest under the Existing Note (as hereinafter defined), shall be due and payable on the Maturity Date. Notwithstanding the foregoing, to the extent necessary to repay the principal amount of this Note in full and all accrued interest thereon, this Note shall be paid concurrently with the closing of each issuance or sale of additional shares of capital stock, or securities directly or indirectly convertible or exchangeable for capital stock, of the Company (each an "**Equity Issuance**") occurring after March 31, 2013 in an amount equal to (a) fifty

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percent (50%) of the first gross proceeds of such Equity Issuance(s) until the cumulative total of such payments equals ten percent (10%) of the cumulative gross proceeds of all Equity Issuances occurring after October 26, 2011 but prior to March 31, 2013, (b) twenty percent (20%) of the next \$4,000,000 of gross proceeds of such Equity Issuance(s), (c) twenty-five percent (25%) of the next \$6,000,000 of gross proceeds of such Equity Issuance(s), and (d) one hundred percent (100%) of the net proceeds of all Equity Issuance(s) thereafter.

3. Calculation of Interest. Interest on this Note shall be calculated on the basis of a 360 day per year factor applied to the actual days on which there exists an unpaid principal balance due under this Note.

4. Application of Payments. All payments made hereunder shall be applied first to late penalties, costs of collection or other sums owing the holder, then to accrued interest (including accrued interest under the Existing Note) and last to payment of the principal amount of this Note.

5. Prepayment. Maker may prepay this Note in whole or in part at any time or from time to time without penalty or additional interest, provided that payments are applied as provided in Section 4 above. Amounts repaid hereunder may not be reborrowed.

6. Use of Proceeds. The purpose of this Note is to fund the working capital needs of Maker, and, by its execution and delivery of this Note, Maker covenants and agrees that the proceeds of this Note shall be used solely for such purpose. Without limitation of the foregoing, no proceeds of this Note will be used to purchase or carry any margin stock (within the meaning of Regulation U issued by the Board of Governors of the Federal Reserve System) or to extend credit to others for the purpose of purchasing or carrying any margin stock.

7. Events of Default. The occurrence of any one or more of the following events (the "**Events of Default**") shall constitute an Event of Default hereunder:

(a) any failure by Maker to pay any principal, interest or other amount due under this Note at or prior to the time when it is due and payable;

(b) any failure of Maker to duly perform, comply with or observe any of the other terms, conditions or covenants contained in this Note or in any of the other Transaction Documents, if such failure remains uncured for a period of five (5) business days after written notice of such failure is delivered by Payee;

(c) any representation or warranty made by Maker herein or in any of the other Transaction Documents or in connection therewith, or any information provided by or on behalf of Maker pursuant hereto or pursuant to any of the other Transaction Documents or in connection therewith, being or becoming false, misleading, incomplete or incorrect in any material respect;

(d) Maker (i) defaults in any payment of principal of or interest on any of its Debt (as defined below) (other than this Note), beyond the period of grace, if any, provided

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in the instrument or promissory note under which such Debt was created; or (ii) defaults in the observance or performance of any other agreement or condition relating to any such Debt or contained in any instrument or agreement relating thereto, or any other event occurs or condition exists, the effect of which default or other event or condition is to cause, or to permit the holder(s) of such Debt to cause, with the giving of notice if required, such Debt to become due prior to its stated maturity;

(e) any judgment against Maker or any attachment or levy against the property of Maker with respect to a claim remains unpaid, unstayed, on appeal, undischarged, unbonded or undismissed for a period of thirty (30) days;

(f) Maker generally does not pay its debts as such debts become due, or admits in writing its inability to pay its debts generally; or a petition for relief in a bankruptcy court is filed by Maker; or Maker applies for, consents to or acquiesces in the appointment of a trustee, custodian or receiver for Maker or any of its assets or property or makes a general assignment for the benefit of its creditors or, in the absence of such application, consent or acquiescence, a trustee, custodian or receiver is appointed for Maker or for a substantial part of its assets or property and is not discharged within thirty (30) days hereafter; or any bankruptcy, reorganization, debt arrangement or other proceeding or case under any bankruptcy or insolvency law or any dissolution or liquidation proceeding is instituted against Maker and if instituted against Maker is consented to or acquiesced in by Maker or remains undismissed for sixty (60) days thereafter; or Maker takes any action to authorize any of the actions described in this subsection; or

(g) any demand by a holder of any of the Current Payables (as defined below) to make payment in excess of \$30,000 on any Current Payable which remains unsatisfied by Maker for a period of ten (10) days.

“**Debt**” of any person means, without duplication, (a) all indebtedness of such person for borrowed money, (b) all obligations of such person to pay the deferred purchase price of property or services, except trade accounts payable arising in the ordinary course of business, (c) all obligations of such person evidenced by notes, bonds, debentures or other similar instruments, (d) all obligations of such person created or arising under any conditional sale or other title retention agreement or arrangement with respect to property acquired by such person, (e) all obligations of such person as lessee under leases that have been or should be, in accordance with generally accepted accounting principles, recorded as capital leases, (f) all obligations, contingent or otherwise, of such person in respect of acceptances, letters of credit or similar extensions of credit, (g) all Debt of others guaranteed directly or indirectly in any manner by such person, and (h) all Debt of others secured by a lien or other encumbrance on any asset of such person, whether or not such person has assumed or become liable for the payment of such Debt. Notwithstanding the foregoing, the term “**Debt**” shall not include payables of the Maker which are outstanding prior to the date of this Note (whether or not past due) (the “**Current Payables**”) including, but not limited to, the amounts owing to Organon Teknika Corporation and Organon BioSciences International B.V. (and their successors) pursuant to that certain letter agreement dated October 31, 2007.

8. Default Interest Rate. Upon the occurrence of an Event of Default until this Note is paid in full, the interest rate applicable to the then outstanding balance shall be increased to ten percent (10%) upon written notice to Maker by Payee of such Event of Default.

9. Rights and Remedies. If any one or more Events of Default shall occur, then in each and every such case, Payee at its option may at any time thereafter exercise and/or enforce any or all of the following rights and remedies:

(a) declare upon notice to Maker all of the amounts payable hereunder to be immediately due and payable, whereupon same shall become due and payable, together with accrued and unpaid interest thereon and all other sums due hereunder, immediately without presentment, demand or protest, all of which Maker hereby waives, provided that upon the occurrence of an Event of Default described in Section 7(f), all amounts shall automatically be and become due and payable immediately without any declaration; and

(b) bring suit for payment and exercise any other rights and remedies available to Payee pursuant to this Note, any of the other Transaction Documents or applicable law.

CONFESSION OF JUDGMENT. IF THIS NOTE IS NOT PAID WHEN DUE, MAKER HEREBY IRREVOCABLY AUTHORIZES AND EMPOWERS PAYEE, BY ITS ATTORNEY, OR BY THE PRONOTHARY OR CLERK OF ANY COURT OF RECORD IN THE STATE OF MARYLAND OR IN ANY JURISDICTION WHERE PERMITTED BY LAW TO BE MAKER'S TRUE AND LAWFUL ATTORNEY-IN-FACT, AND IN MAKER'S NAME AND STEAD, TO APPEAR FOR MAKER AND CONFESS AND ENTER JUDGMENT AGAINST IT IN FAVOR OF PAYEE IN ANY JURISDICTION IN WHICH MAKER OR ANY OF ITS PROPERTY IS LOCATED FOR: (i) THE ENTIRE UNPAID PRINCIPAL AMOUNT OF THIS NOTE THEN REMAINING UNPAID, (ii) INTEREST THEREON THEN ACCRUED AND UNPAID, (iii) ATTORNEYS' FEES IN THE AMOUNT OF \$10,000, AND (iv) COURT COSTS, WITH OR WITHOUT DECLARATION, WITHOUT STAY OF EXECUTION AND WITH RELEASE OF ALL ERRORS AND THE RIGHT TO ISSUE EXECUTION FORTHWITH, AND FOR DOING SO THIS NOTE OR A COPY VERIFIED BY AFFIDAVIT SHALL BE A SUFFICIENT WARRANT. MAKER HEREBY WAIVES AND RELEASES ALL RELIEF FROM ANY AND ALL APPRAISEMENT, STAY OR EXEMPTION LAW OF ANY STATE NOW IN FORCE OR HEREAFTER ENACTED. THIS AUTHORITY AND POWER SHALL NOT BE EXHAUSTED BY THE EXERCISE THEREOF, AND SHALL CONTINUE UNTIL THE OBLIGATIONS ARE FULLY PAID, PERFORMED, DISCHARGED AND SATISFIED. IT IS THE INTENTION OF THE PARTIES HERETO THAT THE PROVISIONS OF THIS NOTE RELATING TO THE PAYMENT OF ATTORNEYS FEES SHALL NOT MERGE INTO ANY JUDGMENT ENTERED IN CONNECTION HEREWITH, AND PAYEE SHALL RETAIN THE RIGHT TO RECOVER FROM MAKER FEES INCURRED IN THE COLLECTION HEREOF WHICH ARE INCURRED AFTER THE ENTRY OF FINAL JUDGMENT ON THIS NOTE. Notwithstanding the amount of attorneys' fees for which judgment may be confessed hereunder, by its acceptance hereof Payee agrees to use reasonable efforts to retain counsel who will charge Payee only for time and expenses at standard hourly rates, and Payee will not enforce the

attorney's fee portion of any confessed judgment for an amount in excess of the actual fees and expenses charged to Payee by its counsel in connection with confessing judgment against Maker and collecting on such judgment. (This provision shall not limit the obligation of Maker to pay all reasonable attorneys' fees incurred by Payee in connection with this Note.)

Each right, power and remedy of Payee specified herein or available at law or in equity or by statute shall be cumulative and concurrent and shall be in addition to every other right, power or remedy provided for in this Note or available at law or in equity and the exercise or beginning of the exercise by Payee of any one or more of such rights, powers or remedies shall not preclude the simultaneous or later exercise by Payee of any or all other rights, powers or remedies.

10. Costs of Collection. If at any time the indebtedness evidenced by this Note is collected through legal proceedings or this Note is placed in the hands of an attorney or attorneys for collection, Maker hereby agrees to pay all costs and expenses (including attorneys' fees) incurred by the holder of this Note in enforcing its rights and collecting or attempting to collect all amounts due hereunder and under any related documents.

11. Extensions or Modifications. Maker agrees that the maturity of this Note or any payment due hereunder may be extended by Payee at any time or from time to time, this Note may be modified by Payee, and any defaults hereunder may be waived by Payee without releasing, discharging or affecting the liability of Maker. No modification or waiver of any provision of this Note, and no consent by Payee to any failure of Maker to comply with any provision of this Note, shall in any event be effective unless the same shall be in writing signed by Payee.

12. Choice of Law; Jurisdiction; Severability. This Note shall be governed, construed and enforced in strict accordance with the laws of the State of Maryland, without reference to principles of conflict of laws. Maker agrees that any suit, action or proceeding instituted by Payee with respect to any of the obligations of Maker hereunder may be brought in any State or federal court located in the State of Maryland (in addition to such other courts in which jurisdiction and venue may be appropriate), and Maker consents to the in personam jurisdiction of such courts. If any provision of this Note shall for any reason be invalid or unenforceable, such invalidity or unenforceability shall not affect any other provision.

13. Waiver of Defenses. In the event the holder of this Note transfers this Note for value, Maker agrees that none of such subsequent holders of this Note shall be subject to any claims or defenses which Maker may have against the prior holder, all of which are waived as to the subsequent holders and all subsequent holders shall have the rights of a holder in due course with respect to Maker even though the subsequent holder might not qualify under applicable law absent this paragraph as a holder in due course.

14. Waivers. Maker hereby waives (a) presentment, protest and demand and notice of protest, demand, dishonor and nonpayment of this Note; (b) all claims and causes of action of Maker against Payee for punitive, exemplary or other non-compensatory damages; and

(c) diligence in the enforcement or collection of all of the obligations of Maker hereunder. EACH OF PAYEE AND MAKER AGREES THAT ANY ACTION, SUIT OR PROCEEDING INVOLVING ANY CLAIM, COUNTERCLAIM OR CROSS-CLAIM ARISING OUT OF OR IN ANY WAY RELATING, DIRECTLY OR INDIRECTLY, TO ANY OF THE OBLIGATIONS OF MAKER HEREUNDER SHALL BE TRIED BY A COURT AND NOT BY A JURY, EACH OF PAYEE AND MAKER HEREBY WAIVING ANY RIGHT TO TRIAL BY JURY IN ANY SUCH ACTION, SUIT OR PROCEEDING AND HEREBY AGREEING THAT THIS WAIVER OF TRIAL BY JURY IS A MATERIAL ASPECT OF THEIR AGREEMENTS.

15. No Waiver; No assignment. The delay or failure of any holder to exercise its rights hereunder shall not be deemed a waiver thereof. No waiver of any rights of holder shall be effective unless in writing and signed by the holder and any waiver of any right shall not apply to any other right or to such right in any subsequent event or circumstance not specifically included in such waiver. Maker may not assign its rights or obligations under this Note.

16. Headings. The headings used in this Note are used for convenience only and are not to be considered in construing or interpreting this Note.

17. Replacement Note. This Note is given pursuant to the terms of that certain Amendment No. 3 to Note and Warrant Purchase Agreement of even date herewith by and between Maker and Payee in replacement of the "Note" as defined in the Note and Warrant Purchase Agreement immediately prior to the date hereof (the "Existing Note"). The execution of this Note and the replacement of the Existing Note hereby shall not constitute or act as a novation, satisfaction or extinguishment of the indebtedness evidenced by the Existing Note, and all accrued and unpaid interest under the Existing Note shall be due and payable on the Maturity Date unless required to be paid prior thereto pursuant to the terms hereof. This Note shall for all purposes be the "Note" as defined in the Note and Warrant Purchase Agreement and in that certain Security Agreement dated October 26, 2011, by and between Maker and Payee (the "Security Agreement"), the terms of which are incorporated herein and made a part hereof as if fully set forth herein. This Note is one of the "Transaction Documents" as defined in the Note and Warrant Purchase Agreement, and the obligations of Maker hereunder are part of the "Obligations" as defined in the Security Agreement.

[THE NEXT PAGE IS THE SIGNATURE PAGE]

IN WITNESS WHEREOF, Maker has caused this Note to be executed on its behalf by its duly authorized officer as of the day and year first above written.

VACCINOGEN, INC.

By: _____
Name: Michael G. Hanna, Jr., Ph.D.
Title: Chairman and Chief Executive Officer

By: _____
Name: Andrew L. Tussing
Title: President and Chief Operating Officer

EXHIBIT B

[Revised Form of Warrant]

THIS WARRANT AND THE SECURITIES ISSUABLE UPON EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY STATE SECURITIES LAWS, AND MAY NOT BE TRANSFERRED UNLESS THE COMPANY HAS RECEIVED A WRITTEN OPINION FROM COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE COMPANY STATING THAT SUCH TRANSFER IS BEING MADE IN COMPLIANCE WITH ALL APPLICABLE FEDERAL AND STATE SECURITIES LAWS.

**VACCINOGEN, INC.
COMMON STOCK PURCHASE WARRANT**

This Common Stock Purchase Warrant (this "**Warrant**") is issued as of this ___ day of _____, 201___, by Vaccinogen Inc., a Maryland corporation (the "**Company**"), to The Abell Foundation, Inc., a Maryland corporation or permitted successors or assigns (the "**Holder**").

1. Issuance of Warrant; Term; Price.

1.1 Issuance. Pursuant to the terms of the Note and Warrant Purchase Agreement, dated as of October 26, 2011, between the Company and the Holder (as the same has been and hereafter may be amended, supplemented or otherwise modified from time to time, the "**Note and Warrant Purchase Agreement**"), the Holder has made a loan to the Company evidenced by the Company's Second Amended and Restated Promissory Note in the maximum principal amount of One Million Eight Hundred Thousand Dollars (\$1,800,000), dated as of April ___, 2013 (the "**Note**"). In consideration of the issuance of the Note, the receipt and sufficiency of which are hereby acknowledged, the Company hereby grants to Holder the right to purchase, at any time and from time to time on and after the date hereof until the Expiration Date (as defined below), up to [_____] fully paid and nonassessable shares (the "**Warrant Shares**") of Common Stock of the Company (the "**Common Stock**") on the terms and subject to the conditions set forth below. [Note: the number of Warrant Shares shall be equal to \$1,100,000 divided by eighty-five percent (85%) of the lowest purchase price per share of Common Stock sold in the Company's the Venture Capital Financing (as defined in the Note and Warrant Purchase Agreement).]

1.2 Term. This Warrant shall be exercisable at any time and from time to time in whole or in part from the date hereof to the earlier of: (a) the ten-year anniversary of the date hereof; (b) the sale of all or substantially all of the Company's assets; and (c) any merger or consolidation of the Company in which the Company is not the surviving entity and the shareholders then owning a majority of the outstanding equity interests in the Company no longer own or control a majority of such equity interests (the earlier of such events being the "**Expiration Date**") by delivery to the Company at its principal executive offices of: (i) this Warrant; (ii) the Purchase Form attached hereto as Exhibit A duly completed and executed; and (iii) payment in accordance with Section 1.3 below. The Warrant Shares so purchased shall be issued to the Holder as the record and beneficial owner of such Warrant Shares or to the Holder's transferee as designated on the Purchase Form as of the close of business on the date on which

this Warrant shall have been surrendered and payment made for such Warrant Shares as aforesaid.

1.3. Exercise Price. Subject to adjustment as hereinafter provided, the exercise price (the "**Warrant Price**") per share for which all or any of the Warrant Shares may be purchased pursuant to the terms of this Warrant initially shall be equal to \$ _____ [Note: the Warrant Price per share shall equal eighty-five percent (85%) of the lowest price per share of the Common Stock issued in the Venture Capital Financing.] The Warrant Price shall be payable in cash or by certified or official bank check or by the cancellation of any present or future indebtedness from the Company to the Holder hereof in a dollar amount equal to the purchase price of the Common Stock for which the consideration is being given, or by surrendering for cancellation shares of capital stock of the Company which shares have a fair market value equal to the purchase price of Common Stock for which the consideration is being given.

2. Adjustment of Warrant Price, Number and Kind of Shares. The Warrant Price and the number and kind of securities issuable upon the exercise of this Warrant shall be subject to adjustment from time to time and the Company agrees to provide notice upon the happening of certain events as follows.

2.1 Stock Dividends Adjustment. In case at any time and from time to time after the date hereof, the holders of the Common Stock of the Company (or any shares of stock or other securities at the time receivable upon the exercise of this Warrant) shall have received, or, on or after the record date fixed for the determination of eligible stockholders, shall have become entitled to receive, without payment therefor, other additional securities or other property (other than cash) of the Company by way of dividend or distribution, then and in each case, the Holder shall, upon the exercise hereof, be entitled to receive, in addition to the number of Warrant Shares receivable thereupon, and without payment of any additional consideration therefor, the amount of such other or additional securities or other property (other than cash) of the Company which the Holder would hold on the date of such exercise had it been the holder of record of such Warrant Shares on the date hereof and had thereafter, during the period from the date hereof to and including the date of such exercise, retained such Warrant Shares and/or all other additional securities or other property receivable by it as aforesaid during such period, giving effect to all adjustments called for during such period by this Section 2.

2.2 Reclassification or Reorganization Adjustment. In case of any reclassification or change of the outstanding securities of the Company or of any reorganization of the Company (or any other corporation the stock or securities of which are at the time receivable upon the exercise of this Warrant) at any time and from time to time after the date hereof, and the Holder, upon the exercise hereof at any time after the consummation of such reclassification, change or reorganization, shall be entitled to receive, in lieu of the stock or other securities and property receivable upon the exercise hereof prior to such consummation, the stock or other securities or property to which the Holder would have been entitled upon such consummation if such holder had exercised this Warrant immediately prior thereto, all subject to further adjustment as provided in this Section 2.

2.3 Stock Splits and Reverse Stock Splits. If at any time and from time to time after the date hereof, the Company shall subdivide or otherwise change its outstanding shares of Common Stock into a greater number of shares, the Warrant Price in effect immediately prior to such subdivision shall thereby be proportionately reduced and the number of shares receivable upon exercise of this Warrant shall thereby be proportionately increased; and, conversely, if at any time and from time to time after the date hereof, the outstanding number of shares of Common Stock shall be combined or otherwise changed into a smaller number of shares, the Warrant Price in effect immediately prior to such combination shall thereby be proportionately increased and the number of shares receivable upon exercise of this Warrant shall thereby be proportionately decreased.

2.4 Other Impairment. The Company will not, by amendment of its articles of incorporation or bylaws or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and conditions and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder against impairment.

3. No Fractional Shares. No fractional shares of Common Stock will be issued in connection with any subscription hereunder. In lieu of any fractional shares that would otherwise be issuable, the Company shall pay cash equal to the product of such fraction multiplied by the fair market value of one share of Common Stock on the date of exercise, as determined in good faith by the Company's Board of Directors.

4. No Shareholder Rights. This Warrant as such shall not entitle Holder to any of the rights of a shareholder of the Company until the Holder has exercised this Warrant in accordance with Section 6 hereof.

5. Reservation of Stock. The Company covenants that during the period this Warrant is exercisable, the Company will reserve from its authorized and unissued Common Stock a sufficient number of shares thereof to provide for the issuance of Warrant Shares or other securities upon the exercise of this Warrant. The Company agrees that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for Warrant Shares or other securities upon the exercise of this Warrant.

6. Exercise of Warrant. This Warrant may be exercised by Holder by the surrender of this Warrant at the principal office of the Company, accompanied by notice of and payment in full of the purchase price of the Warrant Shares the Holder elects to purchase hereunder. As a condition to the Holder's exercise of this Warrant, the Holder shall execute any agreement then in effect among the holders of outstanding shares of capital stock of the Company. This Warrant shall be deemed to have been exercised immediately prior to the close of business on the date of its surrender for exercise as provided above, and the person entitled to receive the Warrant Shares or other securities and/or property issuable upon such exercise shall be treated for all purposes as the holder of such Warrant Shares or other securities of record as of the close of business on such date. As promptly as practicable, the Company shall issue and deliver to the

person or persons entitled to receive the same a certificate or certificates for the number of full Warrant Shares or other securities issuable upon such exercise, together with cash in lieu of any fraction of a share as provided above. The Warrant Shares or other securities issuable upon exercise hereof shall, upon their issuance, be fully paid and nonassessable. If this Warrant shall be exercised in part only, the Company shall, at the time of delivery of the certificate representing the Warrant Shares in respect of which this Warrant has been exercised, make a notation on this Warrant stating the Warrant Shares with respect to which this Warrant shall not have been exercised and this Warrant shall then be returned to the Holder.

7. Certificate of Adjustment. Whenever the Warrant Price or number or type of securities issuable upon exercise of this Warrant is adjusted, as herein provided, the Company shall promptly deliver to the record holder of this Warrant a certificate of an officer of the Company setting forth the nature of such adjustment and a brief statement of the facts requiring such adjustment.

8. Notice of Proposed Transfers. This Warrant is transferable by the Holder hereof subject to compliance with this Section 8. Prior to any proposed transfer of this Warrant or the Warrant Shares received on the exercise of this Warrant (the "Securities"), unless there is in effect a registration statement under the Securities Act of 1933, as amended (the "Securities Act"), covering the proposed transfer, the Holder thereof shall give written notice to the Company of such Holder's intention to effect such transfer. Each such notice shall describe the manner and circumstances of the proposed transfer in sufficient detail, and shall, if the Company so requests, be accompanied (except in transactions in compliance with Rule 144) by either: (a) a written opinion of legal counsel who shall be satisfactory to the Company acting reasonably addressed to the Company and satisfactory in form and substance to the Company's counsel acting reasonably, to the effect that the proposed transfer of the Securities may be effected without registration under the Securities Act; or (b) a "no action" letter from the Securities Exchange Commission (the "Commission") to the effect that the transfer of such Securities without registration will not result in a recommendation by the staff of the Commission that action be taken with respect thereto, whereupon the Holder of the Securities shall be entitled to transfer the Securities in accordance with the terms of the notice delivered by the Holder to the Company; provided, however, no such registration statement or opinion of counsel shall be necessary for a transfer by a Holder to any affiliate of such Holder for no consideration, if the transferee agrees in writing to be subject to the terms hereof to the same extent as if such transferee were the original Holder hereunder. Each certificate evidencing the Securities transferred as above provided shall bear the appropriate restrictive legend set forth above, except that such certificate shall not bear such restrictive legend if in the opinion of counsel for the Company acting reasonably such legend is not required in order to establish compliance with any provisions of the Securities Act.

9. Replacement of Warrants. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of the Warrant, and in the case of any such loss, theft or destruction of the Warrant, on delivery of an indemnity agreement or security satisfactory in form and amount to the Company acting reasonably, and reimbursement to the Company of all reasonable expenses incidental thereto, and upon surrender

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and cancellation of the Warrant if mutilated, the Company will execute and deliver, in lieu thereof, a new Warrant of like tenor.

10. Dividends and Distributions. So long as any part of this Warrant remains outstanding and unexercised, the Company will, upon the declaration of a cash dividend upon its Common Stock or other distribution to the holders of its Common Stock and at least ten (10) days prior to the record date, notify the Holder hereof of such declaration, which notice will contain, at a minimum, the following information: (a) the date of the declaration of the dividend or distribution; (b) the amount of such dividend or distribution; (c) the record date of such dividend or distribution; and (d) the payment date or distribution date of such dividend or distribution. The Holder shall, upon the exercise hereof, be entitled to receive, in addition to the number of shares of Common Stock receivable thereupon, and without payment of any additional consideration therefor, the amount of such other or additional securities or other property (other than cash) of the Company which such Holder would hold on the date of such exercise had it been the holder of record of such Common Stock on the date hereof and had thereafter, during the period from the date hereof to and including the date of such exercise, retained such shares and/or all other additional securities or other property receivable by it as aforesaid during such period, giving effect to all adjustments pursuant to Section 2.

11. Miscellaneous. This Warrant shall be governed by the laws of the State of Maryland. The headings in this Warrant are for purposes of convenience of reference only, and shall not be deemed to constitute a part hereof. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provisions. All notices and other communications from the Company to the Holder shall be delivered personally or mailed by first class mail, postage prepaid, or by facsimile to the address or facsimile number furnished to the Company in writing by the last Holder who shall have furnished an address and facsimile number to the Company in writing, and if mailed shall be deemed given three days after deposit in the U.S. Mail.

12. Taxes. The Company shall pay all issue taxes and other governmental charges (but not including any income taxes of a Holder) that may be imposed in respect of the issuance or delivery of the Warrant Shares or any portion thereof.

13. Amendment. Any term of this Warrant may be amended with the written consent of the Company and the Holder. Any amendment effected in accordance with this Section 13 shall be binding upon the Holder of this Warrant, each future holder of such Warrant, and the Company.

14. Remedies. In the event of any default or threatened default by the Company in the performance of or observance with any of the terms of this Warrant, it is agreed that remedies at law are not and will not be adequate for the Holder and that such terms may be specifically enforced by a decree for the specific performance of any agreement contained herein or by an injunction against a violation of any of the terms hereof or otherwise.

15. Facsimile Signature. This Warrant may be executed by the Company in facsimile or pdf. form and upon receipt by the Holder of such faxed executed copy of this Warrant, this Warrant shall be binding upon and enforceable against the Company in accordance with its

terms. The Company shall promptly forward to the Holder an original of the facsimile signed copy of this Warrant previously delivered to Holder.

16. Term. The term of this Warrant (the “**Term**”), and the Holder’s right to exercise this Warrant, shall terminate immediately upon the close of business (5:00 p.m., Eastern Standard Time) on the ten-year anniversary of the date hereof. Upon termination of the Term, the Holder shall surrender this Warrant to the Company at the Company’s principal place of business.

IN WITNESS WHEREOF, the undersigned officer of the Company has executed this Common Stock Purchase Warrant as of the date first above written.

VACCINOGEN, INC.

By: _____
Name: Michael G. Hanna, Jr., Ph.D.
Title: Chairman and Chief Executive Officer

By: _____
Name: Andrew L. Tussing
Title: President and Chief Operating Officer

**EXHIBIT A
PURCHASE FORM**

The undersigned pursuant to the provisions set forth in the attached Warrant (No. _____) hereby irrevocably elects to purchase ____ shares of Warrant Shares covered by such Warrant and herewith makes payment of _____ representing the full purchase price for such shares of Warrant Shares at the price per share of Warrant Share provided for in such Warrant.

If the shares of Warrant Shares are not to be issued in the name of the undersigned, the shares of Warrant Shares shall be issued in the names of permitted assigns and in the number of units as follows:

Name:

Name:

Address:

Address:

Tax ID #:

Tax ID #:

No. of Units:

No. of Units:

Dated:

Signature:

Print Name:

Address:

EXHIBIT 6.16

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

EXTENSION AND THIRD AMENDMENT TO LEASE

This Extension and Third Amendment to Lease (the "Amendment") is made this 30 day of April, 2013, by and between Martens Properties L.L.P., a Maryland limited liability limited partnership ("Landlord") and Vaccinogen LLC ("Tenant").

WITNESSETH:

WHEREAS, Landlord and Tenant entered into a certain Lease, dated October 24, 2007, the Extension and First Amendment to Lease dated November 1, 2011 and that certain Second Amendment to Lease dated October 23, 2012, herein collectively referred to as "Lease", pursuant to which Tenant leased four thousand and sixty four (4,064) square feet, known as Suite 406 (the "Leased Premises"), in the commercial office building known as Westview Office Court located at 5300 Westview Drive, Frederick, Maryland 21710 (the "Building"), and

WHEREAS, the term of the Lease will expire on April 30, 2013, and Landlord and Tenant desire to extend the term of the Lease and amend certain other terms and conditions hereinafter set forth;

NOW THEREFORE, in consideration of the premises and mutual covenants and agreements contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. Extension of Lease Term. The term of the Lease is hereby extended for a period of six (6) months, commencing on May 1, 2013 ("Extension Commencement Date") and expiring October 31, 2013 ("Lease Expiration Date"). This First Extension Term shall be upon all the same terms and conditions as set forth in the Lease with respect to the Initial Term thereof, except as modified herein. Tenant will be provided one (1) additional six (6) month extension period by providing Landlord with sixty days (60) prior written notice by September 1, 2013 (hereinafter referred to as "Second Extension Period"). In the Second Extension Period the last three (3) months of the term will be on a month-to-month basis with a termination option available to Tenant, provided Tenant notifies Landlord in writing of its intent to terminate, sixty (60) days prior to the termination date. Landlord shall have the right to terminate the lease and any extensions thereof at any time, by providing sixty (60) days prior written notice to Tenant. All provisions of the Lease shall govern during any extension period.

2. Base Rent. As of the Extension Commencement Date, the Base Rent amount of Five Thousand Eighty Nine and 38/100 Dollars (\$5,089.38) shall be paid in equal monthly installments.

3. Additional Rent. In addition to paying the Base Rent specified in Paragraph 2 above, Tenant shall remain obligated to pay to Landlord the amounts determined to be Tax Adjustment and Expense Adjustment (collectively called "Additional Rent") upon the same terms and conditions as set forth in the Initial Lease.

4. Brokers. Tenant represents and warrants to Landlord that Tenant has not dealt with any realtor, broker, agent, or finder in connection with this Amendment other than McShea and Company, Inc. ("Landlord's Agent"). Tenant shall indemnify and hold Landlord harmless from and against any loss, claim, damage, expense or liability for any compensation, commission, or charges claimed by any other realtor, broker, agent, or finder claiming to have dealt with Tenant in connection with this Amendment.

5. Reaffirmation of Terms. All other terms, covenants, and provisions of the Lease not expressly modified and amended hereby shall remain in full force and effect, and are hereby ratified and confirmed in all respects.

IN WITNESS WHEREOF, the parties hereto have duly executed this Extension and Third Amendment to Lease on the day and year first written above.

WITNESS

Willard Hankins

**TENANT
VACCIINOGEN INC.**

By: M. SA

Date: 12 April 2013

WITNESS

**LANDLORD
MARTENS PROPERTIES L.L.P.**

By: _____

Date: _____

IN WITNESS WHEREOF, the parties hereto have duly executed this Extension and Third Amendment to Lease on the day and year first written above.

WITNESS

Walter Hankins

TENANT
VACINOGEN INC.

By: M. SA

Date: 12 April 2013

WITNESS

Virginia L. Martens

LANDLORD
MARTENS PROPERTIES L.L.P.

By: Mary White

Date: April 30, 2013

EXHIBIT 6.17

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

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February 14, 2013

Andrew L. Tussing
President & COO
Vaccinogen, Inc.
5300 Westview Drive, Suite 406
Frederick, MD 21703

Dear Andrew:

In response to our recent discussions, we are pleased to propose a binding Agreement (“Agreement”) between **First Liberties Financial**, a New York corporation together with its subsidiaries, successors and assigns, hereby referred to as FLF, a broker-dealer registered with the SEC and member of FINRA, with principal offices at 369 Lexington Avenue, Suite 311, New York, NY 10017 and **Vaccinogen, Inc.**, a company with executive offices located at 5300 Westview Drive, Suite 406, Frederick, MD 21703 (together with its affiliates, parent companies, subsidiaries, successors and assigns, hereby referred to as the “Company”), collectively known as Parties, as follows:

1. Services to be Rendered. During the Term, the Company hereby retains FLF to provide corporate financial advisory services and to serve as its advisor and placement agent for a best-efforts private placement (the “Placement”) of the Company’s equity or debt securities in an amount expected to provide maximum gross proceeds of Forty Two Million U.S. dollars (\$42,000,000). The structure and terms of the Placement will be mutually agreed upon by (FLF and the Company. FLF agrees that it will use its best efforts to find purchasers of the Shares or debt securities (the “Investors”), and any such Investors shall qualify themselves as “accredited investors” as defined in Rule 501(a) under the Securities Act of 1933 (the “Act”), but FLF disclaims any agreement, expressed or implied, in this Agreement or otherwise, that it will be successful in placing the Shares or arranging Debt. FLF shall identify prospective sources of capital to Company and advise Company of such prospect(s) in writing. Company shall, after review and discussion, advise FLF in writing to approach directly or arrange introductions to selected prospects. Such prospects shall then become identified as the FLF’s List of Introduced Persons. Shares may be purchased in the Placement by an affiliate of FLF and/or directly by or via an affiliate of one or more of FLF’s principals, provided that such entity qualifies as an “accredited investor” as of the date of such purchase. It is understood that the decision by FLF to act as Placement Agent will depend on satisfactory results of FLF’s due diligence investigation and the final approval by FLF’s internal investment banking commitment committee. Notwithstanding anything in this Agreement to the contrary, the Company shall have the sole and absolute discretion to accept or not accept, in whole or in part, the terms of any subscription for Shares.
2. Information. In connection with FLF’s engagement, the Company will furnish, or cause to be furnished, to FLF all data, material and other information requested by FLF for the purposes of performing the services contemplated hereunder, subject to a non-disclosure agreement signed by FLF and the Company. The Company represents and warrants to FLF that any such information, any reports required by it to be filed by it with any state or federal authority (collectively “Reports”) and any other

information supplied to FLF or Investors by or on behalf of the Company in connection with the Placement will not contain any materially untrue statement of a material fact or omit to state a material fact necessary to make the statements therein not misleading. The Company agrees to use its best efforts to cooperate with FLF in connection with the provision of services by FLF hereunder, including attendance or participation via phone by appropriate officers or principals of the Company (with reasonable notice and availability) for meetings coordinated by FLF.

3. Offering Materials. The Company, with advice and support provided by FLF, shall prepare disclosure documents to be provided to potential purchasers of the Shares as offering materials (the "Offering Materials"). The Company represents and warrants to the best of its knowledge that the Offering Materials will not, as of the Closing Date of the Placement, contain any untrue statement of material fact or omit to state any material fact required to be stated therein, or necessary to make the statements contained therein, not misleading. FLF recognizes and acknowledges that it is not authorized to make any representations and statements to any potential purchaser other than and to the extent that such representations and statements are contained in the Offering Materials.

4. Term and Termination. The engagement of FLF shall begin as of the date hereof and continue indefinitely until (a) the Company raises the total of \$42 million of either equity or debt or (b) either Party terminates the Agreement by providing a 30 day written notice to the other Party. During the Term, either party hereto may terminate the Agreement by giving 30 days prior written notice to the other party ("Termination Notice"). Upon expiration or termination of this Agreement, FLF shall have no further obligations to the Company hereunder. If any party that was first introduced to the Company by FLF during the Term makes an investment in the Company within twenty four (24) months of termination of the Term, FLF shall be entitled to fees and warrants as outlined in paragraph 5 herein. Any fees due or claimed by any other placement agents, advisors or representatives of the Company prior to, during or after the Term are solely the responsibility of the Company. Sections 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14 and 15 of this Agreement shall survive termination and remain operative and in full force and effect.

5. Fees and Expenses. In consideration for providing the services contemplated herein, the Company agrees to pay FLF the following:

(i) The Company agrees to (a) pay FLF for each of its debt or equity Placements on the initial Closing Date of the Placement, and on the date of any subsequent closing of such Placement, a cash fee (the "Cash Placement Agent Fee") of seven percent (7%) of the gross proceeds of the debt or equity issue, and (b) issue to FLF, and/or its designees, upon the final closing of the Placement, warrants (the "Placement Agent Warrants") to purchase an aggregate number of Shares equal to five percent (5%) of the total number of Shares subscribed for in any such equity placement. The Placement Agent Warrants shall have a term of five (5) years from the Closing Date of the Placement, have a cashless exercise option in the event of corporate sale or initial public offering of the Company, be exercisable for Shares identical to those sold in the Placement, and have an exercise price per Share equal to the final per-Share offering price of the Shares subscribed for in the Placement; and

(ii) The Company will also reimburse FLF, upon request, for documented expenses ("Out-of-Pocket Expenses") reasonably and directly incurred in serving as its financial advisor and Placement Agent for the Placement (including travel and reasonable fees and disbursements of FLF's counsel), which are, in the aggregate, not expected to exceed twenty-five thousand dollars (\$25,000).

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6. Obligations Limited. FLF shall be under no obligation hereunder to make an independent appraisal of assets or investigation or inquiry as to any information regarding, or any representations of, the Company and shall have no liability hereunder in regard thereto.

7. Indemnification. The Company agrees to indemnify FLF and its representatives, agents, partners, affiliates, subsidiaries, successors, officers and directors in accordance with the indemnification provisions set forth in Appendix A, attached hereto and made part hereof.

8. No Liability. The Company agrees that neither FLF nor any of its partners, affiliates, subsidiaries, successors, directors, agents, employees or controlling persons shall have any liability to the Company or any person asserting claims on behalf of or in right of the Company in connection with or as a result of either FLF's engagement under this Agreement or any matter referred to in this Agreement, except to the extent that any losses, claims, damages, liabilities or expenses incurred by the Company are determined by a court of competent jurisdiction to have resulted solely from the gross negligence or willful misconduct of FLF in performing the services that are the subject of this Agreement.

9. Independent Contractor. The parties hereto acknowledge and agree that the engagement of FLF hereunder is not intended to confer rights upon any person (including shareholders, employees or creditors of FLF) not a party hereto as against the Company or its affiliates, or their respective directors, officers, employees or agents, successors or assigns. FLF shall act as an independent contractor under this Agreement, and does not create any partnership, joint venture or other similar relationship between the Company and FLF and any duties arising out of its engagement shall be owed solely to the Company. FLF shall have no authority to accept any order or to bind or obligate the Company in any way or to renew any debt or obligation for or on account of the Company without the Company's prior written consent. As an independent contractor, FLF will be solely responsible for its income and all other applicable taxes. FLF shall have no restrictions to on its ability to provide services to companies other than the Company, except as stated herein.

10. Severability. If any provision of this Agreement for any reason shall be held to be illegal, invalid or unenforceable, such illegality shall not affect any other provision of this Agreement and this Agreement shall be amended so as to enforce the illegal, invalid or unenforceable provision to the maximum extent permitted by applicable law, and the parties shall cooperate in good faith to further modify this Agreement so as to preserve to the maximum extent possible the intended benefits to be received by the parties hereto.

11. Publicity. With the Company's prior review and approval, which shall not be unreasonably withheld or delayed, FLF may, at its own expense, place customary tombstone announcements or advertisements in financial newspapers and journals describing its services hereunder upon completion of the Placement.

12. Assignment; Benefit. Neither party hereto, without the explicit prior written consent of the other may assign this Agreement or, in whole or in part, the rights and obligations hereunder. The provisions of the Agreement will be binding upon and inure to the benefit of the parties hereto and then respective heirs, legal representatives, permitted successors and assigns.

13. Entire Agreement; Amendment; Waiver. This Agreement sets forth the entire understanding of the parties hereto with respect to the transactions contemplated hereby and supersedes any prior or contemporaneous communications, understandings, arrangements, discussions and agreements between the parties hereto concerning the subject matter herein. No change, amendment or supplement to, or

waiver of this Agreement will be valid or of any effect, except by the written agreement of the parties hereto. The waiver of any particular condition, precedent, or provision provided by this Agreement will not constitute the waiver of any other.

14. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania without regard to its conflict of laws provisions. Any action or proceeding brought by either party against the other party arising out of or related to this Agreement shall be brought exclusively in the courts of the Commonwealth of Pennsylvania located in Montgomery County, Pennsylvania or in the United States District Court for the Eastern District of Pennsylvania, which courts shall have exclusive jurisdiction over the adjudication of such matters, and the Company and FLF consent to the jurisdiction of such courts and personal service with respect thereto. The Company hereby consents to personal jurisdiction, service and venue in any court in which any claim arising out of or in any way relating to this Agreement is brought by any third party against FLF or any indemnified party; except as to any third party claim as to which the court before which such third party claim is pending has determined by final non-appealable order that FLF or an indemnified party is not subject to jurisdiction. The Company agrees that a final judgment in any such proceeding or counterclaim brought in any such court shall be conclusive and binding upon the Company and may be enforced in any other courts to the jurisdiction of which the Company is or may be subject, by suit upon such judgment. Each of FLF and the Company waives all right to trial by jury in any proceeding or counterclaim (whether based upon contract, tort or otherwise) in any way arising out of or relating to this agreement.

15. Representations. Each party hereto represents, warrants and covenants to the other party that (a) it has the power and authority to enter into this Agreement and to perform its respective obligations hereunder, (b) it will comply with all applicable laws, rules and regulations and (c) that it has all licenses and memberships required to perform obligations and services hereunder. The Company shall be responsible for any costs and expenses associated with filings, applications or registrations with any governmental or regulatory body, including, without limitation, those associated with any sales pursuant to Regulation D under the Act, “blue sky” laws, and the laws of the foreign countries in which the securities will be offered or sold that are required to be made by the Company. In addition, the Company shall be hereby notified that certain states, most notably the State of New York, may require “blue sky” filings to be submitted to the respective state securities regulators prior to any solicitation of investors in such states.

16. Counterparts. This Agreement may be executed in one or more counterparts, each of which may be deemed an original and all of which together shall constitute one and the same instrument.

17. Notices. Any notice, consent or other communication given pursuant to this Agreement shall be in writing and shall be effective when (i) delivered personally, (ii) sent by facsimile (with receipt confirmed), provided that a copy is mailed registered mail, return receipt requested, or (iii) when received by the addressee, if sent by Express Mail, Federal Express or other express delivery service (receipt requested), in each case to the appropriate addressee set forth below:

If to FLF:	Mr. Hilary Bergman First Liberties Financial 369 Lexington Avenue New York, NY 10017
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If to the Company: Mr. Andrew L. Tussing
Vaccinogen, Inc.
5300 Westview Drive, Suite 406
Frederick, MD 21703

If the foregoing correctly sets forth your understanding, please so indicate by signing and returning to us one fully executed copy of this Agreement.


Sincerely,

First Liberties Financial


By: _____
Hilary Bergman
President

Intending to be legally bound the foregoing
Is Confirmed and Agreed to by:

Vaccinogen, Inc.



By: _____ Date: 26February2013
Name: Andrew L. Tussing
Title: President

By:  Date: 26February2013
Name: Michael G. Hanna, Jr., Ph.D.
Title: Chief Executive Officer

APPENDIX A

INDEMNIFICATION

The Company agrees to indemnify and hold harmless First Liberties Financial and its affiliates (as defined in Rule 405 under the Securities Act of 1933, as amended) and their respective directors, officers, employees, agents, consultants and controlling persons (FLF) and each such person being an "Indemnified Party") from and against all losses, claims, damages and liabilities (or actions, including shareholder actions, in respect thereof), joint or several, to which such Indemnified Party may become subject under any applicable federal or state law, or otherwise, which are related to or result from the performance by FLF of the services contemplated by, or the engagement of FLF pursuant to, this Agreement and will promptly reimburse any Indemnified Party for all reasonable expenses (including reasonable counsel fees and expenses) as they are incurred in connection with the investigation of, preparation for or defense arising from any threatened or pending claim, whether or not such Indemnified Party is a party and whether or not such claim, action or proceeding is initiated or brought by the Company. The Company will not be liable to any Indemnified Party under the foregoing indemnification and reimbursement provisions, (i) for any settlement by an Indemnified Party effected without its prior written consent (not to be unreasonably withheld); or (ii) to the extent that any loss, claim, damage or liability is found in a final, non-appealable judgment by a court of competent jurisdiction to have resulted primarily from FLF's willful misconduct or gross negligence. The Company also agrees that no Indemnified Party shall have any liability (whether direct or indirect, in contract or tort or otherwise) to the Company or its security holders or creditors related to or arising out of the engagement of FLF pursuant to, or the performance by FLF of the services contemplated by, this Agreement except to the extent that any loss, claim, damage or liability is found in a final, non-appealable judgment by a court of competent jurisdiction to have resulted primarily from FLF's willful misconduct or gross negligence.

Promptly after receipt by an Indemnified Party of notice of any intention or threat to commence an action, suit or proceeding or notice of the commencement of any action, suit or proceeding, such Indemnified Party will, if a claim in respect thereof is to be made against the Company pursuant hereto, promptly notify the Company in writing of the same. In case any such action is brought against any Indemnified Party and such Indemnified Party notifies the Company of the commencement thereof, the Company may elect to assume the defense thereof, with counsel reasonably satisfactory to such Indemnified Party, and an Indemnified Party may employ counsel to participate in the defense of any such action, provided that the employment of such counsel shall be at the Indemnified Party's own expense, unless (i) the employment of such counsel has been authorized in writing by the Company, (ii) the Indemnified Party has reasonably concluded (based upon advice of counsel to the Indemnified Party) that there may be legal defenses available to it or other Indemnified Parties that are different from or in addition to those available to the Company, or that a conflict or potential conflict exists (based upon advice of counsel to the Indemnified Party) between the Indemnified Party and the Company that makes it impossible or inadvisable for counsel to the Indemnifying Party to conduct the defense of both the Company and the Indemnified Party (in which case the Company will not have the right to direct the defense of such action on behalf of the Indemnified Party), or (iii) the Company has not in fact employed counsel reasonably satisfactory to the Indemnified Party to assume the defense of such action within a reasonable time after receiving notice of the action, suit or proceeding, in each of which cases the reasonable fees, disbursements and other charges of such counsel will be at the expense of the Company; provided, further, that in no event shall the Company be required to pay fees and expenses for more than one firm of attorneys representing Indemnified Parties unless the defense of one Indemnified Party is unique or separate from that of another Indemnified party subject to the same claim or action. Any failure or delay by an Indemnified Party to give the notice referred to in this paragraph shall not affect such Indemnified Party's right to be indemnified hereunder, except to the extent that such failure or delay

causes actual harm to the Company, or prejudices its ability to defend such action, suit or proceeding on behalf of such Indemnified Party.

If the indemnification provided for in this Agreement is for any reason held unenforceable by an Indemnified Party, the Company agrees to contribute to the losses, claims, damages and liabilities for which such indemnification is held unenforceable (i) in such proportion as is appropriate to reflect the relative benefits to the Company, on the one hand, and FLF on the other hand, of the Placement as contemplated whether or not the Placement is consummated or, (ii) if (but only if) the allocation provided for in clause (i) is for any reason unenforceable, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) but any other relevant equitable considerations. The Company agrees that for the purposes of this paragraph the relative benefits to the Company and FLF of the Placement as contemplated shall be deemed to be in the same proportion that the total value received or contemplated to be received by the Company or its shareholders, as the case may be, as a result of or in connection with the Placement bear to the fees paid or to be paid to FLF under this Agreement. Notwithstanding the foregoing, the Company expressly agrees that FLF shall not be required to contribute any amount in excess of the amount by which fees paid FLF hereunder (excluding reimbursable expenses), exceeds the amount of any damages which FLF has otherwise been required to pay.

The Company agrees that without FLF's prior written consent, which shall not be unreasonably withheld, it will not settle, compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding in respect of which indemnification could be sought under the indemnification provisions of this Agreement (in which FLF or any other Indemnified Party is an actual or potential party to such claim, action or proceeding), unless such settlement, compromise or consent includes an unconditional release of each Indemnified Party from all liability arising out of such claim, action or proceeding.

In the event that an Indemnified Party is requested or required to appear as a witness in any action brought by or on behalf of or against the Company in which such Indemnified Party is not named as a defendant, the Company agrees to promptly reimburse FLF on a monthly basis for all expenses incurred by it in connection with such Indemnified Party's appearing and preparing to appear as such a witness, including, without limitation, the reasonable fees and disbursements of its legal counsel.

If multiple claims are brought with respect to at least one of which indemnification is permitted under applicable law and provided for under this Agreement, the Company agrees that any judgment or arbitrate award shall be conclusively deemed to be based on claims as to which indemnification is permitted and provided for, except to the extent the judgment or arbitrate award expressly states that it, or any portion thereof, is based solely on a claim as to which indemnification is not available.

EXHIBIT 6.18

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

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VACCINOGEN, INC.
AMENDMENT NO. 4 TO
NOTE AND WARRANT PURCHASE AGREEMENT

THIS AMENDMENT NO. 4 TO NOTE AND WARRANT PURCHASE AGREEMENT is dated as of the 31st day of May, 2013, by and between Vaccinogen, Inc., a Maryland corporation (the "**Company**"), and The Abell Foundation, Inc., a Maryland corporation (the "**Purchaser**").

RECITALS

Reference is made to that certain Note and Warrant Purchase Agreement dated October 26, 2011, by and between the Company and the Purchaser, as amended by that certain Amendment No. 1 to Note and Warrant Purchase Agreement dated February 16, 2012, by and between the Company and the Purchaser (the "**First Amendment**"), as further amended by that certain Amendment No. 2 to Note and Warrant Purchase Agreement dated January 16, 2013, by and between the Company and the Purchaser (the "**Second Amendment**"), and as further amended by that certain Amendment No. 3 to Note and Warrant Purchase Agreement dated April 18, 2013, by and between the Company and the Purchaser (the "**Third Amendment**," and such Note and Warrant Purchase Agreement, as amended by the First Amendment, the Second Amendment and the Third Amendment, the "**Existing Agreement**," and the Existing Agreement, as amended by this Amendment No. 4, the "**Agreement**"), pursuant to which the Purchaser agreed to purchase from the Company a promissory note (the "**Existing Note**") in the maximum principal amount of One Million Eight Hundred Thousand Dollars (\$1,800,000.00) and to purchase the "Warrant" as therein defined (the "**Existing Warrant**"). In order to amend the Existing Agreement, *inter alia*, to extend the maturity of the Existing Note, and to modify the terms of the Existing Warrant as hereinafter provided, the parties hereto have entered into this Amendment No. 4.

NOW, THEREFORE, in consideration of the premises and the mutual covenants set forth herein, and such other consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

1. All capitalized terms not otherwise defined herein which are defined in the Agreement shall have the same meanings assigned to them in the Agreement.
2. All references to (a) "this Agreement" in the Agreement shall mean the Existing Agreement as amended by this Amendment No. 4, (b) the "Note" in the Agreement and in the other Transaction Documents shall mean a promissory note in substantially the form attached hereto as Exhibit A (the "**Replacement Note**"), which Exhibit shall replace in its entirety Exhibit A to the Agreement, and (c) the "Warrant" in the Agreement shall mean a

warrant to purchase capital stock of the Company in substantially the form attached hereto as Exhibit B, which Exhibit shall replace in its entirety Exhibit B to the Agreement.

3. To induce the Purchaser to enter into this Amendment No. 4, the Company hereby:

(a) represents and warrants to the Purchaser that (i) the representations and warranties of the Company set forth in Section 3 of the Agreement, and the representations and warranties of the Company set forth in each of the other Transaction Documents, are true and correct in all material respects with the same effect as if made on the date hereof (except that (x) such materiality qualifier shall not be applicable to any representation or warranty that already are qualified or modified by materiality in the text thereof, and (y) any representation and warranty stated to relate solely to an earlier date shall be true and correct as of such earlier date), it being understood that all references to "this Agreement" and the "Transaction Documents" in Section 3 of the Agreement shall include (without limitation) this Amendment No. 4 and the Warrant, respectively, and (ii) after giving effect to the terms of this Amendment No. 4, the Company is in compliance with all the terms and conditions of the Agreement and the other Transaction Documents, and no Default or Event of Default has occurred and is continuing; and

(b) releases and forever discharges the Purchaser and the officers, employees and trustees thereof, of and from all manner of actions, causes and causes of action, suits, debts, sums of money, account reckonings, bonds, bills, specialties, coverages, judgments, executions, claims, and demands whatsoever, at law or in equity, and particularly, without limiting the generality of the foregoing, all claims relating to the transactions which are the subject of the Transaction Documents, which the Company and its successors and assigns ever had, now has, or may have in the future, for, upon or by reason of any matter, cause, or thing, whatsoever occurring prior to the date hereof and/or arising from facts of which the Company was aware, or reasonably should have been aware, as of the date hereof. Without limitation of the foregoing, the Company waives any and all defenses, offsets, and counterclaims to the Purchaser's enforcement of the Transaction Documents or any action by the Purchaser to foreclose any security interest.

4. This Amendment No. 4 shall become effective on the date upon which the following shall all have occurred:

(a) the Purchaser shall have received each of the following, in form and substance satisfactory to the Purchaser:

(i) a copy of this Amendment No. 4, duly executed and delivered by the Company; and

(ii) the Replacement Note, duly executed and delivered by the Company; and

(b) the Purchaser shall have executed and delivered to the Company this Amendment No. 4.

5. The Company and the Purchaser intend that neither this Amendment No. 4, nor the execution and delivery of this Amendment No. 4, the Replacement Note or any other document executed and delivered pursuant to or in connection with this Amendment No. 4, shall constitute or be construed to operate as a novation of the Agreement, the Existing Note, any of the indebtedness of the Company pursuant to the Existing Note, or any lien or security interest heretofore created pursuant to any of the Transaction Documents. The Company and the Purchaser intend that by the execution and delivery of this Amendment No. 4 and the Replacement Note certain of the terms of the note and warrant purchases by the Purchaser shall be modified, restated and replaced in their entireties, but the indebtedness evidenced by the Existing Note and such liens and security interests heretofore created shall not be extinguished or satisfied. Without limitation of the foregoing, the Company specifically acknowledges and agrees that (a) the "Note" as defined in the Security Agreement dated as of October 26, 2011, by and between the Company and the Purchaser (the "**Security Agreement**") means the Replacement Note, (b) the "Obligations" as defined in the Security Agreement (the "**Obligations**") include all indebtedness and liabilities of the Company under the Agreement, under the Replacement Note and under the other Transaction Documents, (c) the "Collateral" as defined in the Security Agreement (the "**Collateral**") secures, without limitation, the payment and performance all of the Obligations, (d) the Obligations represent debt issued in connection with an investment in the Company, (e) the Collateral includes the "Collateral" (the "**Organon Collateral**") as defined in that certain New Security Agreement (the "**Organon Security Agreement**") made as of October 31, 2007 by and between (i) Intracell Holdings Corporation (predecessor to the Company) and (ii) Organon BioSciences International B.V. and Organon Teknika Corporation (collectively, "Organon"); provided that the inclusion of such "Collateral" as defined in the Organon Security Agreement is included specifically subject to any liens or rights arising from the terms of the Organon Security Agreement, and (f) to the Company's knowledge there are no liens or security interests in the Collateral except for the security interest of the Purchaser therein and except for the security interest granted to Organon in the Organon Collateral pursuant to the Organon Security Agreement.

6. The Company agrees to pay all out-of-pocket expenses incurred by the Purchaser in connection with the preparation, negotiation, execution and delivery of this Amendment No. 4, the Replacement Note and all other documents executed or to be executed in connection herewith, including, without limitation, the expenses and reasonable fees of its counsel in an amount not to exceed \$1,500.

7. The Purchaser shall be permitted to set-off all amounts owed by it to the Company under the Investment Agreement against all amounts owed to it by the Company with respect to the Note.

8. Except as amended hereby, the Agreement shall remain unchanged, and the Agreement, as so amended, shall continue in full force and effect in accordance with its terms. The breach by the Company of any representation, warranty, covenant or agreement contained in this Amendment No. 4 shall represent an Event of Default.

9. This Amendment No. 4 may be executed in any number of counterparts and by the different parties hereto on separate counterparts, each of which, when so executed and delivered, shall be an original, but all such counterparts shall together constitute one and the same instrument.

10. The Recitals hereto and all of the terms of the Agreement are hereby incorporated into and made a part hereof as though fully set forth herein.

11. This Amendment No. 4 shall be governed by and construed under the laws of the State of Maryland, without regard to the conflicts of laws provisions of the State of Maryland or any other state. Any suit, action or proceeding instituted by either party hereto with respect to any of the obligations of other party hereto may be brought in any State or federal court located in the State of Maryland (in addition to such other courts in which jurisdiction and venue may be appropriate), and each party consents to the in personam jurisdiction of such courts.


[SIGNATURES CONTAINED ON THE FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 4 to Note and Warrant Purchase Agreement to be duly executed under seal by their duly authorized respective officers as of the day and year first above written.


ATTEST/WITNESS:

VACCINOGEN, INC.

Caroline Tussing

By:  (SEAL)
Michael G. Hanna, Jr., Ph.D.
Chairman and Chief Executive Officer

Andrew L. Tussing

By:  (SEAL)
Andrew L. Tussing
President and Chief Operating Officer

THE ABELL FOUNDATION, INC.

Robert C. Embry, Jr.


By:  (SEAL)
Robert C. Embry, Jr.
President

EXHIBIT A

[Amended and Restated Promissory Note]

6/10/13

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EXHIBIT B

[Revised Form of Warrant]

6/10/13

\\BA - 065993/000070 - 831462 v2

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EXHIBIT 8.1

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

6/10

ASSET TRANSFER AGREEMENT

This Asset Transfer Agreement is made as of the 24th day of June, 2010 (the "**Effective Date**") between Intracel Holdings Corporation, a Delaware corporation ("**Intracel**," as further defined in Section 1(b) below), and Vaccinogen, Inc., a Delaware corporation ("**Vaccinogen**").

Recitals

A. Intracel and Vaccinogen entered into a License Agreement effective as of October 10, 2007 (the "**License Agreement**") pursuant to which Vaccinogen obtained from Intracel an exclusive license under certain intellectual property and other rights relating to the OncoVAX Program (as defined in the License Agreement).

B. Under the License Agreement, Intracel agreed to transfer to Vaccinogen certain assets related to the OncoVAX Program, contingent upon Vaccinogen's achievement of a certain financing milestone.

C. Notwithstanding Vaccinogen's failure to meet such financing milestone, Intracel desires to transfer, convey, assign, grant and deliver to Vaccinogen and Vaccinogen desires to acquire and receive all of Intracel's right, title and interest in the technology owned by Intracel that relates to the OncoVAX Program, subject to the terms of this Agreement, that certain Amendment to License Agreement of even date herewith by and between Intracel and Vaccinogen (the "**Amendment**"), and certain other agreements and instruments executed in connection with this transaction.

Now, therefore, Intracel and Vaccinogen, for good and valuable consideration the receipt of which is hereby acknowledged, agree as follows:

1. **Definitions.**

(a) All capitalized terms used in this agreement, but not defined in this agreement, have the meaning given to such terms in the License Agreement.

(b) "Intracel" shall include Intracel's Affiliates, and Intracel's "knowledge" shall include each of the members of its board of directors and management, including its Affiliates.

(c) "Regulatory Rights" means all rights in any jurisdiction to develop or commercialize any product, including rights to conduct any in vitro or in vivo testing, rights to import or export, manufacture, market, advertise, distribute, use or sell a product in any jurisdiction, including, without limitation, rights under any authorization, license, approval or the like to market or test any product, including any supplements or amendments thereto, any marketing or data or other exclusivity rights, any supplementary protection rights, as well as any other regulatory right, in any jurisdiction in which any of the above rights have been or could be granted by an entity authorized to confer same, including, without limitation, any national, supra-national, regional, state or local regulatory agency, department, bureau, commission,

council or other governmental entity, in all cases to the extent such rights are owned by Intracel and relate to a product that is part of the OncoVax Program.

(d) "Subsidiary" shall mean any corporation or other legal entity of which another corporation or other legal entity, either directly or indirectly, (a) owns, directly or indirectly, more than 50% of the equity interests the holders of which are generally entitled to vote for election of the board of directors or other governing body of such legal entity, or (b) in the case of partnerships, serves as the general partner, or (c) in the case of a limited liability company, serves as the managing members or (d) otherwise the ability to elect a majority of the directors, trustees or managing members thereof.

2. **Transfer.** Intracel hereby transfers, conveys, assigns, grants and delivers to Vaccinogen, and Vaccinogen hereby acquires and receives, all of Intracel's and Intracel's Affiliate's right, title and interest to the following:

- (a) the Licensed Patents that are listed in the Patent Assignment included as Exhibit A;
- (b) the trademarks that are listed in the Trademark Assignment included as Exhibit B; and
- (c) the assets that relate to the OncoVAX Program that are listed in the Bill of Sale included as Exhibit C;
- (d) the Organon Agreements (as defined in Section 6);
- (e) the Regulatory Rights; and
- (f) any other Assigned Technology, including any Licensed Know-How that is owned by Intracel and that relates solely to the OncoVax Program.

The assets referred to in subsections (a), (b), (c), (d), (e) and (f) are collectively, the "**Transferred Assets**". Notwithstanding anything to the contrary contained in this Agreement, the foregoing obligation to transfer, convey, assign, grant and deliver shall not apply to (and the Transferred Assets shall not include) the Excluded Assets.

3. **Assumption of Liabilities.** Vaccinogen hereby assumes and agrees to perform and discharge all obligations and liabilities of Intracel or Intracel's Affiliates to Organon pursuant to the Organon Agreements and assumes no other obligations or liabilities of Intracel or Intracel's Affiliates as a result of this Agreement, other than the obligations arising under the agreements assumed pursuant to Exhibit C hereto and listed on Schedule X thereto (the "Schedule X Agreements"). Vaccinogen acknowledges and agrees that the royalties owed to Intracel under the License Agreement (as amended by the Amendment), are not offset by the royalties Vaccinogen owes to Organon under the Organon Agreements.

4. Further Assurances. The parties to this agreement each agree to obtain, execute, acknowledge and deliver such documents (including, without limitation, any documents necessary or helpful to transfer to Vaccinogen, or perfect Vaccinogen's interests in, in each case in a timely fashion, any of the Regulatory Rights that are included in the Transferred Assets) and other instruments, and take such other actions, including physical attendance at meetings when requested, as may be required to evidence and effectuate the transfer, assignment, conveyance, grant and delivery to Vaccinogen of Intracel's rights, title and interests in and to the Transferred Assets, and otherwise to the extent necessary to effect the intentions of Vaccinogen and Intracel as expressed herein and in the License Agreement. In the case of the Regulatory Rights included in the Transferred Assets, such documents may include, without limitation, applications or any other materials prepared to perfect such rights or would aid in their perfection in the future, such as applications for any kind of authorization, designation, license or approval, whether wholly or partially complete, including any supplements and amendments thereto, correspondence with regulatory authorities, all internal correspondence relating to such Regulatory Rights and any letters or filings with regulatory entities necessary to transfer such Regulatory Rights. Any assistance provided by Intracel under this Section 6 shall be at Vaccinogen's sole expense, but with payment to Intracel or its personnel limited to reimbursement of reasonable out-of-pocket expenses.

5. Certain Understandings with Respect to License Agreement. This agreement is intended to implement the asset transfer that is described in Section 3.5 of the License Agreement, and this agreement shall control in the event of any inconsistency between this agreement and Section 3.5 of the License Agreement. In addition, Intracel and Vaccinogen acknowledge and agree that, notwithstanding Vaccinogen's failure to receive aggregate cash investments of at least \$15 million in connection with bona fide equity financings by the date required by the License Agreement (the "Financing Milestone"), the License Agreement remains in full force and effect, and is hereby deemed to have been in force continuously, including during the period between February 8, 2010, and the Effective Date. Intracel hereby agrees to waive any right it may have to terminate the License Agreement as result of Vaccinogen's failure to meet the Financing Milestone. Vaccinogen acknowledges that Section 4.4 of the License Agreement, as amended by the Amendment, remains in full force and effect following the date hereof.

6. Representations and Acknowledgments.

(a) Intracel represents and warrants to Vaccinogen that, to Intracel's knowledge, the Transferred Assets are free of any and all security interests, liens, claims, encumbrances and other restrictions of any kind that would prevent Intracel from transferring, conveying, assigning, granting and delivering the Transferred Assets to Vaccinogen.

(b) Intracel represents and warrants to Vaccinogen that, to Intracel's knowledge, Intracel is not in breach or default under the terms of the Letter Agreement between Intracel and Organon Biosciences International B.V. and Organon Teknika Corporation (collectively, "Organon"), dated October 31, 2007, the New Security Agreement between Intracel and Organon, dated October 31, 2007, or the Amended and Restated Product Supply Agreement between Intracel and Organon Teknika Corporation, dated October 31, 2007 (the

“Organon Agreements”) and that Intracel has not received any notice of default under such Organon Agreements (a “default” being defined for purposes hereof as an actual default or event of default or the existence of any fact or circumstance which would, upon receipt of notice or passage of time, constitute a default or right of termination).

(c) Intracel agrees and acknowledges that immediately following the execution of this agreement, Intracel will have no rights (other than rights provided for in the License Agreement, as amended hereby) in the Transferred Assets.

(d) Intracel hereby represents and warrants that, to its knowledge, the Transferred Assets are all of the assets owned by Intracel used, or held for use, by Vaccinogen in its business as operated on the date hereof relating to the development and commercialization of OncoVAX.

(e) Intracel represents that it is a corporation duly organized, validly existing, and in good standing under the laws of Delaware with full corporate power and authority to perform all of its obligations under this Agreement and the other agreements contemplated hereby. Intracel represents and warrants that it has no Subsidiaries.

(f) Intracel represents and warrants that (i) the execution and delivery of this Agreement and the other documents contemplated hereby and the consummation of the transactions contemplated hereby and thereby have been duly authorized and approved by the board of directors of Intracel; and (ii) this Agreement and the other agreements contemplated hereby constitute valid and binding agreements of Intracel, enforceable in accordance with their respective terms, except as may be limited by bankruptcy, insolvency, reorganization, moratorium or other laws affecting creditor's rights generally, and by general equitable principles; and (iii) the execution, delivery and performance of this Agreement and the agreements contemplated hereby by Intracel does not conflict with any agreement, instrument or understanding, written or oral, to which it is a party or by which it may be bound.

(g) Intracel represents and warrants that the person executing this Agreement on Intracel's behalf has been duly authorized to do so by all requisite corporate action.

(h) Intracel represents and warrants that, to its knowledge, it has not caused any liabilities or obligations to be incurred pursuant to the Schedule X Agreements since October 10, 2007.

(i) Vaccinogen represents and warrants that, to its knowledge, as of the Effective Date, Intracel is not in breach of any of its representations and warranties made in subsections (a), (b) and (d) of this Section 6. For purposes of this subsection, Vaccinogen's “knowledge” shall only include the knowledge of Michael G. Hanna, Jr.

7. Indemnification.

(a) Intracel agrees to indemnify, hold harmless, and defend Vaccinogen, its Affiliates and their respective directors, officers, employees, and agents from and against any

and all third party suits, claims, actions, demands, liabilities, expenses and/or losses, including reasonable legal expenses and attorneys' fees (collectively, "Claims"), to the extent arising, directly or indirectly out of a breach by Intracel of any representation, warranty, or covenant of this agreement or the License Agreement. Vaccinogen, in its sole discretion, may offset any damages it suffers pursuant to any Claim against any royalty payment otherwise due Intracel pursuant to Section 4.4 of the License Agreement, as amended by the Letter Agreement.

(b) Vaccinogen agrees to indemnify, hold harmless, and defend Intracel, its Affiliates and their respective directors, officers, employees, and agents from and against any and all Claims, to the extent arising, directly or indirectly out of (i) a breach by Vaccinogen of any representation, warranty, or covenant of this agreement; (ii) Vaccinogen's ownership, use, or operation of the Transferred Assets at any time following the Effective Date (except to the extent Intracel has any indemnification liability with respect thereto pursuant to Section 7(a)); or (iii) any of the liabilities assumed by Vaccinogen pursuant to Section 3.

8. General Provisions.

(a) **Entirety of Agreement.** This agreement and the License Agreement, as amended by this agreement, set forth the entire agreement and understanding of the Parties relating to the subject matter contained herein and merges all prior discussions and agreements between them, and no Party shall be bound by any representation or warranty other than as expressly stated in this agreement or a written amendment to this agreement signed by authorized representatives of each of the Parties.

(b) **Governing Law.** This agreement shall be governed by and construed in accordance with the laws of the State of New York without regard to conflicts of law principals that would provide for the law of a jurisdiction other than New York.


(c) **Counterparts.** This agreement may be executed in one or more counterparts (including by facsimile or scanned electronic mail attachment), each of which shall be deemed an original and all of which shall constitute the same document.

(d) **Limitation of Liability.** NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, NO PARTY TO THIS AGREEMENT SHALL BE LIABLE TO OR OTHERWISE RESPONSIBLE TO THE OTHER PARTY HERETO OR ANY AFFILIATE OF ANY OTHER PARTY HERETO FOR CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES THAT ARISE OUT OF OR RELATE TO THIS AGREEMENT OR THE PERFORMANCE OR BREACH THEREOF.

[Remainder of page left blank intentionally]

The parties have duly executed this agreement as of the date first written above.

INTRACEL HOLDINGS CORPORATION

By: 
Name: Daniel Kane
Title: Chairman of the Board of Directors

VACCINOGEN, INC.

By: _____
Name: Michael G. Hanna, Jr.
Title: President and Chief Executive Officer

The parties have duly executed this agreement as of the date first written above.

**INTRACEL HOLDINGS
CORPORATION**

By: _____
Name: Daniel Kane
Title: Chairman of the Board of Directors

VACCINOGEN, INC.


By:  _____
Name: Michael G. Hanna, Jr.
Title: President and Chief Executive
Officer

EXHIBIT A

ASSIGNMENT

THIS ASSIGNMENT is made by Intracel Holdings Corporation, a Delaware corporation (hereinafter, individually and collectively, "Assignor");

WHEREAS, Assignor is, to its knowledge, the sole and exclusive owner of the patent applications and/or Letters Patents listed in *Schedule A* (attached hereto); and

WHEREAS, Vaccinogen Inc., a Delaware corporation having a place of business at Frederick, MD 21703 (hereinafter, "Assignee"), is desirous of acquiring the right, title and interest in, to and under said patent applications and Letters Patent and the inventions covered thereby;

NOW, THEREFORE, in exchange for good and sufficient consideration, the receipt of which is hereby acknowledged, Assignor has sold, assigned, transferred and set over, and by these presents does sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, its entire right, title and interest in and to the inventions, Letters Patent, and applications for Letters Patent listed in *Schedule A*, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said applications, and any and all Letters Patent in the United States and all foreign countries which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and assignment not been made.

AND for the same consideration, Assignor hereby represents and warrants to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignor is, to its knowledge, the sole and lawful owner of the entire right, title and interest in and to the inventions, Letters Patent and applications for Letters Patent listed in *Schedule A*.

AND for the same consideration, Assignor hereby covenants and agrees to and with Assignee, its successors, legal representatives and assigns, that Assignor will execute any additional documents that may be necessary for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions as listed in *Schedule A*. Assignor also agrees to facilitate the execution of any additional documents necessary to complete the chain of title to Assignee in any of the aforementioned Letters Patents.

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AND Assignor hereby requests the Commissioner of Patent and Trademarks to issue to Assignee any Letters Patent of the United States that arise from the applications for Letters Patent listed in *Schedule A*, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignor hereby grants the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document:

VENABLE LLP

All practitioners at Customer Number 26694

INTRACEL HOLDINGS CORPORATION

Date: _____

By: _____

Name: Daniel Kane

Title: Chairman of the Board of Directors

WITNESS:

Date: _____

By: _____

Name: _____

SCHEDULE A

Country	Title	Application No.	Filing Date	Patent No.	Grant Date
US	ACTIVE SPECIFIC IMMUNOTHERAPY	07/122,257	11/1/1993	5,484,596	1/16/1996
WO	ANTIGEN RECOGNIZED BY MCA-16-88	PCT/US88/02245	7/1/1988		
US	ANTIGEN RECOGNIZED BY MCA-16-88	08/272,402	7/7/1994		
US	ANTIGEN RECOGNIZED BY MCA-16-88	07/929,842	8/13/1992	5,338,832	9/16/1994
JP	ANTIGEN RECOGNIZED BY MCA-16-88	1988 505983	7/1/1988	3,081,206	5/23/1989
US	CHELATING AGENTS FOR ATTACHING METAL IONS TO PROTEINS	08/044,875	4/8/1993	5,292,868	3/8/1994
IT	CHELATING AGENTS FOR ATTACHING METAL IONS TO PROTEINS	9090914273	5/23/1990	429664	5/23/1990
DE	CHELATING AGENTS FOR ATTACHING METAL IONS TO PROTEINS	9069022542	5/23/1990	69022542	6/23/1991
US	CTAA 28A32, THE ANTIGEN RECOGNIZED BY MCA 28A32	08/041,529	4/1/1993	5,521,285	5/28/1996
US	IN VIVO BINDING PAIR PRETARGETING	08/461,167	6/5/1995	5,965,106	10/12/1999
PT	PROCESS FOR PREPARING TUMOR SPECIFIC MONOCLONAL ANTIBODIES	19850079894	1/31/1984	79894	1/31/1984
US	SITE SPECIFIC IN VIVO ACTIVATION OF THERAPEUTIC DRUGS	08/134,520	10/8/1993	5,433,955	7/18/1995
WO	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	PCT/US03/05154	2/21/2003		
US	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	10/370,081	2/21/2003	7,628,996	12/8/2009
JP	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	20030570779	2/21/2003		
EP	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	03723633.8	2/21/2003	1567175	1/21/2009

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Country	Title	Application No.	Filing Date	Patent No.	Grant Date
CN	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	03809115.1	2/21/2003		
CA	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	2,476,999	2/21/2003		
SG	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	200404941-7	2/21/2003	106347	5/30/2007
AU	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	2003230553	2/21/2003		
US	TUMOR ASSOCIATED EPI TOPE	08/960,128	8/19/1997	5,951,985	9/14/1999
JP	TUMOR ASSOCIATED EPI TOPE	19970501429	6/6/1996		
CA	TUMOR ASSOCIATED EPI TOPE	2,222,551	6/6/1996		
US	TUMOR ASSOCIATED MONOCLONAL ANTIBODIES	08/449,613	5/24/1995	5,474,755	12/12/1995
US	TUMOR ASSOCIATED MONOCLONAL ANTIBODYS1AV/78	08/094,589	7/20/1993	5,348,880	9/20/1994
US	TUMOR SPECIFIC MONOCLONAL	302,155	1/25/1989	5,106,738	4/21/1992
US	TUMOR SPECIFIC MONOCLONAL	697,078	1/31/1985	4,828,951	5/9/1989
US	TUMOR SPECIFIC MONOCLONAL ANTIBODIES	645,069	1/22/1991	5,180,814	1/19/1993
IT	TUMOR SPECIFIC MONOCLONAL ANTIBODIES	8585300610	1/30/1985	151030	1/30/1985
IL	TUMOR SPECIFIC MONOCLONAL ANTIBODIES	92103758	11/16/1992	103758	11/16/1992
GB	TUMOR SPECIFIC MONOCLONAL ANTIBODIES	EP0151030	1/30/1985	8585300610	1/30/1985
DE	TUMOR SPECIFIC MONOCLONAL ANTIBODIES	EP0151030	1/30/1985	358093	1/30/1985
CA	TUMOR SPECIFIC MONOCLONAL ANTIBODIES	473130	1/30/1985	1,340,781	10/12/1999

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Country	Title	Application No.	Filing Date	Patent No.	Grant Date
NZ	TUMOUR-SPECIFIC MONOCLONAL ANTIBODIES PRODUCTION THEREOF AND USE	85210867	1/17/1985	210867	1/17/1985

EXHIBIT B

ASSIGNMENT

WHEREAS, Intracel Holdings Corporation, a Delaware corporation having a place of business at 550 Highland Street, Frederick MD 21701, and including, without limitation, its affiliates Intracel Oncovax U.S. LLC (hereinafter, individually and collectively, "Assignor"), is the owner of the following trademarks:

1. OncoVAX – United States Registration Number 2,263,900
2. HUMASPECT
3. COLOSPECT

and of the common-law rights in the trademarks, and the goodwill of the business symbolized by the trademarks;

AND WHEREAS, Vaccinogen Inc., a Delaware corporation having its principal place of business at 5300 Westview Drive Frederick, MD 21703 (hereafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to the trademarks, the goodwill of the business symbolized by the trademarks, and the right to sue for past infringements;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, Assignor does hereby assign, sell, transfer and quitclaim unto Assignee its entire right, title and interest in and to the trademarks, and related trademarks, and counterpart trademarks in foreign countries, together with the goodwill of the business symbolized by said trademarks, the right of Assignor to conduct business under said trademarks, and the right to sue for past infringements of said marks.

Assignor hereby agrees to execute any additional documents that may be necessary to transfer the aforementioned trademark rights to Assignee. Assignor also agrees to facilitate the execution of any additional documents that may be necessary to complete the chain of title to Assignee in any of the aforementioned trademarks.

Done, this _____ day of _____, 2010.

INTRACEL HOLDINGS CORPORATION

By: _____
Name: Daniel Kane
Title: Chairman of the Board of Directors

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EXHIBIT C

BILL OF SALE

KNOW ALL MEN BY THESE PRESENTS, that Intracel Holdings Corporation, a Delaware corporation ("Seller"), for and in consideration of various contractual obligations, the receipt and sufficiency of which are hereby acknowledged, has bargained, sold, transferred, assigned, set over and conveyed, and by these presents does hereby bargain, sell, transfer, assign, set over and convey, unto Vaccinogen Inc., a Delaware corporation ("Buyer"), its successors and assigns forever, all of Seller's right, title and interest in and to, assets associated with and necessary to develop, commercialize and deliver OncoVAX cancer vaccine, including specifically but without limitation, trade secrets, know how, copyright, trademarks, goodwill, contracts, regulatory approvals, and other assets and associated intellectual property rights, including those described in Schedule X attached hereto, including revisions, updates, renewals, revivals, improvements, derivative works, and related documentation, materials, and information (collectively, the "Acquired Assets").

TO HAVE AND TO HOLD said Acquired Assets unto Buyer, its successors and assigns, to their own use and behalf forever.

Seller represents and warrants to Buyer that, except as to ownership interests already held by Buyer, Seller is, to its knowledge, the sole and absolute owner of the Acquired Assets; such Acquired Assets are, to its knowledge, free of any and all security interests, liens, claims, encumbrances and other restrictions of any kind that would prevent Seller from transferring, conveying, assigning, granting and delivering the Acquired Assets to Buyer; and Seller has full right, power and authority to execute this Bill of Sale.

This Bill of Sale shall be governed by and interpreted under and in accordance with the laws of the State of New York (excluding the choice of law rules thereof).

IN WITNESS WHEREOF, Seller has caused this Bill of Sale to be executed by its duly authorized representative on this _____ day of _____, 2010.

WITNESS/ATTEST:

SELLER:

INTRACEL HOLDINGS CORPORATION

By: _____

Name: Daniel Kane

Title: Chairman of the Board of Directors

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SCHEDULE X
Acquired Assets

Section 1

Intracel Resources LLC

Employees/Consultants Contracts and/or CVs

A. Employees

- a. Michael G. Hanna, Jr., CSO
- b. Martin Page, Sr. VP Regulatory Affairs
- c. Myron J. Waxdal, Director, Manufacturing QC
- d. David M. Johns, Jr., OncoVAX Manager, Technical Services
- e. Leslie Ivy, Manager, Human Resources
- f. Wilda Hankins, Office Manager

B. Consultants

- a. LaTonjia Wallace, Regulatory Affairs
- b. W. Randy Ruff, Document Control Officer

Patents Status Report

Human Monoclonal Antibodies

- 1. 16.88
- 2. 28A32
- 3. 81AV78
- 4. 88BV59
- 5. LiLo

Organon/Akzo BCG Supply Agreement (and all revisions thereof)

Investigator's Brochure, 12 December 2005 (and all revisions thereof)

Intracel Study Report for Study 8701, December 6, 2004

Intracel Study Report for Study 5283, December 2, 2004

Overall Clinical Safety Summary, by McPhilips

Protocol ASI-2005-01. A Randomized Multicenter Study of Active Specific Immunotherapy with OncoVAX® in Patients with Stage II Colon Cancer, 5 April 2006 (and all revisions thereof)

Request to FDA for Special Protocol Assessment, BB IND 4561 Serial No. 088, 19 April 2006, including protocol summary and questions

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FDA letter dated 31 May 2006 granting Special Protocol Assessment

Request to FDA for Fast Track designation, BB IND 4561 Serial Number 089, 12 July 2006

FDA letter dated 11 September 2006 granting Fast Track designation

International Approval

- A. NL
- B. UK
 - a. CoREC/MREC
 - b. MHRA

IRB Approvals (to be resubmitted)

- A. St. Joseph Candler
- B. Moffit
- C. Brany
- D. Cleveland Clinic

HumaRAD

Clinical Reports

Drug Master Files

16.88
88BV59

HumaSPECT Registration – EMEA Approval for 88BV59

Equipment List (including freezers)

Inventory of Freezers (except bone marrow samples)

Monograph: HumaRAD

Formulation Lab Equipment List (USA) (and all revisions thereof)

Ramp up

PI Master List

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Section 2

PerImmune BV

Facilities

- A. Emmen Lease
- B. Environment, Health and Safety Letter from Local Dutch Government
Confirming No Violations (in Dutch)

Emmen Salaries

Emmen Employees Contracts and CVs

- A. Iedo Beeksma, Director
- B. Anneke Nederbragt
- C. Simon de Rooij
- D. Antonie Vonk

Benefits

Manufacturing Authorization from Dutch Government

Equipment and Improvements

Index of All Manufacturing and QC Documents

Other Liabilities

- A. Grant
- B. ING Account

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Section 3

Intracel BV

Consolidated Annual Report for:

- A. Perimmune BV
- B. Intracel BV

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Section 4

Vaccinogen GmbH (formerly Intracel GmbH)

Dinand der Lind Contract and CV

Authorization for Import/Export as a Transplant (letters dated 23 September 2004, 4 April 2005, and 3 November 2005)

OncoVAX® - Regulatory Status letter dated, October 14, 2003

Application for Funding of OnxoVAX® as an autologous tumor cell vaccine for the treatment of Stage II colon cancer following surgical resection of the tumor, draft 31 October 2006

ProVaccine Agreement

ProVaccine OncoVAX® Marketing Plan — Switzerland (and all revisions thereof)

Commercial Distribution Contract with Baermed. Prof. Dr. Med. H.U. Baer

Patient Brochure (OncoVAX® Post-Surgical Treatment for Colon Cancer) in English, Arabic, French, German, Italian, and Russian

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EXHIBIT 8.2

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

INTRACEL

LICENSE AGREEMENT

THIS LICENSE AGREEMENT (the "Agreement") is entered into and made effective as of October 10, 2007 ("Effective Date") by and between INTRACEL ACQUISITION HOLDING COMPANY LLC, a Delaware limited liability company having a place of business at 550 Highland Street, Frederick, MD 20701 ("Intracel") and VACCINOGEN, INC., a [Delaware] corporation having a place of business at Frederick, MD 21703 ("Vaccinogen"). Vaccinogen and Intracel are sometimes referred to herein individually as a "Party" and collectively as the "Parties."

RECITALS

WHEREAS, Vaccinogen desires to obtain from Intracel an exclusive license under certain patents, know-how and other intellectual property relating to Intracel's OncoVAX® Active Specific Immunotherapy technology platform (the "OncoVax Program") and, at a later date, to acquire all right, title, and interest in and to such intellectual property subject to and only upon the satisfaction of certain conditions; and

WHEREAS, Intracel is willing to grant such rights and licenses under the terms and conditions set forth in this Agreement.

NOW, THEREFORE, the Parties agree as follows:

ARTICLE 1

DEFINITIONS

As used herein, the following terms shall have the following meanings:

1.1 "Affiliate" means, as to a Party, any entity that controls, is controlled by or is under common control with such Party. For purposes of this definition, the term "controls" (with correlative meanings for the terms "controlled by" and "under common control with") means: (a) that the applicable entity owns directly or indirectly more than fifty percent (50%) of the voting securities or other ownership interest of the Party; or (b) that the entity otherwise possesses, directly or indirectly, the power to direct and control the management of the Party, whether through the ownership of voting securities, by contract, or otherwise.

1.2 "Asset Transfer Closing" has the meaning set forth in Section 3.5(e).

1.3 "Asset Transfer Closing Date" has the meaning set forth in Section 3.5(e).

1.4 "Asset Transfer Milestone" has the meaning set forth in Section 3.5.

1.5 "Assigned Technology" has the meaning set forth in Section 3.5(a).

1.6 "Colon Cancer Product" means the OncoVax Program vaccine for treatment of Stage II colon cancer that, as of the Effective Date, is being clinically developed in the

United States and other countries by Intracel and has received regulatory approval in the Netherlands and Switzerland, as described in more detail in Exhibit A, along with any improvements or modifications thereto that comprise immunotherapy products for the treatment of Stage II colon cancer in which autologous tumor cells are combined with TICE® BCG.

1.7 “Confidential Information” has the meaning set forth in Section 6.1.

1.8 “Control” means, with respect to any Information, patent, patent application, or other intellectual property right, that the applicable Party owns or has a license to such Information, patent, patent application, or intellectual property right and has the ability to grant to the other Party access to and a license (or sublicense, as applicable) under same without violating the terms of any agreement with a Third Party.

1.9 “Equity Financing” means a bona fide equity investment in Vaccinogen from a single investor or group of investors.

1.10 “Excluded Assets” means any and all of the following and any other assets or properties that are specifically associated therewith: (a) the Xoma material transfer agreement dated as of January 29, 2007 (b) the Exclusive License Agreement between Intracel and Oxigene, Inc., dated as of March 30, 2007; (c) the KLH and CVD reagent business and associated intellectual property; and (d) materials, know-how, research data, patents and patent applications covering HumaCD4, HumaRESP, AntiCD38, HumaSTAPH and HumaENT, or any human antibody that has been isolated by or on behalf of Intracel from phage display libraries.

1.11 “Information” means information and data of any type and in any tangible or intangible form, including without limitation inventions, practices, methods, techniques, specifications, operating procedures, protocols, formulations, software, formulae, knowledge, know-how (including without limitation any manufacturing, regulatory, or clinical know-how), skill, experience, test data, analytical and quality control data, stability data, results of studies and patent and other legal information or descriptions.

1.12 “Licensed Know-How” means all Information that is Controlled by Intracel as of the Effective Date that is associated with, or necessary for, the development or commercialization of the Technology, but excluding any Information that comprises or is specifically associated with the Excluded Assets.

1.13 “Licensed Patents” means all patents and patent applications that are Controlled by Intracel as of the Effective Date and claim the Technology or inventions necessary for the development or commercialization of the Technology, as set forth on Exhibit B, but excluding any patents or patents applications that claim or are specifically associated with the Excluded Assets.

1.14 “Licensed Products” means any product (a) the creation, development, manufacture, use, importation, sale or offer for sale of which is covered or claimed by a Licensed Patent or (b) that incorporates Licensed Know-How.

1.15 “Net Sales” means, with respect to a given period of time, the gross amount invoiced by Vaccinogen, its Affiliates, or (sub)licensees to unrelated Third Party purchasers for the sale or distribution of a particular product or service, less the following deductions and offsets, actually incurred, allowed, accrued, specifically allocated and/or taken in connection with such sale or distribution, to the extent that such deductions or offsets are not recovered by or reimbursed to the selling party or its affiliates:

- (a) credits for trade, cash and quantity discounts as are customary in the trade;
- (b) amounts repaid or credited by reason of rejections, recalls, destruction or returns, or because of rebates or chargebacks, in each case not in excess of the selling price of the applicable product or service;
- (c) sales taxes and other governmental charges (including value added tax, but solely to the extent not otherwise creditable or reimbursed) actually paid in connection with the sale (but excluding what is commonly known as income taxes);
- (d) insurance incident to transportation, and transportation and shipping costs (not to exceed, in the aggregate, 2.5% of the gross amount invoiced); and
- (e) sales commissions (not to exceed, in the aggregate, 5% of the gross amount invoiced).

Net Sales shall include the fair market value of all consideration received by the selling party and its affiliates in respect of any sale of the applicable product or service, whether such consideration is in cash, payment in kind, exchange for value or another form.

For clarification, sale of a product or service by a selling party to its affiliate or licensee, or by an affiliate of a selling party to such party, for resale by such entity to an unaffiliated Third Party shall not be deemed a sale for purposes of “Net Sales” hereunder, but the sale of such product or service by such entity to an unaffiliated Third Party shall be deemed to be a sale for purposes of calculating Net Sales hereunder.

1.16 “Organon” means Organon Teknika Corporation.

1.17 “Organon Letter Agreement” means that certain Letter Agreement between Intracel and Organon, dated October 30, 2007.

1.18 “Organon Security Agreement” means that certain New Security Agreement among Intracel, Organon Biosciences NV, and Organon, dated October 30, 2007.

1.19 **“Organon Supply Agreement”** means that certain Amended and Restated Supply Agreement by and between Organon and Intracel Resources LLC, dated as of October __ 2007.

1.20 **“Senior Executive”** means the Chief Executive Officer of a Party or duly appointed representative thereof.

1.21 **“Stock”** has the meaning set forth in Section 4.1.

1.22 **“Technology”** means, to the extent existing on the Effective Date, all assets or property Controlled by Intracel relating to its OncoVAX Program, as set forth in Exhibit C. For clarity, the Technology shall exclude the Excluded Assets.

1.23 **“Third Party”** means any entity other than (a) Intracel, (b) Vaccinogen or (c) an Affiliate of either Party.

1.24 **“TICE BCG”** means the preparation of Bacillus Calmette-Guerin sold by Organon under the tradename TICE® BCG.

ARTICLE 2

LICENSES

2.1 **License to Vaccinogen.** Subject to the terms and conditions of this Agreement and effective solely upon Vaccinogen’s full satisfaction of the obligations set forth in Sections 4.2(a), 4.2(b), and Section 4.3, Intracel shall grant to Vaccinogen the worldwide, royalty-bearing, exclusive license, under the Licensed Patents and the Licensed Know-How, to use, sell, offer for sale, import, make, and have made Licensed Products.

2.2 **Sublicensing.** Vaccinogen shall have no right to grant sublicenses, whether to its Affiliates or to Third Parties, under any or all of the rights licensed to Vaccinogen in Section 2.1, except with Intracel’s prior written consent. In the event that Intracel grants such consent, each such sublicense shall be consistent with the terms of this Agreement. Vaccinogen shall provide a true and complete copy of any sublicense agreement to Intracel no later than thirty (30) days after execution thereof.

2.3 **License Limitation.** Notwithstanding anything to the contrary in this Agreement, all of the licenses granted to Vaccinogen herein expressly exclude any rights with respect to the Excluded Assets, and the exclusive license granted to Vaccinogen in Section 2.1 shall in no event restrict Intracel’s right to use, practice, research, develop, or commercialize the Excluded Assets.

2.4 **No Other Licenses.** Neither Party grants to the other Party any rights or licenses in or to any intellectual property, whether by implication, estoppel, or otherwise, except to the extent expressly provided for under this Agreement.

2.5 Organon Supply Agreement. Effective upon the license grant under Section 2.1 becoming effective, Intracel grants to Vaccinogen the right to exercise all rights and perform all obligations of Intracel under the Organon Supply Agreement, and Vaccinogen agrees to perform and abide by all Intracel's obligations under such agreement, as if Vaccinogen were Intracel. For clarity, any failure by Vaccinogen to abide by the terms of the Organon Supply Agreement that, if Vaccinogen were Intracel, would be a material breach of such agreement shall be deemed to be a material breach of this Agreement by Vaccinogen.

2.6 Other Organon Agreements. Pursuant to the Organon Security Agreement and the Organon Letter Agreement, Organon holds a security interest in certain of the Licensed Know-How and Licensed Patents, and Intracel has certain payment and other obligations to Organon with respect to the Technology. All rights granted and assets transferred to Vaccinogen under this Agreement are subject to all applicable terms and conditions of the Organon Security Agreement and the Organon Letter Agreement, and as of the Effective Date, Vaccinogen agrees to perform and abide by all Intracel's obligations under the Organon Security Agreement and the Organon Letter Agreement, as if Vaccinogen were Intracel. For clarity, any failure by Vaccinogen to abide by the terms of the Organon Letter Agreement or Organon Security Agreement that, if Vaccinogen were Intracel, would be a material breach of such agreement shall be deemed to be a material breach of this Agreement by Vaccinogen.

ARTICLE 3

OTHER OBLIGATIONS OF THE PARTIES

3.1 Development and Commercialization of Products. Upon the license grant under Section 2.1 becoming effective, Vaccinogen shall have sole control over, and responsibility for, the research, development (including but not limited to, pre-clinical and clinical activities and the preparation and submission of all required regulatory filings), and commercialization of any Licensed Products, and shall bear all expenses related thereto. Except as expressly set forth in this Agreement or the Letter Agreement, Intracel shall have no obligations and bear no expense related to the research, development or commercialization of any Licensed Product by or on behalf of Vaccinogen, its Affiliates, or its (sub)licensees.

3.2 Development Information and Reporting. Vaccinogen shall provide to Intracel, every six (6) months during the term of this Agreement, a written report describing in reasonable detail the development and commercialization efforts undertaken by or on behalf of Vaccinogen, its Affiliates, or its (sub)licensees with respect to Licensed Products during the prior six (6) months and the anticipated development and commercialization efforts with respect to Licensed Products for the upcoming twelve (12) months. Intracel may request additional information related to such development and commercialization activities after receipt of such report, and, subject to the required consent of any applicable Third Party, Vaccinogen shall provide such requested information. All information disclosed by Vaccinogen under this Section 3.2 shall be treated as the Confidential Information of Vaccinogen under Article 6.

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3.3 Diligence Obligations. Vaccinogen shall use commercially reasonable efforts to develop, manufacture, and commercialize the Colon Cancer Product. As used herein, “commercially reasonable efforts” means those efforts, consistent with the exercise of prudent scientific and business judgment, as applied as applied by a biotechnology company of similar size and capabilities as Vaccinogen to development and commercialization activities conducted with respect to other products of similar potential and market size at a similar development stage. Any failure by Vaccinogen to comply with the diligence obligation set forth in the first sentence of this Section 3.3 shall be deemed to be a material breach of this Agreement by Vaccinogen, and Intracel shall have the right to terminate this Agreement pursuant to Section 9.2. If Intracel in good faith believes that Vaccinogen is not complying with the diligence obligation set forth in the first sentence of this Section 3.3, Intracel may provide Vaccinogen with written notice thereof, in which event Vaccinogen will have sixty (60) days from the date of such notice in which to provide Intracel with evidence that reasonably demonstrates that Vaccinogen is complying with such diligence obligation. Any disputes regarding diligence that remain at the end of such sixty (60) day period shall be resolved as provided in Article 11.

3.4 Technology Transfer.

(a) **Know-How.** Intracel shall use reasonable efforts to transfer to Vaccinogen the documents and materials (or copies of such documents or materials, as determined by Intracel in its sole discretion) listed on Exhibit C no later than three (3) months after the Effective Date. After the expiration of the three (3) month period described above, Intracel shall use commercially reasonable efforts to provide additional tangible manifestations of Licensed Know-How requested by Vaccinogen, to the extent then in Intracel’s possession. In no event shall Intracel be obligated to transfer Information to Vaccinogen under this Section 3.4 that it does not Control as of the Effective Date, or to breach any obligation it may have to a Third Party, or violate any law, statute, ordinance or regulation; provided, however, that, to the extent any obligation to any Third Party prohibits Intracel from disclosing particular Information, Intracel shall use commercially reasonable efforts to secure the right to disclose such Information to Vaccinogen. For the avoidance of doubt, the transfer of any tangible manifestations of such Licensed Know-How pursuant to this Section 3.4 shall not alter the ownership or other rights of any Party or its Affiliates with respect to such Licensed Know-How. Vaccinogen shall reimburse all reasonable costs and expenses incurred by Intracel in connection with any transfer pursuant to this Section 3.4. Notwithstanding anything to the contrary set forth herein, Intracel shall have no obligation to transfer any Licensed Know-How to Vaccinogen prior to the license grant under Section 2.1 becoming effective.

(b) **Regulatory Materials.** Upon the license grant under Section 2.1 becoming effective, Vaccinogen shall (i) be solely responsible for seeking and maintaining regulatory approvals of Licensed Products developed by Vaccinogen throughout the world, in such countries as it selects; (ii) be responsible for preparing and submitting all regulatory filings required for such regulatory approvals; and (iii) own all regulatory filings that it so prepares and submits. Intracel shall permit Vaccinogen to access, and shall provide Vaccinogen with sufficient rights to reference and use in association with exercising its rights and performing its obligations under this Agreement, all records pertaining to Licensed Products as are in the possession and Control of Intracel and its Affiliates as of the Effective

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Date and are reasonably necessary for obtaining regulatory approval for Licensed Products. Vaccinogen shall be fully responsible for all obligations under such regulatory submission or regulatory approval including, but not limited to, communicating with regulatory authorities, reporting of adverse events, and all costs associated with such regulatory submissions. Further, Intracel shall be permitted to notify any regulatory authority that Vaccinogen, and not Intracel, is responsible for all Licensed Products.

(c) **Disclaimer.** EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, ANY INFORMATION OR MATERIALS THAT ARE TRANSFERRED PURSUANT TO THIS SECTION 3.4 ARE PROVIDED "AS IS" AND WITHOUT ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF COMPLETENESS, COMPLIANCE WITH REGULATORY STANDARDS OR REGULATIONS, MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY WARRANTY THAT THE USE OF SUCH INFORMATION OR MATERIALS WILL NOT INFRINGE OR VIOLATE ANY PATENT OR OTHER PROPRIETARY RIGHTS OF ANY THIRD PARTY.

3.5 Asset Transfer. In the event that, on or prior to July 1, 2009 (or, if applicable, by the end of the six (6) month cure period specified in Section 9.3(b)), Vaccinogen has received cash investments of at least \$15,000,000 in connection with bona fide equity financings (the "**Asset Transfer Milestone**"), then the following shall become effective:

(a) Upon the terms and subject to the conditions of this Section 3.5, on the Asset Transfer Closing Date, Intracel shall transfer, convey, assign, grant and deliver to Vaccinogen, and Vaccinogen shall acquire and receive, all of the Intracel's right, title and interest in and to Technology, but only to the extent that (i) such Technology is related solely to the OncoVAX Program and (ii) Intracel owns such Technology (the "**Assigned Technology**"). For the avoidance of doubt, any patents or patent applications owned by Organon shall not be included in the Assigned Technology.

(b) All assets of Intracel other than the Assigned Technology (including the Excluded Assets) shall remain the property of Intracel and are not subject to this Section 3.5, but provided that any Technology that is not owned by Intracel as of the Asset Transfer Closing Date shall remain licensed to Vaccinogen under Section 2.1.

(c) At the Asset Transfer Closing, Vaccinogen shall assume and agree to perform and discharge any all obligations and liabilities of Intracel or Intracel's Affiliates (whether known, unknown, accrued, absolute, matured, unmatured, contingent or otherwise, whether or not required to be reflected on a balance sheet, whether or not incurred in the ordinary course of business and whether arising prior to or after the Asset Transfer Closing), to the extent relating to the Assigned Technology, as such liabilities and obligations may exist at and/or after the Asset Transfer Closing.

(d) From and after the Asset Transfer Closing Date, each Party shall execute and deliver such documents and take such other actions as the other Party may reasonably

request, to the extent necessary to effect the intentions of the Parties as expressed in this Section 3.5.

(e) The consummation of the transactions contemplated by this Section 3.5 (the “**Asset Transfer Closing**”) shall take place at the offices of Cooley Godward Kronish LLP, 3175 Hanover Street, Palo Alto, California (or at such other place as the Parties shall mutually agree), at 9:00 a.m. (California time) on such date following the achievement of the Asset Transfer Milestone as the Parties may agree. For purposes of this Agreement, “**Asset Transfer Closing Date**” shall mean the time and date as of which the Asset Transfer Closing actually takes place.

3.6 Certain Obligations of Vaccinogen. From the Effective Date, Vaccinogen shall have the following obligations with respect to Intracel (whether or not Intracel holds any stock of Vaccinogen):

(a) Vaccinogen shall allow one representative designated by Intracel to attend all meetings of the Vaccinogen’s Board of Directors in a nonvoting capacity.

(b) Vaccinogen will maintain true books and records of account in which full and correct entries will be made of all its business transactions pursuant to a system of accounting established and administered in accordance with generally accepted accounting principles consistently applied (except as noted therein or as disclosed to the recipients thereof), and will set aside on its books all such proper accruals and reserves as shall be required under generally accepted accounting principles consistently applied.

(c) Vaccinogen will furnish Intracel: (i) at least thirty (30) days prior to the beginning of each fiscal year an annual budget and summary operating plan for such fiscal year that has been approved by the Board of Directors (and as soon as available, any subsequent written revisions thereto); (ii) as soon as practicable after the end of each fiscal quarter of Vaccinogen, and in any event within forty five (45) days thereafter, a balance sheet of Vaccinogen as of the end of each such fiscal quarter, and a statement of income and a statement of cash flows of Vaccinogen for such quarter and for the current fiscal year to date, including a comparison to plan figures for such period; (iii) as soon as practicable after the end of each fiscal year of Vaccinogen, and in any event within one hundred eighty (180) days thereafter, a balance sheet of Vaccinogen, as at the end of such fiscal year, and a statement of income and a statement of cash flows of Vaccinogen, for such year, all prepared in accordance with generally accepted accounting principles consistently applied (except as noted thereon or as disclosed to the recipients thereof), with the exception that no notes need be attached to such statements and year-end audit adjustments may not have been made. Such financial statements shall be signed by the senior financial officer of Vaccinogen.

(d) Vaccinogen will furnish Intracel, as soon as practicable following each quarterly accounting period in each fiscal year of Vaccinogen, and in any event within forty-five (45) days thereafter, a summary capitalization table reflecting all shares, options, warrants, and other convertible securities then outstanding.

ARTICLE 4

FINANCIAL TERMS

4.1 Equity. Upon the first Equity Financing following the Effective Date, Vaccinogen shall issue to Intracel shares of Vaccinogen stock, in a security acceptable to Intracel (the “**Stock**”), having the same or superior rights as the shares of stock issued to the investors in such Equity Financing, which shares shall be issued in such number that, upon the close of such Equity Financing, Intracel shall hold stock representing ten percent (10%) of the fully diluted equity capitalization of Vaccinogen. The Stock shall be issued pursuant to the terms and conditions of a separate stock purchase agreement and other related agreements and documentation (collectively, the “**Equity Documents**”). Such Stock shall have the anti-dilution and other rights set forth in Exhibit D, and shall be entitled to any additional or different rights granted to other investors in Vaccinogen’s equity, through the first \$30,000,000 in equity investment in Vaccinogen. In addition, the Equity Documents shall provide Intracel with registration rights with respect to the Stock, and at no point shall the Stock be subject to lock-up or other restrictions on sale following a liquidity event for Vaccinogen.

4.2 Payments and Other Consideration to Organon.

(a) As soon as practicable after the Effective Date (but no later than the time period specified in Section 3(a)(i) of the Letter Agreement), Vaccinogen shall pay directly to Organon the \$500,000 payment set forth in Section 3(a)(i) of the Letter Agreement and deliver competent written evidence to Intracel that such payment has been made. Such payment may be made in cash or, to the extent permitted by Organon, in equity of Vaccinogen.

(b) As soon as practicable (but no later than thirty (30) days) after the Effective Date, Vaccinogen shall purchase from Organon 1,333 vials of TICE BCG, at total cost of \$100,000, pursuant to the terms of the Organon Supply Agreement. For clarity, Vaccinogen shall be required to pay for such purchase in advance.

(c) Vaccinogen shall assume, and pay directly to Organon, all amounts owed by Intracel to Organon under the Letter Agreement, including without limitation the royalties and annual payments due to Organon under Section 3 of the Letter Agreement. It is understood and agreed that the payment made by Vaccinogen pursuant to Section 4.2(a) is intended to satisfy Intracel’s obligation to Organon under Section 3(a)(i) of the Letter Agreement.

(d) To the extent Organon elects to take an equity position in Vaccinogen pursuant to Section 3(a)(ii) of the Letter Agreement, Vaccinogen agrees to issue to Organon or its designee the number of shares of Vaccinogen stock specified in Section 3(a)(ii) of the Letter Agreement.

4.3 Settlement of Trade Creditor Payables. As soon as practicable (but no later than thirty (30) days) after the Effective Date, Vaccinogen shall pay Intracel the sum of \$450,000 for the purpose of settling valid and verifiable trade creditor and intellectual property-

related payables that relate solely to Licensed Products and that were incurred by Intracel or its Affiliates through the date of such payment. Vaccinogen shall also assume all liability for the creditor payables and claims of Intracel B.V. and shall settle such payables and claims independently through the trustees of the Netherlands bankruptcy court. For clarity, Vaccinogen shall have no obligation to pay for the corporate payables and claims of Intracel.

4.4 Royalties Paid to Intracel.

(a) **Royalty Rate.** For the term specified below, Vaccinogen shall pay to Intracel a running royalty on Net Sales of Colon Cancer Products with the incremental royalty rate determined by the amount of aggregate Net Sales of Colon Cancer Products during the applicable calendar year according to the following schedule:

(i) 3% of Net Sales on the first \$350 million of Net Sales of Colon Cancer Products occurring in the calendar year;

(ii) 4% of that portion of Net Sales of Colon Cancer Products in the calendar year in excess of \$350 million and up to and including \$750 million; and

(iii) 5% of that portion of Net Sales of Colon Cancer Products in the calendar year in excess of \$750 million.

(b) **Timing of Royalty Payments.** Royalties due under this Section 4.4 shall be paid quarterly no later than the due date for the relevant report submitted pursuant to Section 4.6.

(c) **Royalty Term.** Vaccinogen's royalty obligations under this Section 4.4 shall continue for as long as Colon Cancer Products are being sold by Vaccinogen, or by one of its Affiliates or (sub)licensees.

4.5 Royalty Reports. Beginning with the first calendar quarter in which Vaccinogen or its Affiliate or (sub)licensee books the first commercial sale of a Licensed Product and continuing for all subsequent calendar quarters until all royalty obligations under Section 4.4 have expired, Vaccinogen shall provide to Intracel a written report no later than forty-five (45) days following the end of each calendar quarter. Such report shall set forth a complete and accurate summary of the sales or other disposition by Vaccinogen, its Affiliates, and its (sub)licensees of Licensed Products for such calendar quarter and shall include a calculation of the royalties due for such calendar quarter pursuant to Section 4.4.

4.6 Records and Audit. During the term of this Agreement and for a period of three (3) years thereafter, Vaccinogen shall keep complete and accurate records pertaining to the sale of Licensed Products, in sufficient detail to permit the Intracel to confirm any payments due hereunder that are attributable to such sales. Intracel shall have the right to cause an independent, certified public accountant to audit such records to confirm such payments. Such audits may be exercised no more frequently than twice per year upon reasonable advance notice to Vaccinogen and during normal business hours. Intracel shall bear the full cost of such audit

unless such audit discloses an underpayment to Intracel hereunder of greater than five percent (5%), in which case, Vaccinogen shall bear the full cost of such audit.

4.7 Currency; Method of Payments. All references to “dollars” or “\$” herein shall mean United States dollars. All payments due under this Agreement shall be paid in United States dollars by checks or by wire transfer to a bank designated in writing by the Party to which the payment is due.

4.8 Withholding of Taxes. Intracel will be responsible for and pay any and all taxes levied on account of any payments made to it under this Agreement. If any such taxes are required to be withheld by Vaccinogen, Vaccinogen will (a) deduct such taxes from the payment made to Intracel, (b) timely pay the taxes to the proper taxing authority, and (c) send proof of payment to Intracel and certify its receipt by the taxing authority within thirty (30) days following such payment.

4.9 Interest. If Vaccinogen fails to make any payment due to Intracel or another party under this Agreement, then interest shall accrue on a daily basis at an interest rate equal to 1.5% per month, or at the maximum rate permitted by applicable law, whichever is the lower.

ARTICLE 5

PATENTS

5.1 Patent Prosecution.

(a) Unless and until the license grant under Section 2.1 becomes effective, Intracel shall remain solely responsible for the prosecution and maintenance of all Licensed Patents. Upon the license grant under Section 2.1 becoming effective, Vaccinogen shall thereafter be responsible for, at its sole expense, the prosecution and maintenance of all Licensed Patents and shall reimburse Intracel for all prosecution costs incurred after the Effective Date, and the remainder of this Section 5.1(a) and Section 5.1(b) shall become effective. Vaccinogen shall deliver to Intracel copies of all documents materially related to such prosecution or maintenance within a reasonable period of time after such documents are prepared by or received by Vaccinogen, and in any event a reasonable amount of time before any such document is filed with or submitted to the applicable patent office or agency by Vaccinogen. Vaccinogen shall consult with Intracel regarding the prosecution of any patent applications in the Licensed Patents, and shall incorporate any and all reasonable comments or suggestions made by Intracel with respect to such prosecution.

(b) If, at any time during the term of this Agreement, Vaccinogen no longer wishes to file, prosecute, or maintain a patent or patent application in the Licensed Patents, it shall notify Intracel in writing of such decision. Vaccinogen shall provide such notice at least ninety (90) days prior to abandonment or lapse of such patent or patent application, to the extent practicable in light of the timing of any notice relating to such patent or patent application. Thereafter, Intracel shall have the right, but not the obligation, to assume the sole and exclusive responsibility, at its discretion, for the filing, prosecution, and/or maintenance (as

the case may be) of such patent or patent application solely at its own expense. Such patent or patent application (and any patent(s) that issue from such application) shall cease to be a Licensed Patent for the purpose of the license granted in Article 2.

5.2 Infringement by Third Parties.

(a) **Notice.** If either Party becomes aware of any actual or threatened infringement of a Licensed Patent, such Party shall promptly notify the other Party in writing (the “**Notice**”) and the Parties shall confer in good faith regarding the most appropriate action to take with respect to such infringement. Both Parties shall use their reasonable efforts in cooperating with each other to terminate such infringement without litigation.

(b) **Enforcement.** Unless and until the license grant under Section 2.1 becomes effective, Intracel shall remain solely responsible for, at its sole expense, the enforcement of the Licensed Patents, and Intracel shall retain all of any amounts recovered as result of such enforcement. Solely upon the license grant under Section 2.1 becoming effective, the remainder of this Section 5.2(b) and Sections 5.2(c)-(d) shall become effective. Unless the Parties otherwise agree, Vaccinogen shall have the first right, but not the obligation, to take appropriate action against activities allegedly infringing any patent in the Licensed Patents, in its own name and under its sole control. If Vaccinogen does not take any action against such activities within one hundred twenty (120) days after delivery of the Notice, then Intracel may, upon thirty (30) days’ notice to Vaccinogen, take appropriate action against such activities in its own name and under its sole control.

(c) **Cooperation; Settlement.** Regardless of which Party brings the action (the “**Initiating Party**”), the other Party (the “**Non-Initiating Party**”) hereby agrees to cooperate reasonably in any such effort, all at the Initiating Party’s expense, and the Parties shall reasonably cooperate to address new facts or circumstances that come to light during the course of any action relating to the Licensed Patents which may affect the need for one Party or the other to participate in such action. The Non-Initiating Party agrees to be joined as a party plaintiff, at the Initiating Party’s expense, in any such action if needed for the Initiating Party to bring or continue an infringement action hereunder. The Non-Initiating Party shall, at its own expense and with its own counsel, have the right to participate in any action brought by the Initiating Party. Neither Party may settle any action brought under this Section 5.2, or take any other action in the course thereof, that adversely affects the other Party’s interest in the Licensed Patents or Licensed Know-How, without the written consent of such other Party, such consent not to be unreasonably withheld.

(d) **Costs; Allocation of Recovery.** The costs and expenses of conducting any infringement suit brought under this Section 5.2 shall be borne solely by the Initiating Party, unless there is a separate written agreement to share costs between the Parties. Except as otherwise agreed to in writing by the Parties, any recovery realized by a Party as a result of a litigation or other action taken under this Section 5.2 with respect to any actual or threatened infringement of a Licensed Patent will first be applied to reimburse the Initiating Party for any actual litigation costs and expenses borne by the Initiating Party and not otherwise reimbursed, and any amounts remaining after such reimbursement (a “**Net Recovery**”) will be allocated

between the Parties as follows: (i) if the Vaccinogen is the Initiating Party, Vaccinogen will receive seventy percent (70%) of the Net Recovery, and Intracel will receive thirty percent (30%) of the Net Recovery; and (ii) if the Intracel is the Initiating Party, Intracel will receive seventy percent (70%) of the Net Recovery, and Vaccinogen will receive thirty percent (30%) of the Net Recovery.

ARTICLE 6

CONFIDENTIALITY

6.1 Confidentiality Obligations. All Information disclosed by one Party to the other Party pursuant to this Agreement shall be “**Confidential Information**” for all purposes hereunder. Each Party agrees that, for the term of this Agreement and for five (5) years thereafter, such Party shall, and shall ensure that its officers, directors, employees and agents shall, keep completely confidential (using at least the same standard of care as it uses to protect proprietary or confidential information of its own, but in no event less than reasonable care) and not publish or otherwise disclose and not use for any purpose except as expressly permitted hereunder any Confidential Information furnished to it by the other Party pursuant to this Agreement (including, without limitation, know-how of the disclosing Party). The foregoing obligations shall not apply to any Information disclosed by a Party hereunder to the extent that the receiving Party can demonstrate with competent evidence that such Information:

(a) was already known to the receiving Party or its Affiliate, other than under an obligation of confidentiality, at the time of disclosure;

(b) was generally available to the public or otherwise part of the public domain at the time of its disclosure to the receiving Party;

(c) became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving Party in breach of this Agreement;

(d) was subsequently lawfully disclosed to the receiving Party or its Affiliate by a Third Party other than in contravention of a confidentiality obligation of such Third Party to the disclosing Party; or

(e) was independently developed or discovered by employees of the receiving Party or its Affiliates who had no access to the Confidential Information of the disclosing Party.

6.2 Authorized Disclosure. A Party may disclose the Confidential Information belonging to the other Party to the extent such disclosure is reasonably necessary in the following instances:

(a) Complying with applicable law or governmental regulations; and

(b) Disclosure, in connection with the performance of this Agreement, to Affiliates, sublicensees, employees, consultants, subcontractors or agents, each of whom prior to disclosure must be bound by similar obligations of confidentiality and non-use no less stringent than those set forth in this Article 6.

Notwithstanding the foregoing, in the event a Party is required to make a disclosure of the other Party's Confidential Information pursuant to Section 6.2(a), it will, except where impracticable, give reasonable advance notice to the other Party of such disclosure and use efforts to secure confidential treatment of such information at least as diligent as such Party would use to protect its own confidential information, but in no event less than reasonable efforts.

6.3 Confidentiality of Agreement Terms. The Parties acknowledge that the terms of this Agreement shall be treated confidentially as Confidential Information of both Parties. Notwithstanding the foregoing, such terms may be disclosed by a Party to investment bankers, investors, and potential investors or acquirers, in the context of a potential transaction, each of whom prior to disclosure must be bound by similar obligations of confidentiality and non-use no less stringent than those set forth in this Article 6. The Parties will consult with each other on the provisions of this Agreement to be redacted in any filings made by the Parties with the Securities and Exchange Commission or as otherwise required by applicable law or government regulations

6.4 Publicity. Any publication, news release or other public announcement relating to this Agreement or to the performance hereunder and containing information not previously disclosed to the public, shall first be reviewed by both Parties (wherein each Party will have an opportunity to comment upon on such publication, news release or other public announcement); *provided, however,* that any disclosure that is required by law as advised by the disclosing Party's counsel may be made without the prior consent of the other Party, although the other Party shall be given prompt notice of any such legally required disclosure and to the extent practicable shall provide the other Party an opportunity to comment upon the proposed disclosure.

ARTICLE 7

REPRESENTATIONS AND WARRANTIES

7.1 Representations and Warranties of Vaccinogen. Vaccinogen hereby represents and warrants to Intracel that, as of the Effective Date:

(a) **Corporate Power.** Vaccinogen is duly organized and validly existing under the laws of State of Delaware and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof.

(b) **Due Authorization.** Vaccinogen is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder. The person executing this Agreement on Vaccinogen's behalf has been duly authorized to do so by all requisite corporate action.

(c) **Binding Agreement.** This Agreement is a legal and valid obligation binding upon Vaccinogen and enforceable in accordance with its terms. The execution, delivery and performance of this Agreement by Vaccinogen does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound.

(d) **Validity.** Vaccinogen is aware of no action, suit or inquiry or investigation instituted by any person or entity that questions or threatens the validity of this Agreement.

7.2 Representations and Warranties of Intracel. Intracel hereby represents and warrants to Vaccinogen that, as of the Effective Date:

(a) **Corporate Power.** Intracel is duly organized and validly existing under the laws of State of Delaware and has full corporate power and authority to enter into this Agreement, to grant the licenses granted hereunder, and to carry out the provisions hereof.

(b) **Due Authorization.** Intracel is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder. The person executing this Agreement on Intracel's behalf has been duly authorized to do so by all requisite corporate action.

(c) **Binding Agreement.** This Agreement is a legal and valid obligation binding upon Intracel and enforceable in accordance with its terms. The execution, delivery and performance of this Agreement by Intracel does not conflict with any agreement, instrument or understanding, oral or written, to which it is a party or by which it may be bound.

(d) **Validity.** Intracel is aware of no action, suit or inquiry or investigation instituted by any person or entity that questions or threatens the validity of this Agreement.

7.3 Disclaimer. EXCEPT AS EXPRESSLY PROVIDED IN THIS ARTICLE 7, EACH PARTY HEREBY DISCLAIMS ANY AND ALL WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT.

ARTICLE 8

INDEMNIFICATION

8.1 Indemnification by Intracel. Unless otherwise provided herein, Intracel agrees to indemnify, hold harmless, and defend Vaccinogen, its Affiliates, and their respective directors, officers, employees, and agents (the "**Vaccinogen Indemnitees**") from and against any and all third party suits, claims, actions, demands, liabilities, expenses and/or losses, including reasonable legal expenses and attorneys' fees (collectively, "**Claims**"), to the extent arising, directly or indirectly, out of any of the following:

- (a) a breach by Intracel of a representation, warranty, or covenant of this Agreement; or
- (b) the negligence, recklessness or willful misconduct of Intracel.

Such indemnity shall not apply if Vaccinogen fails to comply with the indemnification procedures set forth in Section 8.3 or to the extent that the Claim was the result of any breach by Vaccinogen of this Agreement or the negligence, recklessness or willful misconduct of a Vaccinogen Indemnitee.

8.2 Indemnification by Vaccinogen. Unless otherwise provided herein, Vaccinogen agrees to indemnify, hold harmless, and defend Intracel, its Affiliates, and their respective directors, officers, employees, and agents (the “**Intracel Indemnitees**”) from and against any and all Claims, to the extent arising, directly or indirectly, out of any of the following:

- (a) a breach by Vaccinogen of a representation, warranty, or covenant of this Agreement; or
- (b) Vaccinogen’s exercise of the rights granted under Section 2.1 or 3.5 of this Agreement, including without limitation the research, development, manufacture, possession, storage, transport, importation, use, sale, marketing, or distribution of Licensed Products by Licensee or its Affiliates or (sub)licensees; or
- (c) any failure on the part of Vaccinogen to perform and discharge, on a timely basis, the liabilities and obligations assumed by Vaccinogen pursuant to Section 3.5(c).

Such indemnity shall not apply if Intracel fails to comply with the indemnification procedures set forth in Section 8.3 or to the extent that the Claim was the result of any breach by Intracel of this Agreement or the negligence, recklessness or willful misconduct of Intracel.

8.3 Control of Defense. Any entity entitled to indemnification under this Article 8 shall give written notice to the indemnifying Party of any Claims that may be subject to indemnification, promptly after learning of such Claim. Within a reasonable time after receiving such notice, the indemnifying Party shall assume the defense of such Claims with counsel reasonably satisfactory to the indemnified Party. The indemnified Party shall cooperate with the indemnifying Party in such defense. The indemnified Party may, at its option and expense, be represented by counsel of its choice in any action or proceeding with respect to such Claim. The indemnifying Party shall not be liable for any litigation costs or expenses incurred by the indemnified Party without the indemnifying Party’s written consent, such consent not to be unreasonably withheld. The indemnifying Party shall not settle any such Claim if such settlement (a) does not fully and unconditionally release the indemnified Party from all liability relating thereto or (b) adversely impacts the rights granted to the indemnified Party under this Agreement, unless the indemnified Party otherwise agrees in writing.

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8.4 Insurance. Vaccinogen, at its own expense, shall maintain general liability insurance (including clinical trial insurance and product liability insurance) in an amount consistent with industry standards during the term of the Agreement and shall name Intracel as an additional insured with respect to such insurance. Vaccinogen shall provide a certificate of insurance evidencing such coverage to Intracel upon request.

ARTICLE 9

TERM; TERMINATION.

9.1 Term. The term of this Agreement shall commence upon the Effective Date and shall continue indefinitely unless terminated pursuant to Section 9.2 or Section 9.3 or by mutual written agreement of the Parties.

9.2 Termination for Cause. If either Party believes that the other Party is in material breach of this Agreement, then such Party may deliver notice of such material breach to the other Party. In such written notice, the noticing Party shall identify the actions or conduct that such Party would consider to be an acceptable cure of such material breach. If the breaching Party fails to cure such material breach within sixty (60) days after the receipt of such notice, then the noticing Party shall be permitted to terminate this Agreement, effective at the end of such sixty (60) day period. In addition, either Party may immediately terminate this Agreement by written notice if the other Party becomes insolvent, makes a general assignment for the benefit of creditors, suffers or permits the appointment of a receiver for its businesses or assets, becomes subject to any proceedings under any bankruptcy or insolvency laws (which proceedings or appointment is not terminated within 30 days), or has wound up or liquidated, voluntarily or otherwise.

9.3 Termination by Intracel.

(a) Intracel shall have the right to terminate this Agreement immediately upon written notice to Vaccinogen if Vaccinogen does not fully satisfy its obligations set forth in Sections 4.2(a), 4.2(b), and Section 4.3 within thirty (30) days after the Effective Date or if Vaccinogen does not fully satisfy by the applicable deadline any obligation undertaken by Vaccinogen pursuant to Section 4.2(c).

(b) Intracel shall have the right to terminate this Agreement upon six (6) months written notice to Vaccinogen if, as of July 1, 2009, Vaccinogen has not received cash investments of at least \$15,000,000 in connection with bona fide equity financings, unless during such six (6) month period additional cash is invested in Vaccinogen such that the aggregate cash investments in Vaccinogen in connection with bona fide equity financings equals or exceeds \$15,000,000 by the end of such period. If Intracel terminates the Agreement under this Section 9.3(b), Intracel shall issue to each of Vaccinogen's investors a promissory note in an amount equal to such investor's investment in Vaccinogen prior to such termination, each of which note shall be secured by the Technology (but specifically excluding any patents or patent applications owned by Organon) shall be pari passu to the most senior debt of Intracel

then outstanding, and shall be subordinate to any debt issued in connection with investments in Intracel following such termination.

9.4 Effect of Termination. Upon any termination of this Agreement:

(a) all licenses granted under Article 2 shall automatically terminate and revert to Intracel;

(b) any sublicense granted under the Licensed Patents or Licensed Know-How by Vaccinogen shall automatically terminate and be of no further force or effect;

(c) all rights to the Technology shall automatically revert to Intracel to the fullest extent allowed by applicable law, and Vaccinogen shall undertake all commercially reasonable efforts necessary to return, reassign and transfer (at Vaccinogen's expense) all patents, patent applications, Information, regulatory filings, and other aspects of the Technology provided, transferred, and/or assigned to Vaccinogen under this Agreement prior to the date of termination;

(d) Intracel shall have the option, at its sole discretion, to purchase some or all of any TICE BCG remaining in Vaccinogen's possession or control at the per-unit price paid by Vaccinogen for such TICE BCG. In the event that Intracel exercises this option, Vaccinogen shall transfer the desired quantity of TICE BCG to Intracel or Intracel's designee within thirty (30) days after such exercise.

(e) all outstanding obligations to Organon in connection with the rights and licenses reverting back to Intracel under articles (a), (b) and (c) of this section 9.4 shall also revert back to Intracel; and

(f) except in the event of a termination based on Intracel's material breach, at Intracel's request, the Parties shall negotiate in good faith a license from Vaccinogen to Intracel to enable the continued research, development, and commercialization of Licensed Products by Intracel, its Affiliates, or sublicensees, which license shall be on commercially reasonable terms.

9.5 Surviving Obligations. Expiration or termination of this Agreement shall not relieve the Parties of any obligation accruing prior to such expiration or termination. Sections 4.1 (last sentence only), 4.6, 9.3(b), 9.4, and 9.5, and Articles 6, 8, 10, 11, and 12 of this Agreement shall survive termination or expiration of this Agreement.

ARTICLE 10

GOVERNING LAW; DISPUTE RESOLUTION.

10.1 Governing Law. This Agreement shall be governed by the laws of the State of New York, without regard to any conflicts of law principles that would provide for application of the law of a jurisdiction other than New York.

10.2 Legal Compliance. The Parties shall review in good faith and cooperate in taking such actions to ensure compliance of this Agreement with all applicable laws.

ARTICLE 11

ARBITRATION

11.1 Disputes. The Parties recognize that disputes as to certain matters may arise from time-to-time during the term of this Agreement. It is the objective of the Parties to seek to resolve any issues or disputes arising under this Agreement in an expedient manner and, if at all possible, without resort to litigation, and to that end the Parties agree to abide by the following procedures set forth in this Article 11 to resolve any such issues or disputes. The Parties initially shall attempt to settle any such issue or dispute through good faith negotiations in the spirit of mutual cooperation between business executives with authority to resolve the dispute.

11.2 Escalation. Prior to taking action as provided in Section 11.3 or 11.4 of this Agreement, the Parties shall first submit such dispute to the Parties' respective Senior Executives for resolution. The Senior Executives to whom any dispute is submitted shall attempt to resolve the dispute through good faith negotiations over a reasonable period, not to exceed forty-five (45) calendar days, unless the Senior Executives mutually agree in writing to extend such period of negotiation. Such forty-five (45) calendar day period shall be deemed to commence on the date the dispute was submitted to the Senior Executives. The Senior Executives shall, if mutually agreed by the Senior Executives, submit the dispute to voluntary mediation at such place and following such procedures as the Parties shall reasonably agree. All negotiations pursuant to this Section 11.2 shall be confidential, and shall be treated as compromise and settlement negotiations for purposes of applicable rules of evidence.

11.3 Arbitration. Any dispute that is not resolved by the Parties by negotiation and/or mediation pursuant to Sections 11.1 and/or 11.2 above shall, upon the submission of a written request of either Party to the other Party, be resolved exclusively by binding arbitration before a three-person panel of arbitrators (the "**Panel**"), conducted in accordance with the rules of arbitration of the American Arbitration Association for commercial disputes (the "**Rules**"), except to the extent that such Rules are inconsistent with this Agreement. Each Party shall select one independent, neutral arbitrator (a "**Party Arbitrator**"), and shall notify the other Party of its selection of such Party Arbitrator within twenty (20) days after receipt by one Party of the other Party's written request for binding arbitration. The two (2) Party Arbitrators shall then mutually select a third arbitrator (a "**Neutral Arbitrator**") in accordance with the Rules. The Panel shall resolve the dispute in accordance with this Agreement and the substantive rules of law (but not the rules of procedure or conflicts of laws) that would be applied by a federal court sitting in [city], [state]. The final decision of the Panel shall be the sole and exclusive remedy of the Parties, shall be final and shall be fully and irrevocably accepted by the Parties. The prevailing Party may enforce such decision against the other Party in any court having jurisdiction. The arbitration shall take place in Frederick, MD and shall be conducted in the English language. The Parties agree that they shall share equally the cost of the arbitration

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filing and hearing fees, and the cost of the arbitrators that constitute the Panel. Each Party shall bear its own attorneys' and expert fees and all associated costs and expenses.

11.4 Court Actions. Notwithstanding the above, to the full extent allowed by law, either Party may bring an action in any court of competent jurisdiction for injunctive relief (or any other provisional remedy) to protect the Parties' rights or enforce the Parties' obligations under this Agreement pending final resolution of any claims related thereto in an arbitration proceeding as provided above. In addition, either Party may bring an action in any court of competent jurisdiction to resolve disputes pertaining to the validity, construction, scope, enforceability, infringement or other violations of patents or other proprietary or intellectual property rights. The Parties shall use their reasonable efforts to conduct all dispute resolution procedures under this Agreement as expeditiously, efficiently and cost-effectively as possible.

ARTICLE 12

GENERAL PROVISIONS.

12.1 Notices. All notices required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been given (a) upon personal delivery to the Party to be notified at the address set forth below, (b) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, to the address set forth below, (c) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery to the address set forth below, with written verification of receipt, or (d) upon confirmation of receipt if sent by facsimile to the number set forth below.

To Intracel:

Intracel Holdings
550 Highland Street, Frederick, MD 21701
Attn: Mitchell Finer
Fax: 301 668 4809

To Vaccinogen:

Vaccinogen, Inc.
Frederick MD 21703
Attn: Michael G. Hanna, Jr., Ph.D.
Phone: 301 793 7736

Any Party may, by written notice to the other, designate a new address or fax number to which notices to the Party giving the notice shall thereafter be mailed or faxed.

12.2 Force Majeure. No Party shall be liable for any delay or failure of performance to the extent such delay or failure is caused by circumstances beyond its reasonable control and that by the exercise of due diligence it is unable to prevent, provided that the Party claiming excuse uses its best efforts to overcome the same.

12.3 Entirety of Agreement. This Agreement sets forth the entire agreement and understanding of the Parties relating to the subject matter contained herein and merges all prior discussions and agreements between them, and no Party shall be bound by any representation other than as expressly stated in this Agreement or a written amendment to this Agreement signed by authorized representatives of each of the Parties.

12.4 Non-Waiver. The failure of a Party in any one or more instances to insist upon strict performance of any of the terms and conditions of this Agreement shall not be construed as a waiver or relinquishment, to any extent, of the right to assert or rely upon any such terms or conditions on any future occasion.

12.5 Independent Contractors. Each Party shall act solely as an independent contractor, and nothing in this Agreement shall be construed to give either Party the power or authority to act for, bind or commit the other Party in any way. Nothing herein shall be construed to create the relationship of partnership, principal and agent, or joint venture between the Parties.

12.6 Severance. If any Article or part thereof of this Agreement is declared invalid by any court of competent jurisdiction, or any government or other agency having jurisdiction over either Vaccinogen or Intracel deems any Article or part thereof to be contrary to any anti-trust or competition laws, then such declaration shall not affect the remainder of the Article or other Articles. To the extent possible the Parties shall revise such invalidated Article or part thereof in a manner that will render such provision valid without impairing the Parties' original intent.

12.7 Assignment. Except as provided in this Section, neither Party shall delegate duties of performance or assign, in whole or in part, rights or obligations under this Agreement without the prior written consent of the other Party, such consent not to be unreasonably withheld, and any attempted delegation or assignment without such written consent shall be of no force or effect; *provided, however*, such consent shall not be required for an assignment of the Agreement by a Party to its Affiliate or to its successor in interest in connection with an merger, acquisition or similar transaction of such Party or a sale of all or substantially all of such Party's assets to which this Agreement relates. Subject to the restrictions contained in the preceding sentence, this Agreement shall be binding upon, and inure to the benefit of, the successors and assigns of the Parties.

12.8 Bankruptcy. All rights and licenses granted under this Agreement are, and shall otherwise be deemed to be, for purposes of Section 365(n) of Title 11, U.S. Code (the "**Bankruptcy Code**"), licenses of rights to "intellectual property" as defined under Section 101 of the Bankruptcy Code. In the event of commencement of a bankruptcy proceeding by or against a Party under the United States Bankruptcy Code, the other Party shall be entitled to a complete duplicate of (or complete access to, as appropriate) any intellectual property licensed to such other Party hereunder, and all embodiments of such intellectual property, if not already in its possession, shall be promptly delivered to such other Party.

12.9 Headings. The headings contained in this Agreement have been added for convenience only and shall not be construed as limiting.

12.10 Limitation of Liability. NO PARTY SHALL BE LIABLE TO ANOTHER FOR INDIRECT, INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. NOTHING IN THIS SECTION IS INTENDED TO LIMIT OR RESTRICT THE DAMAGES AVAILABLE TO A PARTY FOR THE OTHER PARTY'S BREACH OF ITS OBLIGATIONS UNDER ARTICLE 6 OR THE RIGHTS OR OBLIGATIONS OF EITHER PARTY UNDER ARTICLE 8.

12.11 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be an original and all of which shall constitute together the same document.

IN WITNESS WHEREOF, the Parties hereto have duly executed this License Agreement.

[INTRACEL ACQUISITION HOLDING
COMPANY]

By: 

Name: Mitchell Finer, Ph.D.

Title: Chief Executive Officer

VACCINOGEN, INC.

By: 

Name: Michael G. Hanna, Jr., Ph.D.

Title: Chairman & Chief Executive Officer

EXHIBIT A

Description of Colon Cancer Product

Vaccinogen is focused on the development of immunotherapy products for the treatment of solid tumors and on the commercialization of autologous tumor vaccine products. Vaccinogen's lead product, OncoVAX, is a patient-specific tumor cell vaccine that uses the bacillus Calmette-Guérin (BCG) as an adjuvant. The completed phase III trial demonstrates OncoVAX delays time-to-tumor-progression and leads to an improvement in recurrence-free survival in stage II colon cancer. OncoVAX has been demonstrated to be safe and well tolerated, with over 350 patients having received a three or four-injection regimen with no significant side effects reported. In the second quarter of 2005, OncoVAX was approved as a magisterial (pharmacy-compounded) product in The Netherlands. In the third quarter of 2005, Vaccinogen received the final approval enabling commercial sales of OncoVAX for the treatment of stage II colon carcinoma in Switzerland. The product is currently available upon prescription for self-pay patients.

EXHIBIT B
LICENSED PATENTS

Status Report for Intracel

Please see color legend on page 3

Client-Matter	Country	Status	Title	Application Number/Date	Patent Number/Date	Afty.	Accoo.
18502.0006/P006	US	F	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	10/570,881 2/21/2003		JWB	DAD
18502.0006/P006	AU	F	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	2003230553 2/21/2003		JWB	DAD
18502.0006/P006	CA	F	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	2,476,999 2/21/2003		JWB	DAD
18502.0006/P006	CN	F	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	03809115.1 2/21/2003		JWB	DAD
18502.0006/P006	EP	F	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	03723633.8 2/21/2003		JWB	DAD
18502.0006/P006	BG	G	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	200404941-7 2/21/2003	106347 5/30/2007	JWB	DAD
18502.0006/P006	WO	F	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	PCT/US03/05154 2/21/2003		JWB	DAD
18502.0006/P006	JP	I	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS	570,779/2003 2/21/2003		JWB	DAD
18502.0006/P006	US	D	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS			JWB	DAD
18502.0006/P006	US	D	STERILE IMMUNOGENIC NON-TUMORIGENIC TUMOR CELL COMPOSITIONS AND METHODS			JWB	DAD
18502.0006/P006	US	F	NEUTRALIZING MONOCLONAL ANTIBODIES TO RESPIRATORY SYNCYTIAL VIRUS	40405,855 4/23/2003		JWB	DAD
18502.0006/P006	US	I	NEUTRALIZING MONOCLONAL ANTIBODIES TO RESPIRATORY SYNCYTIAL VIRUS	084043,633 4/23/2003		JWB	DAD
18502.0006/P006	US	I	A HIGH THROUGHPUT METHOD FOR THE PRODUCTION AND MANUFACTURE OF A TRIVALENT DE-	40644,753 02/4/2003		JWB	DAD
18502.0006/P006	US	F	TORULINUM ANTITOXIN COMPOSITIONS AND METHODS	40848,354 2/12/2004		JWB	DAD
18502.0006/P006	WO	F	A HIGH THROUGHPUT METHOD FOR THE PRODUCTION AND MANUFACTURE OF A TRIVALENT DE-	PCT/US04/05435 2/12/2004		JWB	DAD
18502.0006/P006	US	Q	METHOD OF TREATING BLADDER CANCER WITH A KEYHOLE LIMPET HEMOCYANIN COMPOSITION WITH	08050,682 4/13/2003	5,437,843 4/18/2005	JWB	DAD
18502.0010/P010	US	G	TUMOR ASSOCIATED MONOCLONAL ANTIBODIES	08449,513 5/24/1995	5,474,755 12/12/1995	JWB	DAD

USA

Status Report for Intracel

Client-Matter	Country	Status	Title	Application Number/Date	Patent Number/Date	Atty.	Acco.
18602.0011/PC11	US	I	TUMOR ASSOCIATED MONOCLONAL ANTIBODY 81A1/78	08/094,599 7/20/1993	5,349,880 9/20/1994	JWB	DAD
18602.0043/PC43	US	G	METHOD USING KEYHOLE LIMBET-HEMOXYANIN COMPOSITION WITH ENHANCED IMMUNOGENIC	08/027,498 3/26/1992	5,555,848 4/24/1995	JWB	DAD
18602.0043/PC43	US	G	METHOD FOR TREATING BLADDER CANCER WITH A KEYHOLE LIMBET-HEMOXYANIN COMPOSITION HAVING	08/095,124 1/29/1999	5,791,476 11/9/1996	JWB	BAB
18602.0014/PC14	US	F	ANTIGEN RECOGNIZED BY MCA 16-89	08/272,402 7/7/1994		JWB	DAD
18602.0015/PC15	WO	F	ANTIGEN RECOGNIZED BY MCA 16-89	PCT/US89/02245 7/1/1988		JWB	DAD
18602.0026/PC26	US	G	TUMOR SPECIFIC MONOCLONAL ANTIBODIES	645,069 1/22/1991	5,190,814 1/19/1993	JWB	DAD
18602.0030/PC30	US	G	TUMOR SPECIFIC MONOCLONAL	302,155 1/25/1989	5,105,738 4/21/1992	JWB	DAD
18602.0031/PC31	US	G	TUMOR SPECIFIC MONOCLONAL	697,078 1/31/1985	4,828,851 5/9/1985	JWB	DAD
18602.0032/PC32	US	G	ACTIVE SPECIFIC IMMUNOTHERAPY	07/122,257 11/1/1993	5,484,596 1/16/1996	JWB	DAD
18602.0033/PC33	US	G	CHELATING AGENTS FOR ATTACHING METAL IONS TO PROTEINS	08/044,875 4/8/1993	5,292,868 3/9/1994	JWB	DAD
18602.0034/PC34	US	G	TUMOR ASSOCIATED EPI TOPE	08/950,129 8/19/1997	5,951,945 9/14/1995	JWB	DAD
18602.0035/PC35	US	G	ANTIGEN RECOGNIZED BY MCA 16-89	07/829,842 8/13/1992	5,338,632 8/16/1994	JWB	DAD
18602.0035/PC35	CA	G	TUMOR SPECIFIC MONOCLONAL ANTIBODIES	473130 1/30/1985	1,340,751 1/30/1985	JWB	DAD
18602.0037/PC37	CA	E	TUMOR ASSOCIATED EPI TOPE	1,222,551 6/5/1995		JWB	DAD
18602.0038/PC38	PT	I	PROCESS FOR PREPARING TUMOR SPECIFIC MONOCLONAL ANTIBODIES	8573994 1/31/1984	79894 1/31/1984	JWB	DAD
18602.0039/PC39	JP	G	ANTIGEN RECOGNIZED BY MONOCLONAL ANTIBODY 16-89	1988 505983 7/1/1988	3081208 5/23/1988	JWB	DAD
18602.0040/PC40	JP	F	TUMOR ASSOCIATED EPI TOPE	9-501429 6/5/1985		JWB	DAD

USA

Status Report for Intracel

Client-Matter	Country	Status	Title	Application Number/Date	Patent Number/Date	Atty.	Assoc.
<u>IS602.0041/PC41</u>	<u>DE</u>	<u>S</u>	<u>CHELATING AGENTS FOR ATTACHING METAL IONS TO PROTEINS</u>	<u>9069022542</u> <u>5/23/1990</u>	<u>59022542</u> <u>6/23/1991</u>	<u>JWB</u>	<u>DAD</u>
<u>IS602.0042/PC42</u>	<u>DE</u>	<u>S</u>	<u>TUMOR SPECIFIC MONOCLONAL ANTIBODIES</u>	<u>8885300510</u> <u>1/30/1988</u>	<u>358093</u> <u>1/30/1988</u>	<u>JWB</u>	<u>DAD</u>
<u>IS602.0043/PC43</u>	<u>GB</u>	<u>S</u>	<u>TUMOR SPECIFIC MONOCLONAL ANTIBODIES</u>	<u>880151030</u> <u>1/30/1988</u>	<u>8885300510</u> <u>1/30/1988</u>	<u>JWB</u>	<u>DAD</u>
<u>IS602.0044/PC44</u>	<u>IL</u>	<u>S</u>	<u>TUMOR SPECIFIC MONOCLONAL ANTIBODIES</u>	<u>92103758</u> <u>11/15/1992</u>	<u>103758</u> <u>11/15/1992</u>	<u>JWB</u>	<u>DAD</u>
<u>IS602.0045/PC45</u>	<u>IT</u>	<u>I</u>	<u>TUMOR SPECIFIC MONOCLONAL ANTIBODIES</u>	<u>8885300510</u> <u>1/30/1988</u>	<u>151030</u> <u>1/30/1988</u>	<u>JWB</u>	<u>DAD</u>
<u>IS602.0046/PC46</u>	<u>IT</u>	<u>I</u>	<u>CHELATING AGENTS FOR ATTACHING METAL IONS TO PROTEINS</u>	<u>9090914273</u> <u>5/23/1990</u>	<u>429544</u> <u>5/23/1990</u>	<u>JWB</u>	<u>DAD</u>
<u>IS602.0047/PC47</u>	<u>NZ</u>	<u>S</u>	<u>TUMOUR-SPECIFIC MONOCLONAL ANTIBODIES, PRODUCTION THEREOF AND USE</u>	<u>88210867</u> <u>1/17/1988</u>	<u>210867</u> <u>1/17/1988</u>	<u>JWB</u>	<u>DAD</u>

41 case(s)

Legend:

Yellow highlight - Intracel cases for the sterile process by product to be included in the Organon collateral
 Green underline - Cases related to the original PerImmune spin-out in the prior security agreement
 Red strike through - Cases that will remain with Intracel as they are unrelated to OncoVAX

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EXHIBIT C ASSET LIST TABLE OF CONTENTS

Section 1

100 Intracel Resources LLC

Leases

N/A

Staff and Salaries

Employees/Consultants Contracts and/or CVs

A. Employees

- a. Michael G. Hanna, Jr., CSO
- b. Martin Page, Sr. VP Regulatory Affairs
- c. Myron J. Waxdal, Director, Manufacturing QC
- d. David M. Johns, Jr., OncoVAX Manager, Technical Services
- e. Leslie Ivy, Manager, Human Resources
- f. Wilda Hankins, Office Manager
- g. April Baer, AP/AR Administrator

B. Consultants

- a. Darrell Wicker, Controller
- b. LaTonjia Wallace, Regulatory Affairs
- c. W. Randy Ruff, Document Control Officer

INTRACEL

Intellectual Property

- A. Patents Status Report
- B. OncoVAX®
 - 1. US5484596-OncoVAX® Composition of Matter
 - 2. US0030228300-Sterile Product by Process
- C. KLH
 - 1. US5855919-Composition of Matter KLH
 - 2. US5407912-Method of Treatment for Bladder Carcinoma 1
 - 3. US5981476-Method of Treatment for Bladder Carcinoma 2
- D. Human Monoclonal Antibodies
 - 1. 16.88
 - 2. 28A32
 - 3. 81AV78
 - 4. 88BV59
 - 5. LiLo

Organon/Akzo BCG Supply Agreement

Investigator's Brochure, 12 December 2005

Intracel Study Report for Study 8701, December 6, 2004

Intracel Study Report for Study 5283, December 2, 2004

Overall Clinical Safety Summary, by McPhillips

Protocol ASI-2005-01. A Randomized Multicenter Study of Active Specific Immunotherapy with OncoVAX® in Patients with Stage II Colon Cancer, 5 April 2006

Request to FDA for Special Protocol Assessment, BB IND 4561 Serial No. 088, 19 April 2006, including protocol summary and questions

FDA letter dated 31 May 2006 granting Special Protocol Assessment

Request to FDA for Fast Track designation, BB IND 4561 Serial Number 089, 12 July 2006

INTRACEL

FDA letter dated 11 September 2006 granting Fast Track designation

International Approval

- A. NL
- B. UK
 - a. CoREC/MREC
 - b. MHRA

USA Approval

- A. St. Joseph Candler
- B. Moffit
- C. Brany
- D. Cleveland Clinic

HumaRAD

Clinical Reports

Drug Master Files

16.88
88BV59

HumaSPECT Registration

EMA Approval for 88BV59

Equipment List (including freezers)

Inventory of Freezers (except bone marrow samples)

Monographs

- A. HumaSTAPH
- B. HumaRAD
- C. HumaENT1

Formulation Lab Equipment List (USA)

Ramp up

PI Master List

INTRACEL

Section 2

200 PerImmune BV

Facilities

- A. Emmen Lease
- B. Environment, Health and Safety Letter from Local Dutch Government Confirming No Violations (in Dutch)

Emmen Salaries

Emmen Employees Contracts and CVs

- A. Iedo Beeksma, Director
- B. Anneke Nederbragt
- C. Simon de Rooij
- D. Antonie Vonk

Benefits

Manufacturing Authorization from Dutch Government

Equipment and Improvements

Index of All Manufacturing and QC Documents

Other Liabilities

- A. Grant
- B. ING Account

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INTRACEL

Section 3

300 Intracel BV

Consolidated Annual Report for:

- A. PerImmune BV
- B. Intracel BV

INTRACEL

Section 4

400 Intracel GmbH

Dinand der Lind Contract and CV

Authorization for Import/Export as a Transplant (letters dated 23 September 2004, 4 April 2005, and 3 November 2005)

OncoVAX® - Regulatory Status letter dated, October 14, 2003

Application for Funding of OnxoVAX® as an autologous tumor cell vaccine for the treatment of Stage II colon cancer following surgical resection of the tumor, draft 31 October 2006

ProVaccine Agreement

ProVaccine OncoVAX® Marketing Plan – Switzerland

Commercial Distribution Contract with Baermed. Prof. Dr. Med. H.U. Baer

Patient Brochure (OncoVAX® Post-Surgical Treatment for Colon Cancer) in English, Arabic, French, German, Italian, and Russian

EXHIBIT D

ANTIDILUTION RIGHTS

1. Vaccinogen will issue to Intracel, without further consideration, any additional shares of Stock necessary to ensure that the aggregate number of shares of Stock issued to Intracel does not represent less than ten percent (10%) of the fully diluted equity capitalization of Vaccinogen at any time through the completion of issuance of all shares to be issued in connection with the first round of Equity Financing that results in a cumulative equity investment in Vaccinogen of \$30,000,000 (the "Milestone Round"). This right will expire upon the issuance to Vaccinogen of the shares of Stock to be issued pursuant to such right in connection with the Milestone Round.

2. Intracel shall have the right to purchase for cash up to five percent (5%) of the securities sold by Vaccinogen in each financing round up to and including the Milestone Round, on the same terms as other investors in the Milestone Round. Such right shall terminate upon the close of the Milestone Round. Intracel shall be permitted to assign such right, in whole or in part, to one or more of the holders of membership interests in Intracel.

WLS

EXHIBIT 8.3

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

6/6/16



October 31, 2007

VIA FEDERAL EXPRESS/EMAIL

Mitchell Finer
Chief Executive Officer
Intracel Holdings Corporation
550 Highland Street, Suite 417
Frederick, MD 21701

RE: Product Supply Agreement between Organon Teknika Corporation ("OTC") and Intracel Resources LLC (as successor in interest to Intracel Corporation) dated December 1, 2000, as amended by Addendum dated November 26, 2002 (the "Supply Agreement") and Letter Agreement dated as of November 27, 2002 between OTC, Organon BioSciences International B.V. ("OBS") (as successor in interest to Akzo Nobel Pharma International B.V.) (OTC and OBS, together Organon), Intracel Corporation and Intracel Acquisition Holding Company LLC (the "Original Letter Agreement")

Dear Mr. Finer:

Thank you and your team for forwarding the proposal dated October 18, 2006 on behalf of Intracel to restructure the relationship between Organon and its affiliates. We have considered your proposal and through this "Letter Agreement" hereby respond as follows:

1. Original Letter Agreement. Upon the acceptance of this proposal by Intracel Holdings Corporation (hereinafter, "Intracel") (on behalf of its affiliate Intracel Resources LLC and as successor in interest to Intracel Formation Corporation, the ultimate beneficial owner of the assets transferred pursuant to the bankruptcy transfer from Intracel Corporation contemplated by the Original Letter Agreement) and Intracel Acquisition Holding Company LLC, the provisions of this Letter Agreement will supersede the Original Letter Agreement and, along with the Amended and Restated Supply Agreement and the New Security Agreement (each, as defined below), will constitute the full and complete agreement among the parties with respect to the Original Letter Agreement and the matters covered thereby.
2. Liabilities and Security Agreement. For the purposes hereof, the term "Liabilities" shall mean any and all obligations accrued or owing by Intracel or any of its affiliates through the date of this Letter Agreement under or with respect to the Letter Agreement, including without limitation, US \$4,000,000 (plus 12% accrued interest since January 31, 2005, date of default), plus 5% royalty on the sales of OncoVax from its commercialization through December 31, 2013.

Organon Teknika Corporation LLC
100 Rodolphe Street
Durham, NC 27712
USA

T 1 919 620-7201

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3. Current Liabilities. The Liabilities (including the accrued interest referenced in Section 2 above) will be replaced in their entirety by the Current Liabilities. The "Current Liabilities" shall comprise the following:

(a) Settled Amount: US \$4,000,000 (plus any accrued interest described in Section 3(a)(ii) below) which will be paid as follows:

- (i) Intracel will make a payment of US \$500,000 to OTC, or a designated affiliate, upon execution by Intracel of this Letter Agreement;
- (ii) No later than one (1) year after the date of this Letter Agreement, Intracel will make a payment of US \$500,000 (plus accrued interest calculated from the date of this Letter Agreement based on a simple annual interest rate based on the prime lending rate in effect on the anniversary of the signing of this Letter Agreement) to OTC, or a designated affiliate. Prior to such payment being made, OTC may elect to receive in lieu of such payment a number of shares of Vaccinogen stock that are equivalent to US \$500,000, which number shall be determined by OTC and Vaccinogen by mutual agreement. OTC shall make such election, if at all, by written notice to Intracel.
- (iii) Commencing one (1) year after the first marketing approval of OncoVax by the United States Food and Drug Administration or the European Medicines Agency following the date of this Letter Agreement, whichever is first, Intracel shall make an annual payment of US \$1,000,000 to OTC until collection of the entire Settled Amount, plus accrued interest calculated from the date of this Letter Agreement based on a simple annual interest rate based on the prime lending rate in effect on the anniversary of the signing of this Letter Agreement;
- (iv) Intracel, or any licensee or successor in interest of Intracel, shall be permitted to, at its option, pay the remaining balance of the Settled Amount, without penalty, at any time, including prior to marketing approval of OncoVax;
- (v) Should Intracel (or its successor in interest) divest, out-license or otherwise partner OncoVax or any Tice[®] BCG based product (other than the transaction contemplated by Section 6) and receive financial benefit from that transaction, excluding reimbursements for the costs of clinical development or market launch or funds raised solely to finance the clinical development of OncoVax in bona fide debt or equity financings, the balance of the Settled Amount shall become payable within thirty (30) days of the first receipt of such financial benefit (except as set forth in the following sentence). If the amounts received by Intracel (or its successor in interest) as a result of the aforementioned transaction(s) is less than the outstanding balance on the Settled Amount, OTC is to be paid to the extent funds are available from the

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transaction and the remaining debt is to be paid post marketing approval as prescribed in this Letter Agreement.

- (b) **Royalties:** In addition, Intracel shall pay OTC, or its designated affiliate, a royalty of ten percent (10%) of the Net Sales of OncoVax (and all other Tice[®] BCG related products, if any) until the Settled Amount is paid in full, including interest, and three percent (3%) for five (5) years thereafter. Such payments are to be made quarterly. For the purpose of this Section 3(b), "Net Sales" shall mean the amounts invoiced or charged purchasers for the applicable product sold by Intracel, its Affiliates or (sub)licensees, or other transferees of the OncoVax assets, to a third party, less costs of insurance incident to transportation; transportation and shipping costs; excise, sales, luxury, gross receipt, turnover or similar taxes and customs duties; trade and cash discounts; sales commissions; and allowances for returns and uncollectible accounts. For clarity, the following shall not be considered Net Sales for the purpose of this Letter Agreement: (a) any consideration received as a result of a license of patent rights or know-how with respect to a specified product or products, including all license fees, royalties and milestone payments and (b) any payments to fund research or other product development expenses and costs. During the term of this Letter Agreement (and for a period of three years after Intracel's royalty obligations expire), Intracel (or its successor in interest) shall keep accurate records pertaining its business and the sale of OncoVax, in sufficient detail to allow OTC to confirm any payments due hereunder to OTC. OTC shall have the right to cause an independent auditor to audit such records to confirm such payments.
4. **New Security Agreement.** The outstanding balance on the Settled Amount shall be secured pursuant to a separate security agreement (the "New Security Agreement") executed by Intracel covering the ownership rights of OncoVax. The New Security Agreement will permit assignment to OTC affiliates. Intracel shall ensure, prior to the execution of the New Security Agreement, that all priority liens granted by Intracel with respect to the collateral covered by the New Security Agreement are subordinated to the security interest granted pursuant to the New Security Agreement.
5. **Default.** Intracel's failure to make a payment hereunder with respect to the Settled Amount when due shall constitute an event of default, which if unremedied for a period of forty five (45) days after written notice of such default has been received by Intracel, shall also constitute an event of default under the Supply Agreement and the New Security Agreement in accordance with their applicable terms. Notwithstanding the foregoing, any failure by Vaccinogen (as defined below) to make any payments set forth in Section 3 or Section 8, as required by the Vaccinogen License (as defined below), shall not be treated as an event of default under this Letter Agreement (or the Supply Agreement or the New Security Agreement), provided that (a) Intracel terminates the Vaccinogen License within thirty (30) days after Intracel receives written notice of Vaccinogen's failure to make such payment; (b) Intracel (or a successor in interest) complies with any then-due payments under Section 3 or Section 8 no later than the termination of the Vaccinogen license; and (c) Intracel (or a

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successor in interest) thereafter complies with any further payments pursuant Section 3 or Section 8 as they come due. Upon a breach by Vaccinogen as provided in this Article 5, failure by Intracel to comply with the requirements of (a), (b), and (c) in this Article 5, shall constitute an event of default. Notwithstanding anything to the contrary set forth herein or in any prior or contemporaneous agreement between Intracel and OTC (or an OTC affiliate), if Intracel agrees in writing to assign its entire right, title, and interest in the collateral covered by the New Security Agreement to OTC or a designated OTC affiliate within thirty (30) days after Intracel receives written notice of Vaccinogen's failure to make a payment, then such assignment shall be Intracel's sole liability, and OTC's sole remedy, with respect to such failure.

6. Vaccinogen Transaction. Notwithstanding anything to the contrary set forth in this Letter Agreement or the New Security Agreement and subject to OTC's prior approval of a definitive license agreement between Intracel and Vaccinogen, Inc. ("Vaccinogen") (the "Vaccinogen License"), Intracel shall be permitted to license its rights to the OncoVAX-related assets (including all associated intellectual property and rights under the Amended and Restated Supply Agreement) to Vaccinogen. In the event Intracel assigns such OncoVax related assets to Vaccinogen in accordance with the terms of the Vaccinogen License, then Intracel may also assign this Letter Agreement, the New Security Agreement, and the Amended and Restated Supply Agreement to Vaccinogen; provided that, in connection with such license and/or assignment, as applicable, Vaccinogen agrees in writing to be bound by all provisions of the applicable agreement as if Vaccinogen were Intracel. In no event shall any license or assignment to Vaccinogen release Intracel from its obligations to OTC under this Letter Agreement, the New Security Agreement and the Amended and Restated Supply Agreement.
7. Amended and Restated Supply Agreement. The Supply Agreement shall be amended and restated, as specifically detailed in Exhibit 1, attached hereto (the "Amended and Restated Supply Agreement").
8. Current Order. The parties acknowledge and agree that, prior to the parties' execution of this Letter Agreement and the Amended and Restated Supply Agreement, Vaccinogen placed an order for 1,333 vials of Tice BCG at a total cost of \$100,000, which Vaccinogen paid for at the time of order.
9. Governing Law, Arbitration Clause. This Letter Agreement shall be governed in accordance with the laws and dispute provisions governing the Amended and Restated Supply Agreement.
10. Intracel Entities. For the purpose of this Letter Agreement, the Amended and Restated Supply Agreement and the New Security Agreement, Intracel, Intracel GmbH, Intracel BV, Intracel Resources LLC and any of their respective affiliates (other than Intracel Acquisition Holding Company LLC) (together, the "Intracel Entities") shall be jointly and severally liable to OTC and its affiliates.



11. Representations and Warranties.

(a) the Intracel Entities represent and warrant to Organon that, as of the date of this Letter Agreement:

(i) all liens granted by Intracel with respect to the collateral covered by the New Security Agreement are subordinated to the security interest granted to Organon pursuant to the New Security Agreement;

(ii) they are duly incorporated or formed (as appropriate), validly existing and in good standing under the laws in which they are incorporated or formed;

(iii) they have full legal right, corporate power and authority to enter into this Letter Agreement and perform the transactions contemplated hereby. This Letter Agreement has been duly authorized by the applicable Intracel Entities. The execution, delivery and performance of this Letter Agreement by the Intracel Entities and the consummation of the transactions herein contemplated will not violate any existing agreements to which the Intracel Entities are party to or violate any statute or any judgment, decree, order, rule or regulation of any governmental authority applicable to the Intracel Entities. Upon the execution and delivery of this Letter Agreement, this Letter Agreement will constitute a valid and binding obligation of the Intracel Entities, enforceable in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' and contracting parties' rights generally.

(b) OTC represents and warrants to Intracel that, as of the date of this Letter Agreement:

(i) it is duly incorporated, validly existing and in good standing under the laws in which it is incorporated;

(ii) it has full legal right, corporate power and authority to enter into this Letter Agreement and perform the transactions contemplated hereby. The execution, delivery and performance of this Letter Agreement by OTC and the consummation of the transactions herein contemplated will not violate any existing agreements to which OTC is party to or violate any statute or any judgment, decree, order, rule or regulation of any governmental authority applicable to OTC. Upon the execution and delivery of this Letter Agreement, this Letter Agreement will constitute a valid and binding obligation of OTC, enforceable in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' and contracting parties' rights generally.

12. Notices. Intracel hereby agrees to promptly notify OTC of (i) any breach by Vaccinogen under the License Agreement, (ii) the commencement of an event of bankruptcy (including filing of a petition of bankruptcy) by either Intracel and/or Vaccinogen, or (iii) if a new security interest is granted by Intracel or Vaccinogen in connection with the Collateral under the New Security Agreement.



13. The need to set out the terms and conditions of this Letter Agreement in further detail in additional documentation does not in any way limit the commitments made by the parties hereto herein. The parties hereto agree to implement this proposal through amendment to existing agreements, where necessary, and to enter into such other agreements and take all step and actions as may be necessary to carry out the provisions set forth herein.

Please indicate acceptance of these terms by signing below.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

Accepted and agreed on behalf of:

INTRACEL HOLDINGS CORPORATION

INTRACEL ACQUISITION
HOLDING COMPANY LLC

By: _____
Name:
Title:

By: _____
Name: *CHARLES LINDSAY*
Title: *AUTHORIZED SIGNATORY*

ORGANON BIOSCIENCES
INTERNATIONAL B.V.

ORGANON TEKNIKA CORP.

By: _____
Name:
Title:

By: _____
Name:
Title:

By: _____
Name:
Title:

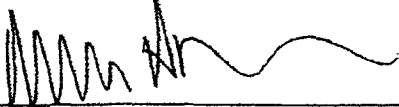
By: _____
Name:
Title:

[SIGNATURE PAGE TO LETTER AGREEMENT]

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Accepted and agreed on behalf of:

INTRACEL HOLDINGS CORPORATION

By: 
Name: Mitchell H. Finer
Title:

ORGANON BIOSCIENCES
INTERNATIONAL B.V.

By: _____
Name:
Title:

By: _____
Name:
Title:

INTRACEL ACQUISITION
HOLDING COMPANY LLC

By: _____
Name:
Title:

ORGANON TEKNIKA CORP.

By: _____
Name:
Title:

By: _____
Name:
Title:

[SIGNATURE PAGE TO LETTER AGREEMENT]

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Accepted and agreed on behalf of:

INTRACEL HOLDINGS CORPORATION

INTRACEL ACQUISITION
HOLDING COMPANY LLC

By: _____
Name:
Title:

By: _____
Name:
Title:

ORGANON BIOSCIENCES
INTERNATIONAL B.V.

ORGANON TEKNIKA CORP.

By: *A Wilderbeek* *
Name: *ATM Wilderbeek*
Title: *Director*

By: _____
Name:
Title:

By: _____
Name:
Title:

By: _____
Name:
Title:

G. van Alphen
Director



[SIGNATURE PAGE TO LETTER AGREEMENT]

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Accepted and agreed on behalf of:

INTRACEL HOLDINGS CORPORATION

INTRACEL ACQUISITION
HOLDING COMPANY LLC

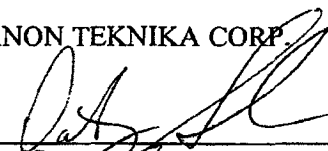
By: _____
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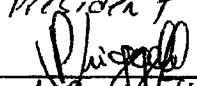
ORGANON BIOSCIENCES
INTERNATIONAL B.V.

ORGANON TEKNIKA CORP.

By: _____
Name:
Title:

By: 
Name: JANTE Serichew
Title: President

By: _____
Name:
Title:

By: 
Name: A.P. van Tiggelou
Title: VP Finance



[SIGNATURE PAGE TO LETTER AGREEMENT]

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EXHIBIT 8.4

VACCI NOGEN, INC. – FORM 1-A Regulation A Offering Statement

STOCK EXCHANGE AGREEMENT

THIS STOCK EXCHANGE AGREEMENT (this "Agreement") is dated as of June 24, 2010, by and between Vaccinogen, Inc., a Delaware corporation (the "Company"), Intracel Holdings Corporation, a Delaware corporation ("Intracel"), and those persons and entities listed on Exhibit A hereto (other than Intracel) (the "Tranche 12 Lenders"). Intracel and the Tranche 12 Lenders may each be referred to herein as a "Holder" and collectively as the "Holders".

WHEREAS, the Company and Holders are entering into, on the date hereof, that certain Investor Rights Agreement (the "Investor Rights Agreement") and Registration Rights Agreement (the "Registration Rights Agreement") and the Company and Intracel are entering into, on the date hereof, that certain Asset Transfer Agreement (the "Asset Transfer Agreement," and together with this Agreement, the Investor Rights Agreement and the Registration Rights Agreement, the "Transaction Agreements");

WHEREAS, in connection with the transaction contemplated by the Transaction Agreements, the Company is filing on the date hereof, the Third Amended and Restated Certificate of Incorporation of the Company (the "Third Amendment") with the Secretary of State of the State of Delaware (the "Secretary of State");

WHEREAS, Intracel is the record owner of 1,497,728 shares of common stock, par value \$.0001 per share, of the Company ("Intracel Common Stock") and 48,088 shares of Series AA Preferred Stock, par value \$.0001 per share of the Company ("Intracel Series AA Stock," together with the Intracel Common Stock, the "Intracel Stock"), which constitutes all shares of any class or series of stock of the Company owned by Intracel;

WHEREAS, Intracel is obligated to use commercially reasonable efforts to transfer to the Tranche 12 Lenders twenty percent (20%) of any shares of capital stock of the Company received by Intracel, which shares are to be allocated ratably based on the then outstanding principal owed to each such Tranche 12 Lender under the applicable promissory notes (such obligation, the "Transfer Obligation");

WHEREAS, Intracel Investment LLC ("Intracel Investment"), which is a Tranche 12 Lender, and the members of Intracel Investment each desire to have the shares of capital stock of the Company to which Intracel Investment has a right pursuant to the Transfer Obligations to be delivered directly to the members of Intracel Investment listed as such on the signature page hereto (the "Intracel Investment Members");

WHEREAS, Intracel has not yet transferred, or arranged for the transfer, to the Tranche 12 Lenders of any shares of the Intracel Common Stock or the Intracel Series AA Stock pursuant to the Transfer Obligation;

WHEREAS, on and subject to the terms and conditions hereof, the Company desires to repurchase the Intracel Stock and all rights associated therewith and acquire the assets transferred to the Company pursuant to the Asset Transfer Agreement (the "Transferred Assets"), and Intracel is willing to transfer the Intracel Stock and the Transferred Assets in exchange for shares of Series B Preferred Stock of the Company, par value \$.0001 per share,

eighty percent (80%) of which will be issued to Intracel and twenty percent (20%) of which will be issued to the Tranche 12 Lenders (including the Intracel Investment Members) in accordance with the Transfer Obligation, and such other rights and obligations contained in the Transaction Agreements and the Third Amendment.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are acknowledged, the parties agree as follows:

1. Exchange.

(a) All shares of Intracel Stock shall be repurchased by the Company and the Transferred Assets shall be transferred to the Company pursuant to the Asset Transfer Agreement in exchange for (i) the Company's issuance of 3,451,766 shares of Series B Preferred Stock (the "Exchange Shares") to the Holders, in the proportions set forth on Schedule A hereto, and (ii) any such other shares of stock that are issued in the future pursuant to the Investors' Rights Agreement (the "Milestone and Anti-Dilution Shares") and as a dividend or distribution with regard to such Exchange Shares or Milestone and Anti-Dilution Shares. Upon the acceptance of the Third Amendment for record by the Secretary of State, (i) the shares of Intracel Stock shall be deemed to be repurchased by the Company and Intracel shall have no further rights with respect to the shares of Intracel Stock, and any certificates representing shares of Intracel Stock shall be deemed to be converted into only the right to receive the Exchange Shares, and (ii) the Exchange Shares shall have been validly issued by the Company.

(b) Intracel shall transfer all stock certificates representing shares of Intracel Stock, duly executed in blank. If such stock certificates shall have been lost, stolen or destroyed, Intracel may tender in lieu thereof (i) an affidavit of that fact by Intracel, and (ii) an indemnity agreement against any claim that may be made against the Company with respect to such lost, stolen or destroyed certificates, each in form and substance reasonably satisfactory to the Company.

(c) Company's issuance of the Exchange Shares to the each of the Tranche 12 Lenders shall be conditioned upon the applicable Tranche 12 Lender entering into the Investor Rights Agreement and the Registration Rights Agreement.

(d) Each of the Holders acknowledges that, in satisfaction of the Transfer Obligation, twenty percent (20%) of the Exchange Shares (in the aggregate) are being issued directly to the Tranche 12 Lenders. In addition, Intracel Investment, which is one of the Tranche 12 Lenders, and the Intracel Investment Members acknowledge that the Exchanges Shares to which Intracel Investment is entitled pursuant to the Transfer Obligation are being issued directly to the Intracel Investment Members in accordance with their respective interests in such entity.

2. Representations, Warranties and Covenants of the Holder. Each Holder hereby represents and warrants to the Company, and covenants for the benefit of the Company, as follows:

(a) In the case of Intracel, Holder is a corporation organized, validly existing, and in good standing under the laws of the State of Delaware;

(b) This Agreement has been duly authorized, validly executed, and delivered by the Holder and is a valid and binding agreement and obligation of the Holder, enforceable against the Holder in accordance with its terms, subject to limitations on enforcement by general principles of equity and by bankruptcy or other laws affecting the enforcement of creditors' rights generally. The Holder has full power and authority to execute and deliver the Agreement and the other agreements and documents contemplated hereby and to perform its obligations hereunder and thereunder;

(c) In the case of Intracel, Holder has not transferred, and owns, beneficially and of record, good and marketable title to, the shares of Intracel Stock free and clear of all liens or other encumbrances;

(d) This Agreement is made with the Holder in reliance upon the Holder's representation to the Company, which by the Holder's execution of this Agreement, the Holder hereby confirms, that the Exchange Shares to be acquired by the Holder will be acquired for investment for the Holder's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof, and that the Holder has no present intention of selling, granting any participation in, or otherwise distributing the same. By executing this Agreement, the Holder further represents that the Holder does not presently have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participations to such person or to any third person, with respect to any of the Exchange Shares.

(e) The Holder has had an opportunity to discuss the Company's business, management, and financial affairs with the Company's management and the Holder has received all additional information regarding the Company that it has requested, if any.

(f) The Holder understands that the Exchange Shares have not been, and will not be, registered under the Securities Act of 1933, as amended (the "Securities Act"), by reason of a specific exemption from the registration provisions of the Securities Act which depends upon, among other things, the bona fide nature of the investment intent and the accuracy of the Holder's representations as expressed herein. The Holder understands that the Exchange Shares are "restricted securities" under applicable U.S. federal and state securities laws and that, pursuant to these laws, the Holder must hold the Exchange Shares indefinitely unless they are registered with the Securities and Exchange Commission and qualified by state authorities, or an exemption from such registration and qualification requirements is available. The Holder acknowledges that the Company has no obligation to register or qualify the Exchange Shares for resale except as set forth in the Registration Rights Agreement. The Holder further acknowledges that if an exemption from registration or qualification is available, it may be conditioned on various requirements including, but not limited to, the time and manner of sale, the holding period for the Exchange Shares, and on requirements relating to the Company which are outside of the Holder's control, and which the Company is under no obligation and may not be able to satisfy.

(g) The Holder understands that no public market now exists for the Exchange Shares, and that the Company has made no assurances that a public market will ever exist for the Shares.

(h) The Holder understands that the Exchange Shares and any securities issued in respect of or exchange for the Exchange Shares, shall bear the legends set forth in, or required by, the other Transaction Agreements and any legend required by the securities laws of any state to the extent such laws are applicable to the Exchange Shares represented by the certificate so legended.

(i) The Holder is an "accredited investor" as defined in Rule 501(a) of Regulation D promulgated under the Securities Act.

(j) Neither the Holder, nor any of its officers, directors, employees, agents, stockholders or partners has either directly or indirectly, including through a broker or finder (a) engaged in any general solicitation, or (b) published any advertisement in connection with the offer and sale of the Exchange Shares.

(k) The Holder's principal place of business is identified on Schedule A hereto.

3. **Representations, Warranties and Covenants of the Company.** The Company represents and warrants to the Holders, and covenants for the benefit of the Holders, as follows:

(a) The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware;

(b) At the time the Exchange Shares are issued pursuant to this Agreement, (i) the Exchange Shares and the issuance thereof will have been duly authorized by all necessary corporate action, and (ii) the Exchange Shares will be validly issued, fully paid and nonassessable, free and clear of all liens, encumbrances and rights of refusal of any kind, except as set forth in the Third Amendment and the Transaction Agreements;

(c) This Agreement has been duly authorized, validly executed, and delivered on behalf of the Company and is a valid and binding agreement and obligation of the Company enforceable against the Company in accordance with its terms, subject to limitations on enforcement by general principles of equity and by bankruptcy or other laws affecting the enforcement of creditors' rights generally. The Company has full power and authority to execute and deliver the Agreement and the other agreements and documents contemplated hereby, and will have, at the time the Exchange Shares are issued pursuant to this Agreement, full power and authority to perform its obligations hereunder and thereunder.

4. **Governing Law.** This Agreement and any controversy arising out of or relating to this Agreement shall be governed by and construed in accordance with the General Corporation Law of the State of Delaware as to matters within the scope thereof, and as to all other matters shall be governed by and construed in accordance with the internal laws of State of Delaware, without regard to conflict of law principles that would result in the application of any law other than the law of the State of Delaware.

5. **Notices.** Any notices or other communications required or permitted hereunder shall be sent in the same manner as is contemplated by the Investor Rights Agreement


6. **Entire Agreement.** This Agreement, the Investor Rights Agreement, the Asset Transfer Agreement and the Registration Rights Agreement constitute the entire understanding and agreement of the parties with respect to the subject matter hereof and supersedes all prior and/or contemporaneous oral or written proposals or agreements relating thereto all of which are merged herein. This Agreement may not be amended or any provision hereof waived in whole or in part, except by a written amendment signed by both of the parties hereto.

7. **Counterparts.** This Agreement may be executed in any number of counterparts each of which, when executed, shall be deemed to be an original and all of which together shall be deemed to be one and the same instrument.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement to be effective as of the date first written above.

VACCINOGEN, INC.

By: 
Name: Michael G. Hanna, Jr.
Title: President and Chief Executive Officer

INTRACEL HOLDINGS CORPORATION

By: _____
Name: Daniel Kane
Title: Chairman of the Board of Directors

IN WITNESS WHEREOF, the parties hereto have executed this Agreement to be effective as of the date first written above.

VACCINOGEN, INC.

By: _____
Name: Michael G. Hanna, Jr.
Title: President and Chief Executive Officer

INTRACEL HOLDINGS CORPORATION

By: Daniel Kane
Name: Daniel Kane
Title: Chairman of the Board of Directors

TRANCHE 12 LENDERS

DANIEL FITZGERALD

Name: Daniel Fitzgerald

INTRACEL INVESTMENT LLC

By: Daniel Kane
Name: Daniel Kane
Title: managing member

DUBLIND PARTNERS

By: _____
Name: _____
Title: _____

K. SCHMIDT

Name: _____

ALLIANCE EQUITIES

By: _____
Name: _____
Title: _____

CHARLES LINDSAY

Name: Charles Lindsay

CURTIS PARTNERSHIP

By: _____
Name: _____

TRANCHE 12 LENDERS

DANIEL FITZGERALD

Name: Daniel Fitzgerald

INTRACEL INVESTMENT LLC

By: _____
Name:
Title:

DUBLIND PARTNERS

By: _____
Name:
Title:

K. SCHMIDT

Kenneth M. Schmidt
Name: _____

ALLIANCE EQUITIES

By: _____
Name:
Title:

CHARLES LINDSAY

Name: Charles Lindsay

CURTIS PARTNERSHIP

By: _____
Name:

Signature Page to Stock Exchange Agreement

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TRANCHE 12 LENDERS

DANIEL FITZGERALD

Name: Daniel Fitzgerald

INTRACEL INVESTMENT LLC

By: _____
Name: _____
Title: _____

DUBLIND PARTNERS

By: _____
Name: _____
Title: _____

K. SCHMIDT

Name: _____


ALLIANCE EQUITIES

By: _____
Name: _____
Title: _____

CHARLES LINDSAY

Name: Charles Lindsay

CURTIS PARTNERSHIP

By: 
Name: Alan Curtis
Title: Managing General Partner

Signature Page to Stock Exchange Agreement

Title:

CHARLES DUBROFF

Name: _____

3V SOURCEONE

By: _____

Name:

Title:

Signature Page to Stock Exchange Agreement

MEMBERS OF INTRACEL INVESTMENT LLC

Alan Cohen

Name: Alan Cohen

Daniel Kane



Name: Daniel Kane

Albert Nassi

Name: Albert Nassi

SQ Ventures

By: _____
Name:
Title:

Chris Huber

Name: Chris Huber

MEMBERS OF INTRACEL INVESTMENT LLC

Alan Cohen


Name: Alan Cohen

Daniel Kane

Name: Daniel Kane

Albert Nassi

Name: Albert Nassi

SQ Ventures

By: _____
Name:
Title:

Chris Huber

Name: Chris Huber

Signature Page to Stock Exchange Agreement

MEMBERS OF INTRACEL INVESTMENT LLC

Alan Cohen

Name: Alan Cohen

Daniel Kane

Name: Daniel Kane

Albert Nassi



Name: Albert Nassi

SQ Ventures

By: _____

Name:

Title:

Chris Huber



Name: Chris Huber

MEMBERS OF INTRACEL INVESTMENT LLC

Alan Cohen

Name: Alan Cohen

Daniel Kane

Name: Daniel Kane

Albert Nassi

Name: Albert Nassi

SQ Ventures

By: *David L. Seidenberg*
Name: DAVID L. SEIDENBERG
Title: MANAGING MEMBER.

Chris Huber

Name: Chris Huber

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Schedule A

<u>Holder</u>	<u>Address</u>	<u>Percentage</u>
Intracel Holdings Corporation		80.00%
Dan Fitzgerald		3.35%
Intracel Investment LLC		0.00%
Alan Cohen		4.65%
Daniel Kane		4.65%
Albert Nassi		0.67%
SQ Ventures		0.16%
Chris Huber		0.13%
Dublind Partners		1.03%
K. Schmidt		0.59%
Alliance Equities		0.47%
Charles Lindsay		0.24%
Curtis Partnership		0.74%
Charles Dubroff		2.59%
3V Sourceone		0.73%

EXHIBIT 10.1

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

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Consent of Independent Registered Public Accounting Firm

Vaccinogen, Inc.
Frederick, Maryland

We hereby consent to the use in the Offering Circular constituting a part of this Regulation A Offering Statement of our report dated April 22, 2013, relating to the consolidated financial statements of Vaccinogen, Inc., which is contained in that Offering Circular. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

We also consent to the reference to us under the caption "Experts" in the Offering Circular.

BDO USA, LLP

BDO USA, LLP
Bethesda, Maryland

June 17, 2013

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EXHIBIT 11.1

VACCINOGEN, INC. – FORM 1-A Regulation A Offering Statement

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**INDEGLIA
& CARNEY**
A Professional Corporation

EXHIBIT 11.1

E-Mail: greg@indegliacarney.com

June 17, 2013

Vaccinogen, Inc.
5300 Westview Drive, Suite 406
Frederick, MD 21703

Re: Vaccinogen, Inc./Offering Statement on Form 1-A

Ladies and Gentlemen:

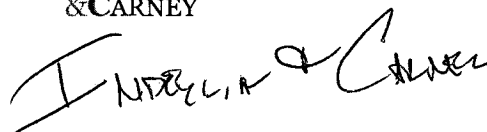
We are special counsel to Vaccinogen, Inc., a Delaware corporation (the "Company"). In connection with the preparation and filing of a Form 1-A Offering Statement with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Offering Statement"), relating to the sale by the Company of up to 400,000 shares (the "Shares") of Common Stock, par value \$0.0001 per share (the "Common Stock") of the Company described in the Offering Statement. We have examined the originals or copies of corporate records, certificates of public officials and officers of the Company and other instruments relating to the authorization and issuance of such shares of Common Stock as we have deemed relevant and necessary for the opinion hereinafter expressed.

On the basis of the foregoing, we are of the opinion that the Shares to be offered and sold by the Company are duly authorized, validly issued, fully paid, and non-assessable.

We hereby consent to the use of this opinion as an exhibit to the Offering Statement and further consent to the use of our name wherever appearing in the Registration Statement, including the prospectuses constituting a part thereof and any amendment thereto.

Very truly yours,

INDEGLIA
& CARNEY



INDEGLIA & CARNEY

A Professional Corporation

1062

E-Mail: greg@indegliacarney.com

June 17, 2013

SEC
Mail Processing
Section

JUN 18 2013

Washington DC
404

VIA OVERNIGHT DELIVERY

SEC Headquarters
100 F. Street, NE
Washington, DC 20549

Re: **Vaccinogen, Inc.**
Regulation A Offering Statement on Form 1-A

Ladies and Gentlemen:

On behalf of Vaccinogen, Inc. ("**Vaccinogen**"), we are furnishing for filing Vaccinogen's Regulation A Offering Statement on Form 1-A (the "**Offering Statement**") covering the offering of up to 180,000 shares of Vaccinogen's common stock at a fixed price of \$5.60 per share. We are filing seven (7) copies of the Offering Statement with exhibits. One copy of the Offering Statement is an original, manually signed copy, which has been signed by Vaccinogen's Chief Executive Officer, acting Chief Financial Officer and a majority of the directors of Vaccinogen.

Please direct all comments and inquiries regarding this filing to me at (949) 679-9560.

Very truly yours,

INDEGLIA
& CARNEY



Gregory R. Carney

Enclosures

From: (949) 861-3321
 Greg Carney
 INDEGLIA & CARNEY
 1900 MAIN STREET
 SUITE 300
 IRVINE, CA 92614

Origin ID: DTHA



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Dims: 12 X 10 X 15 IN

Delivery Address Bar Code



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SEC Headquarters
 100 F Street, NE

Washington, DC 20549

Ref # 10182.01
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 PO #
 Dept #

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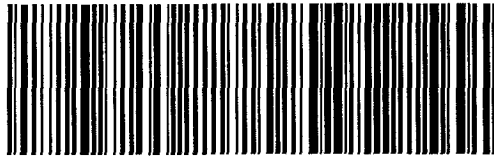
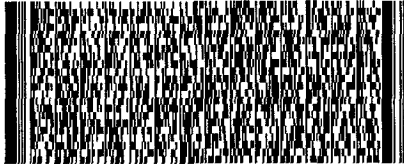
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From: (949) 861-3321
 Greg Carney
 INDEGLIA & CARNEY
 1900 MAIN STREET
 SUITE 300
 IRVINE, CA 92614

Origin ID: DTHA



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Ship Date: 17 JUN 13
 ActWgt: 28.0 LB
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 Dims: 12 X 10 X 15 IN

Delivery Address Bar Code



SHIP TO: (202) 942-8088
SEC HEADQUARTERS
SEC Headquarters
100 F Street, NE

BILL SENDER

Ref # 10182.01
 Invoice #
 PO #
 Dept #

Washington, DC 20549

TUE - 18 JUN 3:00P
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2 of 2

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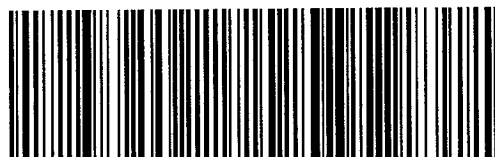
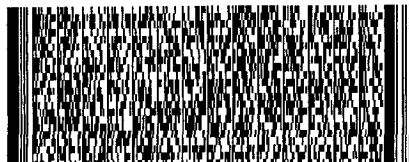
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