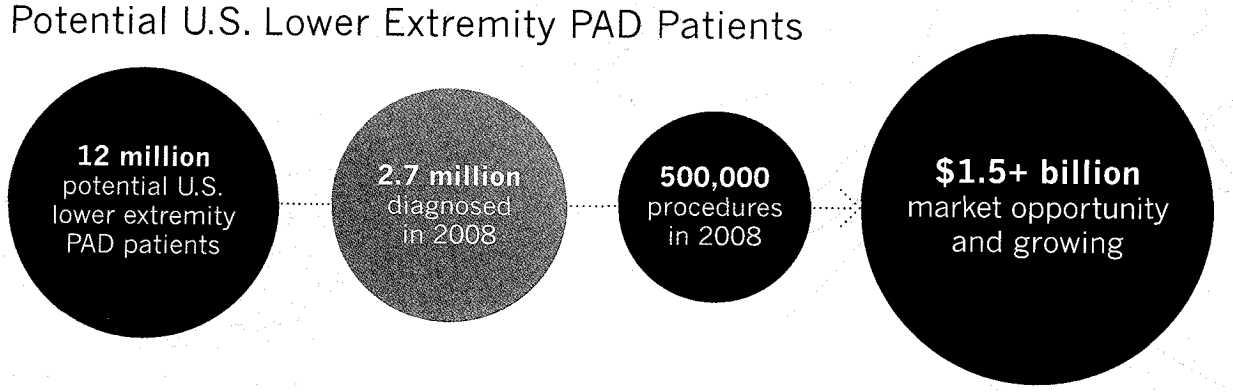
CSI
CARDIOVASCULAR SYSTEMS INC.

Peripheral Arterial Disease: An Underserved Growing Market

PAD is a common circulatory disease in which plaque deposits build up on the walls of blood vessels, reducing blood flow. PAD affects more than 12 percent of the U.S. population over age 65. Plaque ranges from soft to calcified. Calcified and fibrotic deposits are the most difficult to treat with traditional interventional procedures and are more common in older patients. With risk factors such as diabetes and obesity on the rise, the prevalence of PAD is growing at double-digit rates.

triumph over PAD™

Potential U.S. Lower Extremity PAD Patients



The Diamondback 360° PAD System: Redefining the Interventional Treatment of Vascular Disease

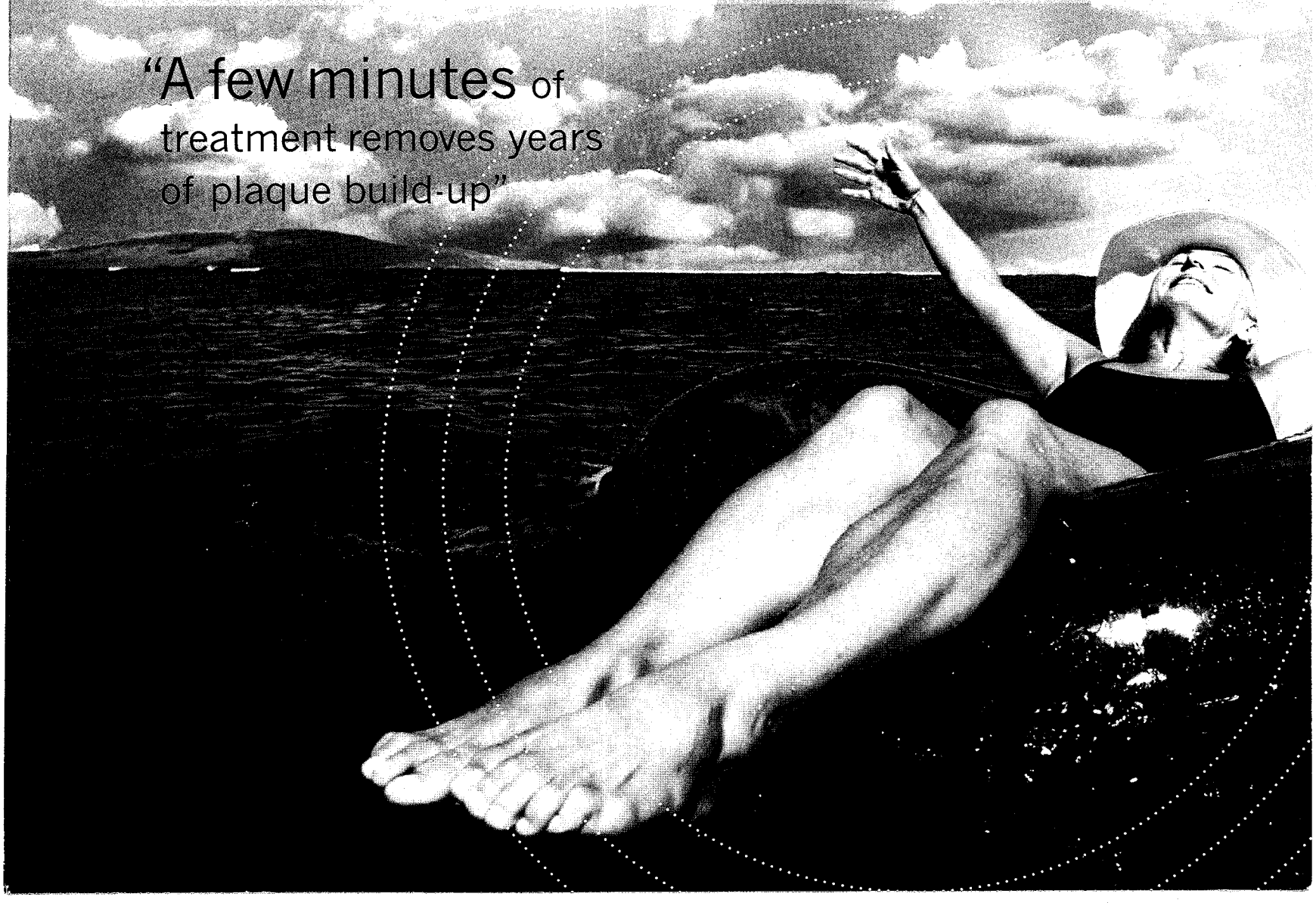
CSI's Diamondback 360° PAD System is capable of treating plaque in arteries throughout the leg. The system uses a small diamond-coated "crown" attached to a flexible drive shaft. When rotated at various speeds, the crown orbits to modify or remove hardened plaque that limits blood flow — in just a few minutes of treatment time. The Diamondback 360° provides stand-alone treatment and facilitates adjunctive lower-pressure balloon inflations, and/or stenting, when indicated, to restore vessel lumens and increase blood flow.

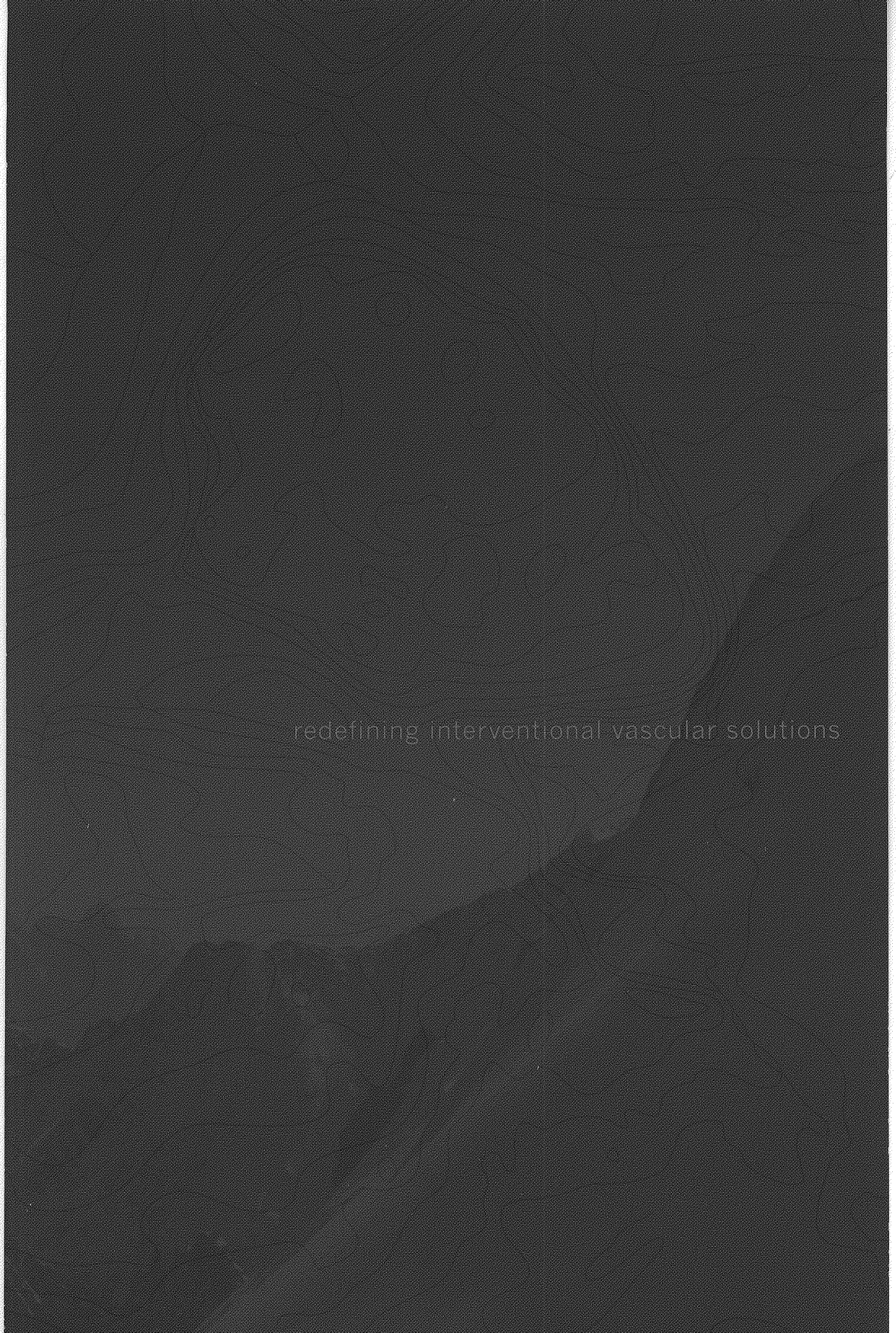
The Diamondback 360° provides several advancements over other PAD treatment options, including stents, balloon angioplasty and other plaque removal devices.

The system offers:

- Differential sanding for removal of plaque while preserving normal vessel tissue;
- Removal of fibrotic and calcified plaque — above, behind and below the knee;
- Rapid lesion treatment time;
- Single device insertion convenience for physicians; and
- The ability to treat multiple vessels and plaque morphologies with one device.

CSI continually introduces enhancements to the Diamondback 360°. In addition, the company has an expanding portfolio of complementary products, through its Viper line and distribution agreements.




redefining interventional vascular solutions

company profile

Cardiovascular Systems, Inc.

(CSI; Nasdaq: CSII), a medical device company based in St. Paul, Minn., develops and commercializes interventional treatment systems for vascular disease. CSI provides physicians with the solutions they need to help the nearly 12 million Americans suffering from peripheral arterial disease (PAD) — blockages in leg arteries — to walk without pain, remain independent and avoid the potential catastrophic risk of limb amputation. CSI's primary product, the Diamondback 360® PAD System, is a minimally invasive catheter system capable of treating a broad range of plaque obstructions in leg arteries.

At Cardiovascular Systems, we:

- Develop and continually improve devices to treat vascular disease;
- Focus our efforts where our technology offers the opportunity to provide clinically superior cost-effective therapy;
- Collaborate with physicians to acquire useful data and evidence through clinical trials, to improve our devices, and to ensure optimal clinical usage through education;
- Expand our ability to offer better solutions for patients with vascular disease; and
- Strive for commercial success, both in terms of revenue growth and profitability.

Our ultimate measure of success will be the results experienced by patients.

Fredrikson
& BYRON, P.A.

January 26, 2010

Via Federal Express

Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 20549

Re: Cardiovascular Systems, Inc. - File No. 000-52082
2009 Annual Report to Stockholders

Ladies/Gentlemen:

This letter relates to the Annual Report of Cardiovascular Systems, Inc. (the "Company"). Pursuant to Rule 14a-3(c) under the Securities Exchange Act of 1934 (the "Act"), enclosed solely for the information of the Commission are seven copies of the Company's Annual Report to Shareholders for the fiscal year ended June 30, 2009, which Report was mailed to shareholders on or about January 26, 2010.

Please acknowledge receipt of this letter and the enclosures by signing or stamping the enclosed "Receipt Copy" of this letter and returning it to the undersigned in the self-addressed, stamped envelope provided.

Sincerely,

FREDRIKSON & BYRON, P.A.

By Mary Beth Marti
Mary Beth Marti

Direct Dial: 612.492.7781
Email: mbmarti@fredlaw.com

Enclosures

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CARDIOVASCULAR SYSTEMS, INC.

651 Campus Drive
St. Paul, Minnesota 55112
Telephone: 877-CSI-0360

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
To Be Held on March 5, 2010

Dear Stockholder:

You are cordially invited to attend the Annual Meeting of Stockholders (the "Annual Meeting") of Cardiovascular Systems, Inc. (the "Company") on Friday, March 5, 2010, at 12:00 p.m. (Central Time) at the Company's offices, located at 651 Campus Drive, St. Paul, Minnesota 55112; for the following purposes:

1. To elect as Class I directors to hold office until the Fiscal 2012 Annual Meeting of Stockholders, the following two nominees recommended by the Board of Directors: Edward Brown and Augustine Lawlor.

2. To ratify the appointment of PricewaterhouseCoopers LLP as the independent registered public accounting firm of the Company for its fiscal year ending June 30, 2010.

3. To conduct any other business properly brought before the meeting.

These items of business are more fully described in the proxy statement accompanying this Notice.

The record date for the Annual Meeting is January 12, 2010. Only stockholders of record at the close of business on that date may vote at the meeting or any adjournment thereof.

By Order of the Board of Directors,

Sincerely,

David L. Martin
President, Chief Executive Officer and Director

St. Paul, Minnesota
January 26, 2010

You are cordially invited to attend the meeting in person. Whether or not you expect to attend the meeting, please vote your shares. You may submit your proxy card or voting instruction card by completing, signing, dating and mailing your proxy card or voting instruction card in the envelope provided or vote over the telephone or the Internet as instructed in the proxy statement. Any stockholder attending the meeting may vote in person, even if you already returned a proxy card or voting instruction card. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE STOCKHOLDER MEETING TO BE HELD ON MARCH 5, 2010:

The Proxy Statement and Fiscal 2009 Annual Report to Stockholders are available at http://www.csi360proxy.com

TABLE OF CONTENTS

CARDIOVASCULAR SYSTEMS, INC.

651 Campus Drive
St. Paul, Minnesota 55112
Telephone: 877-CSI-0360

PROXY STATEMENT
FOR THE ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON MARCH 5, 2010

QUESTIONS AND ANSWERS ABOUT THIS PROXY MATERIAL AND VOTING

Why am I receiving these materials?

We have sent you this proxy statement and the enclosed proxy card because the Board of Directors of Cardiovascular Systems, Inc. (the "Company") is soliciting your proxy to vote at the Annual Meeting of Stockholders (the "Annual Meeting") to be held at the Company's offices, located at 651 Campus Drive, St. Paul, Minnesota 55112, on Friday, March 5, 2010, at 12:00 p.m. (Central Time), including any adjournments or postponements of the Annual Meeting. You are invited to attend the Annual Meeting to vote on the proposals described in this proxy statement. However, you do not need to attend the meeting to vote your shares. Instead, you may simply complete, sign and return the enclosed proxy card, or follow the instructions below to submit your proxy over the telephone or on the Internet.

The Company intends to mail this proxy statement and accompanying proxy card on or about January 26, 2010, to all stockholders of record entitled to vote at the Annual Meeting.

Who can vote at the Annual Meeting?

Only stockholders of record at the close of business on January 12, 2010, will be entitled to vote at the Annual Meeting. On the record date, there were 14,832,698 shares of common stock of the Company outstanding and entitled to vote.

Stockholder of Record: Shares Registered in Your Name

If on January 12, 2010, your shares were registered directly in your name with the Company's transfer agent, American Stock Transfer & Trust Company, then you are a stockholder of record. As a stockholder of record, you may vote in person at the meeting or vote by proxy. Whether or not you plan to attend the meeting, we urge you to vote your shares by completing, signing, dating and mailing your proxy card in the envelope provided or vote by proxy over the telephone or on the Internet as instructed below to ensure your vote is counted

Beneficial Owner: Shares Registered in the Name of a Broker or Bank

If on January 12, 2010, your shares were held, not in your name, but rather in an account at a brokerage firm, bank, dealer, or other similar organization, then you are the beneficial owner of shares held in "street name" and these proxy materials are being forwarded to you by that organization. The organization holding your account is considered to be the stockholder of record for purposes of voting at the Annual Meeting. As a beneficial owner, you have the right to direct your broker or other agent regarding how to vote the shares in your account. You are also invited to attend the Annual Meeting. However, since you are not the stockholder of record, you may not vote your shares in person at the meeting unless you request and obtain a valid proxy from your broker or other agent.

What am I voting on?

There are two matters scheduled for a vote:

- Election as Class I directors to hold office until the Fiscal 2012 Annual Meeting of Stockholders, the following two nominees recommended by the Board of Directors: Edward Brown and Augustine Lawlor; and
- Ratification of the selection by the Audit Committee of the Company's Board of Directors of PricewaterhouseCoopers LLP as independent auditors of the Company for its fiscal year ending June 30, 2010.

How do I vote?

You may either vote "For" all the nominees to the Board of Directors or you may "Withhold" your vote for any nominee you specify. For the ratification of the Audit Committee's selection of PricewaterhouseCoopers LLP as the Company's independent registered public accounting firm for the fiscal year ending June 30, 2010, you may vote "For" or "Against" or abstain from voting. The procedures for voting are as follows:

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record, you may vote in person at the Annual Meeting, vote by proxy using the enclosed proxy card, vote by proxy over the telephone, or vote by proxy on the Internet. Whether or not you plan to attend the meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the meeting and vote in person even if you have already voted by proxy.

- To vote in person, come to the Annual Meeting and we will give you a ballot when you arrive. If you would like directions to our offices, please call 877-CSI-0360.
- To vote using the proxy card, simply complete, sign and date the enclosed proxy card and return it promptly in the envelope provided. If you return your signed proxy card to us before the Annual Meeting, we will vote your shares as you direct.
- To vote over the telephone, dial toll-free 1-800-690-6903 using a touch-tone phone and follow the recorded instructions. Please have the enclosed proxy card available. Your vote must be received by 11:59 PM Eastern Time (10:59 PM Central Time) on March 4, 2010, to be counted.
- To vote on the Internet, go to *http://www.voteproxy.com* to complete an electronic proxy card. Please have the enclosed proxy card available. Your vote must be received by 11:59 PM Eastern Time (10:59 PM Central Time) on March 4, 2010, to be counted.

We are providing Internet proxy voting to allow you to vote your shares online, with procedures designed to ensure the authenticity and correctness of your proxy vote instructions. However, please be aware that you must bear any costs associated with your Internet access, such as usage charges from Internet access providers and telephone companies.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner of shares registered in the name of your broker, bank, or other agent, you should have received a proxy card and voting instructions with these proxy materials from that organization rather than from us. Simply complete and mail the proxy card to ensure that your vote is submitted to your broker or bank. Alternatively, you may vote by telephone or over the Internet as instructed by your broker or bank. To vote in person at the Annual Meeting, you must obtain a valid proxy from your broker, bank, or other agent. Follow the instructions from your broker or bank included with these proxy materials, or contact your broker or bank to request a proxy form.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you own as of January 12, 2010.

What if I return a proxy card but do not make specific choices?

If you return a signed and dated proxy card without marking any voting selections, your shares will be voted "For" the election of the nominees for director and "For" the ratification of the selection of Pricewaterhouse-Cooopers LLP as the Company's independent auditors for the fiscal year ending June 30, 2010. If any other matter is properly presented at the meeting, your proxyholder (one of the individuals named on your proxy card) will vote your shares using its best judgment.

Who is paying for this proxy solicitation?

The Company will pay for the entire cost of soliciting proxies. In addition to these mailed proxy materials, our directors and employees may also solicit proxies in person, by telephone, or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting proxies. We may also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

What does it mean if I receive more than one proxy card?

If you receive more than one proxy card, your shares are registered in more than one name or are registered in different accounts. Please complete, sign and return **each** proxy card to ensure that all of your shares are voted.

Are proxy materials available on the Internet?

This proxy statement and our Fiscal 2009 Annual Report to Stockholders are available at *http://www.csi360proxy.com.*

Can I change my vote after submitting my proxy?

Yes. You can revoke your proxy at any time before the final vote at the meeting. If you are the record holder of your shares, you may revoke your proxy in any one of three ways:

- You may submit another properly completed proxy card with a later date.
- You may send a timely written notice that you are revoking your proxy to our Secretary at 651 Campus Drive, St. Paul, Minnesota, 55112.
- You may attend the Annual Meeting and vote in person. Simply attending the meeting will not, by itself, revoke your proxy.

If your shares are held by your broker or bank as a nominee or agent, you should follow the instructions provided by your broker or bank.

How are votes counted?

Votes will be counted by the inspector of election appointed for the meeting, who will separately count "For" and "Withhold" and, with respect to proposals other than the election of directors, "Against" votes, abstentions and broker non-votes. Abstentions will be counted towards the vote total for each proposal, and will have the same effect as "Against" votes. Broker non-votes have no effect and will not be counted towards the vote total for any proposal.

What are "broker non-votes"?

Broker non-votes occur when a beneficial owner of shares held in "street name" does not give instructions to the broker or nominee holding the shares as to how to vote on matters deemed "non-routine." Generally, if shares are held in street name, the beneficial owner of the shares is entitled to give voting instructions to the broker or nominee holding the shares. If the beneficial owner does not provide voting instructions, the broker or nominee can still vote

the shares with respect to matters that are considered to be "routine," but not with respect to "non-routine" matters. Under the rules and interpretations of the New York Stock Exchange, the ratification of the appointment of PricewaterhouseCoopers LLP as the Company's independent registered public accounting firm is currently considered a routine matter. The election of directors is currently considered a non-routine matter under the rules of the New York Stock Exchange.

How many votes are needed to approve each proposal?

- For Proposal 1, the election of Class I directors, who are elected by a plurality, the two nominees receiving the most "For" votes (from the holders of shares present in person or represented by proxy and entitled to vote on the election of directors) will be elected. Only votes "For" or "Withheld" will affect the outcome.

- To be approved, Proposal 2, ratification of the selection of PricewaterhouseCoopers LLP as our independent auditors for the fiscal year ending June 30, 2010, must receive a "For" vote from the majority of shares present and entitled to vote either in person or by proxy. If you "Abstain" from voting, it will have the same effect as an "Against" vote. Broker non-votes will have no effect.

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if stockholders holding at least a majority of the outstanding shares are present at the meeting in person or represented by proxy. On the record date, there were 14,832,698 shares outstanding and entitled to vote. Thus, the holders of 7,416,350 shares must be present in person or represented by proxy at the meeting to have a quorum.

Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you vote in person at the meeting. Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, the holders of a majority of shares present at the meeting in person or represented by proxy, or the chairman of the meeting, may adjourn the meeting to another date.

How can I find out the results of the voting at the Annual Meeting?

Preliminary voting results will be announced at the Annual Meeting. Final voting results will be published in a Current Report on Form 8-K, which we will file within four business days after the meeting.

When are stockholder proposals due for the Fiscal 2010 Annual Meeting?

Any appropriate proposal submitted by a stockholder and intended to be presented at the Fiscal 2010 Annual Meeting must be submitted in writing to our Secretary at 651 Campus Drive, St. Paul, Minnesota, 55112, and received no later than September 27, 2010, to be includable in the Company's proxy statement and related proxy for the Fiscal 2010 Annual Meeting. A stockholder proposal will need to comply with the Securities and Exchange Commission regulations under Rule 14a-8 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), regarding the inclusion of stockholder proposals in company-sponsored proxy materials. Although our Board of Directors will consider stockholder proposals, we reserve the right to omit from our proxy statement, or to vote against, stockholder proposals that we are not required to include under the Exchange Act, including Rule 14a-8. Additionally, pursuant to the advance notice provisions of the Company's Bylaws, as authorized by applicable state law, in order for stockholders to present director nominations or other business at the Fiscal 2010 Annual Meeting, a stockholder's notice of such nomination or other business must be received by our Secretary at the same address no earlier than the close of business on November 5, 2010, and no later than the close of business on December 5, 2010, and must be in a form that complies with the requirements set forth in the Company's Bylaws. You are advised to review the Company's Bylaws for these requirements.

EXPLANATORY NOTE

We were incorporated as Replidyne, Inc. in Delaware in 2000. On February 25, 2009, Replidyne, Inc. completed its business combination with Cardiovascular Systems, Inc., a Minnesota corporation ("CSI-MN"), in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated as of November 3, 2008, by and among Replidyne, Responder Merger Sub, Inc., a wholly-owned subsidiary of Replidyne ("Merger Sub"), and CSI-MN (the "Merger Agreement"). Pursuant to the Merger Agreement, Merger Sub merged with and into CSI-MN, with CSI-MN continuing after the merger as the surviving corporation and a wholly-owned subsidiary of Replidyne. At the effective time of the merger, Replidyne changed its name to Cardiovascular Systems, Inc. ("CSI") and CSI-MN changed its name to CSI Minnesota, Inc. Following the merger of Merger Sub with CSI-MN, CSI-MN merged with and into CSI, with CSI continuing after the merger as the surviving corporation. These transactions are referred to herein as the "merger." Immediately following the effective time of the merger, former CSI-MN stockholders owned approximately 80.2% of the outstanding common stock of CSI, and Replidyne stockholders owned approximately 19.8% of the outstanding common stock of CSI. Unless the context otherwise requires or as otherwise stated herein, all references herein to the "Company," "CSI," "we," "us" and "our" refer to CSI-MN prior to the completion of the merger and to CSI following the completion of the merger and the name change, and all references to "Replidyne" refer to Replidyne prior to the completion of the merger and the name change.

PROPOSAL 1

ELECTION OF DIRECTORS

The Board of Directors is divided into three classes, with each class serving staggered three-year terms. Vacancies on the Board of Directors may be filled only by persons elected by a majority of the remaining directors. A director elected by the Board of Directors to fill a vacancy in a class, including vacancies created by an increase in the number of directors, shall serve for the remainder of the full term of that class and until the director's successor is elected and qualified.

The term of office of the Class I directors expires at the Annual Meeting. The Governance/Nominating Committee recommended to the Board, and the Board has set the number of Class I directors at two and has nominated Edward Brown and Augustine Lawlor for re-election at the Annual Meeting. Messrs. Brown and Lawlor have been members of CSI's Board of Directors since February 2009, following the merger. Prior to being members of CSI's Board of Directors, Messrs. Brown and Lawlor served as members of Replidyne's Board of Directors since May 2007 and March 2002, respectively. If elected at the Annual Meeting, each of these nominees would serve until the Fiscal 2012 Annual Meeting and until his successor is elected and has qualified, or, if sooner, until the director's death, resignation or removal. It is the Company's policy to invite directors and nominees for director to attend the annual meeting. CSI-MN and Replidyne did not hold annual meetings for their fiscal years ended June 30, 2008, and December 31, 2008, respectively.

Directors are elected by a plurality of the votes of the holders of shares present in person or represented by proxy and entitled to vote on the election of directors at the annual meeting at which a quorum is present. The two nominees receiving the most "For" votes (among votes properly cast in person or by proxy) will be elected. If no contrary indication is made, shares represented by executed proxies will be voted "For" the election of the two nominees named above or, if any nominee becomes unavailable for election as a result of an unexpected occurrence, "For" the election of a substitute nominee designated by our Board of Directors. Each nominee has agreed to serve as a director if elected, and we have no reason to believe that any nominee will be unable to serve.

The following is a brief biography for each nominee for Class I director and each person whose term of office as a Class II or Class III director will continue after the Annual Meeting.

Name	Age(1)	Position
Directors:		
Class I Directors:		
Edward Brown(2)(3)	46	Director
Augustine Lawlor(4)	53	Director
Class II Directors:		
Brent G. Blackey(4)	51	Director
John H. Friedman(3)	56	Director
Roger J. Howe, Ph.D.	66	Director
Class III Directors:		
Geoffrey O. Hartzler, M.D.(2)(4)	63	Director
David L. Martin	45	President, Chief Executive Officer and Director
Glen D. Nelson, M.D.(2)	72	Chairman

(1) As of the date of this proxy statement.

(2) Member of the Governance/Nominating Committee.

(3) Member of the Compensation Committee.

(4) Member of the Audit Committee.

NOMINEES FOR ELECTION FOR A THREE-YEAR TERM EXPIRING AT THE FISCAL 2012 ANNUAL MEETING

Edward Brown. Mr. Brown has been a member of CSI's Board of Directors since February 2009. Mr. Brown was a member of Replidyne's Board of Directors from May 2007 to February 2009. Mr. Brown is a Managing Director at TPG Growth. Prior to joining TPG, Mr. Brown was a Managing Director and co-founder of HealthCare Investment Partners, a private equity fund focused on healthcare investments from June 2004 to June 2007. Before HealthCare Investment Partners, Mr. Brown was a Managing Director in the healthcare group of Credit Suisse Group where he led the firm's West Coast healthcare effort and was one of the senior partners responsible for the firm's global life sciences practice. Mr. Brown also serves on the board of directors of Angiotech Pharmaceuticals Inc., a publicly-held company.

Augustine Lawlor. Mr. Lawlor has been a member of CSI's Board of Directors since February 2009. He was a member of Replidyne's Board of Directors from March 2002 to February 2009. Mr. Lawlor is the Managing Partner of HealthCare Ventures LLC, where he was a Managing Director from 2000 to 2007. Mr. Lawlor was previously Chief Operating Officer of LeukoSite, Inc. and has also served as a management consultant with KPMG Peat Marwick. Mr. Lawlor is a member of the board of directors of Human Genome Sciences, Inc., a publicly-held company.

THE BOARD OF DIRECTORS RECOMMENDS
A VOTE IN FAVOR OF EACH NOMINEE NAMED ABOVE.

DIRECTORS CONTINUING IN OFFICE UNTIL THE FISCAL 2010 ANNUAL MEETING

Brent G. Blackey. Mr. Blackey has been a member of CSI's Board of Directors since 2007. Since 2004, Mr. Blackey has served as the President and Chief Operating Officer for Holiday Companies. Between 2002 and 2004, Mr. Blackey was a Senior Partner at the accounting firm of Ernst & Young LLP. Prior to 2002, Mr. Blackey served most recently as a Senior Partner at the accounting firm of Arthur Andersen LLP. Mr. Blackey serves on the board of directors of Datalink Corporation, a publicly-held company, and also serves on the Board of Overseers for the University of Minnesota, Carlson School of Management.

John H. Friedman. Mr. Friedman has been a member of CSI's Board of Directors since 2006. Mr. Friedman is the Managing Partner of the Easton Capital Investment Group, a private equity firm. Prior to founding Easton Capital, Mr. Friedman was the founder and Managing General Partner of Security Pacific Capital Investors, a $200-million private equity fund geared towards expansion financings and recapitalizations, from 1989 to 1992. Prior to founding Security Pacific, Mr. Friedman was a Managing Director and Partner at E.M. Warburg, Pincus & Co., Inc. from 1981 to 1989. Mr. Friedman has also served as a Managing Director of Atrium Capital Corp., an investment firm. Mr. Friedman currently serves on the board of directors of Trellis Bioscience, Inc., Xoft, Inc., Genetix Pharmaceuticals, Inc., PlaySpan Inc., Promedior, Inc., Experimed Bioscience, Inc. and Ventralfix, Inc., all of which are privately-held companies.

Roger J. Howe, Ph.D. Dr. Howe has been a member of CSI's Board of Directors since 2002. Over the past 22 years, Dr. Howe has founded four successful start-up ventures in the technology, information systems and medical products business sectors. Dr. Howe served as Chairman of the Board of Reliant Technologies, Inc., a medical laser company, from 2001 to 2005. From 1996 to 2001, Dr. Howe served as Chief Executive Officer of Metrix Communications, Inc., a business-to-business software development company that he founded. Dr. Howe currently is the Executive Chairman of Stemedica Cell Technologies, Inc. and serves on the boards of directors of Stemedica and BioPharma Scientific, Inc., both of which are privately-held companies.

DIRECTORS CONTINUING IN OFFICE UNTIL THE FISCAL 2011 ANNUAL MEETING

Glen D. Nelson, M.D. Dr. Nelson has been a member of CSI's Board of Directors since 2003 and CSI's Chairman since August 2007. Since 2002, Dr. Nelson has been Chairman of GDN Holdings, LLC, a private investment company of which he is the sole owner. Dr. Nelson was a member of the board of directors of Medtronic, Inc. from 1980 until 2002. Dr. Nelson joined Medtronic as Executive Vice President in 1986, and he was elected Vice Chairman in 1988, a position held until his retirement in 2002. Before joining Medtronic, Dr. Nelson practiced surgery from 1969 to 1986. Dr. Nelson was Chairman of the Board and Chief Executive Officer of American MedCenters, Inc. from 1984 to 1986. Dr. Nelson also was Chairman, President and Chief Executive Officer of the Park Nicollet Medical Center, a large multi-specialty group practice in Minneapolis, from 1975 to 1986. Dr. Nelson serves as a director for 13 private companies.

Geoffrey O. Hartzler, M.D. Dr. Hartzler has been a member of CSI's Board of Directors since 2002. Dr. Hartzler commenced practice as a cardiologist in 1974, serving from 1980 to 1995 as a Consulting Cardiologist with the Mid America Heart Institute of St. Luke's Hospital in Kansas City, Missouri. Dr. Hartzler has co-founded three medical product companies, including Ventritex Inc. Most recently, he served as Chairman of the Board of IntraLuminal Therapeutics, Inc. from 1997 to 2004 and Vice Chairman from 2004 to 2006. Dr. Hartzler has also served as a consultant or director to over a dozen business entities, some of which are medical device companies.

David L. Martin. Mr. Martin has been CSI's President and Chief Executive Officer since February 2007, and a director since August 2006. Mr. Martin also served as CSI's Interim Chief Financial Officer from January 2008 to April 2008. Prior to joining CSI, Mr. Martin was Chief Operating Officer of FoxHollow Technologies, Inc. from January 2004 to February 2006, Executive Vice President of Sales and Marketing of FoxHollow Technologies, Inc. from January 2003 to January 2004, Vice President of Global Sales and International Operations at CardioVention Inc. from October 2001 to May 2002, Vice President of Global Sales for RITA Medical Systems, Inc. from March 2000 to October 2001 and Director of U.S. Sales, Cardiac Surgery for Guidant Corporation from September 1999 to March 2000. Mr. Martin has also held sales and sales management positions for The Procter & Gamble Company and Boston Scientific Corporation.

INFORMATION REGARDING THE BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

INDEPENDENCE OF THE BOARD OF DIRECTORS

As required under the Nasdaq Stock Market ("Nasdaq") listing standards, a majority of the members of a listed company's Board of Directors must qualify as "independent," as affirmatively determined by the Board of Directors. The Board of Directors consults with the Company's counsel to ensure that the Board of Directors'

determinations are consistent with relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in pertinent listing standards of the Nasdaq, as in effect from time to time.

Consistent with these considerations, after review of all relevant transactions or relationships between each director, or any of his family members, and the Company, its senior management and its independent registered public accounting firm, the Board of Directors, following the determination of the Governance/Nominating Committee, has affirmatively determined that the following directors are independent directors within the meaning of the applicable Nasdaq listing standards: Gary M. Petrucci, Messrs. Blackey, Brown, Friedman, and Lawlor, and Drs. Hartzler, Howe and Nelson. In making this determination, the Board of Directors found that none of these directors or nominees for director had a material or other disqualifying relationship with the Company. Mr. Martin, the Company's President and Chief Executive Officer, is not an independent director by virtue of his employment with the Company.

CODE OF ETHICS AND BUSINESS CONDUCT

The Company has adopted the Cardiovascular Systems, Inc. Code of Ethics and Business Conduct that applies to all officers, directors and employees, which was last amended on July 16, 2009. We intend to maintain the highest standards of ethical business practices and compliance with all laws and regulations applicable to our business. The Code of Ethics and Business Conduct, as amended, was filed as Exhibit 14.1 to the Company's Annual Report on Form 10-K filed with the SEC on September 29, 2009.

STOCKHOLDER COMMUNICATIONS WITH THE BOARD OF DIRECTORS

Stockholders may communicate directly with the Board of Directors. All communications should be directed to the Company's Secretary at the address below and should prominently indicate on the outside of the envelope that it is intended for the Board of Directors or for non-management directors, and the Company's Secretary will forward the communications to all specified directors. If no director is specified, the communication will be forwarded to the entire Board. Stockholder communications to the Board should be sent to:

Cardiovascular Systems, Inc. Board of Directors
Attention: Secretary
651 Campus Drive
St. Paul, MN 55112

MEETINGS OF THE BOARD OF DIRECTORS

The Board of Directors met nine times during the fiscal year ended June 30, 2009. All directors attended at least 75% of the aggregate of the meetings of the Board of Directors and of the committees on which they served and which were held during the period for which they were directors or committee members. In addition, the directors often communicate informally to discuss the affairs of the Company and, when appropriate, take formal action by written consent, in accordance with the Company's charter and bylaws and Delaware law.

INFORMATION REGARDING COMMITTEES OF THE BOARD OF DIRECTORS

During the fiscal year ended June 30, 2009, the Board of Directors maintained three committees: the Audit Committee, the Compensation Committee and the Governance/Nominating Committee. The following table provides membership and meeting information for fiscal 2009 for each of the committees of the Board of Directors in existence through June 30, 2009:

Name	Audit	Compensation	Governance/ Nominating
Brent G. Blackey	X*		
Edward Brown		X	X
John H. Friedman		X*	
Geoffrey O. Hartzler, M.D.	X		X*
Roger J. Howe, Ph.D.			
Augustine Lawlor	X		
David L. Martin			
Glen D. Nelson, M.D.			X
Gary M. Petrucci	_	X	_
Total meetings in fiscal 2009	4	6	0

* Committee Chairperson

Below is a description of each committee of the Board of Directors as such committees are presently constituted. The Board of Directors has determined that each current member of each committee meets the applicable SEC and Nasdaq rules and regulations regarding "independence" and that each member is free of any relationship that would impair his individual exercise of independent judgment with regard to the Company.

Audit Committee

The Audit Committee of the Board of Directors was established by the Board of Directors in accordance with Section 3(a)(58)(A) of the Exchange Act to oversee the Company's corporate accounting and financial reporting processes and audits of its financial statements. The Board of Directors has adopted an Audit Committee Charter, which was last amended on April 29, 2009, and is available on our website at *http://www.csi360.com* in the "Investors" section. The functions of this Audit Committee include, among other things:

- serving as an independent and objective party to monitor the Company's financial reporting process and internal control system;
- coordinating, reviewing and appraising the audit efforts of the Company's independent auditors and management and, to the extent the Company has an internal auditing or similar department or persons performing the functions of such department ("internal auditing department" or "internal auditors"), the internal auditing department; and
- communicating directly with the independent auditors, the financial and senior management, the internal auditing department, and the Board of Directors regarding the matters related to the committee's responsibilities and duties.

Both our independent registered public accounting firm and management periodically meet privately with our Audit Committee.

As of January 15, 2010, our Audit Committee consists of Mr. Blackey, as the chairperson, and Dr. Hartzler and Mr. Lawlor. Each Audit Committee member is a non-employee director of our Board. The Board of Directors reviews the Nasdaq listing standards definition of independence for Audit Committee members on an annual basis and has determined that all current members of the Company's Audit Committee are independent (as independence is currently defined in Rule 4350(d)(2)(A)(i) and (ii) of the Nasdaq listing standards). The Audit Committee met four times in fiscal 2009.

Audit Committee Financial Expert

The Board has determined that Mr. Blackey is the "audit committee financial expert," as defined in Item 407(d)(5)(ii) of Regulation S-K under the Securities Act of 1933, as amended. As noted above, Mr. Blackey is independent within the meaning of Nasdaq's listing standards. A description of Mr. Blackey's experience is set forth above under "Directors Continuing in Office until the Fiscal 2010 Annual Meeting." The designation of Mr. Blackey as the audit committee financial expert does not impose on Mr. Blackey any duties, obligations or liability that are greater than the duties, obligations and liability imposed on Mr. Blackey as a member of the Audit Committee and the Board of Directors in the absence of such designation or identification.

Report of the Audit Committee of the Board of Directors

In accordance with its written charter, the Audit Committee assists the Board of Directors with fulfilling its oversight responsibility regarding the quality and integrity of the accounting, auditing and financial reporting practices of the Company. In discharging its oversight responsibilities regarding the audit process, the Audit Committee:

(1) reviewed and discussed the audited financial statements with management and the independent auditors;

(2) discussed with the independent auditors the material required to be discussed by Statement on Auditing Standards No. 61, as amended (AICPA, Professional Standards, Vol. 1, AU section 380), as adopted by the Public Company Accounting Oversight Board in Rule 3200T, with and without management present; and

(3) received the written disclosures and the letter from the independent auditors required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant's communications with the audit committee concerning independence, and discussed with the independent accountant the independent accountant's independence.

Based upon the review and discussions referred to above, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2009, as filed with the Securities and Exchange Commission.

Brent G. Blackey, Chair
Geoffrey O. Hartzler, M.D.
Augustine Lawlor

Compensation Committee

As of January 15, 2010, our Compensation Committee consists of three directors, Mr. Friedman, as the chairperson, and Messrs. Brown and Petrucci. All members of the Company's Compensation Committee were appointed by the Board of Directors, and consist entirely of directors who are "outside directors" for purposes of Section 162(m) of the Internal Revenue Code of 1986, as amended (the "Code"), "non-employee directors" for purposes of Rule 16b-3 under the Exchange Act and "independent" as independence is currently defined in Rule 4200(a)(15) of the Nasdaq listing standards. In fiscal 2009, the Compensation Committee met four times.

The Board of Directors has adopted a Compensation Committee Charter, which was last amended on February 25, 2009, and is available on our website at *http://www.csi360.com* in the "Investors" section. The functions of the Compensation Committee include, among other things:

- recommending the annual compensation packages, including base salaries, incentive compensation, deferred compensation and stock-based compensation, for our executive officers;
- recommending cash incentive compensation plans and deferred compensation plans for our executive officers, including corporate performance objectives;

- administering our stock incentive plans, and subject to board approval in the case of executive officers, approving grants of stock, stock options and other equity awards under such plans;
- reviewing and making recommendations regarding the terms of employment agreements for our executive officers;
- developing, recommending, reviewing and administering compensation plans for members of the Board of Directors;
- reviewing and discussing the compensation discussion and analysis with management; and
- preparing any compensation committee report required to be included in the annual proxy statement.

All compensation committee recommendations regarding compensation to be paid or awarded to our executive officers are subject to approval by a majority of the independent directors serving on the Board of Directors.

Our Chief Executive Officer may not be present during any board or compensation committee voting or deliberations with respect to his compensation. Our Chief Executive Officer may, however, be present during any other voting or deliberations regarding compensation of our other executive officers, but may not vote on such items of business. In fiscal 2009, the Compensation Committee met without the Chief Executive Officer present to review and determine the compensation of the Chief Executive Officer, with input from him and the Compensation Committee's third-party compensation consultant on his annual salary and cash incentive compensation for the year. For all other executive officers in fiscal 2009, the Compensation Committee met with the Chief Executive Officer to consider and determine executive compensation, based on recommendations by the Chief Executive Officer and the Compensation Committee's third-party compensation consultant.

Compensation Committee Interlocks and Insider Participation

As indicated above, as of January 15, 2010, the Compensation Committee consists of Messrs. Friedman, Brown and Petrucci. No member of the Compensation Committee has ever been an executive officer or employee of ours. None of our officers currently serves, or has served during the last completed year, on the Compensation Committee or the Board of Directors of any other entity that has one or more officers serving as a member of the Board of Directors or the Compensation Committee.

Governance/Nominating Committee

As of January 15, 2010, our Governance/Nominating Committee consists of three directors, Dr. Hartzler, as the chairperson, and Mr. Brown and Dr. Nelson. All members of the Company's Governance/Nominating Committee are "outside directors" for purposes of Section 162(m) of the Code and "non-employee directors" for purposes of Rule 16b-3 under the Exchange Act and "independent" as independence is currently defined in Rule 4200(a)(15) of the Nasdaq listing standards. The Governance/Nominating Committee did not meet during the fiscal 2009.

The Board of Directors has adopted a Governance/Nominating Committee Charter, which was last amended on April 29, 2009, and is available on our website at *http://www.csi360.com* in the "Investors" section. The functions of the Governance/Nominating Committee include, among other things:

- developing, reviewing and revising as appropriate, for adoption by the Board, the Principles of Corporate Governance by which the Company and the Board shall be governed;
- developing, reviewing and revising as appropriate, for adoption by the Board, the codes of ethical conduct and legal compliance by which the Company and its directors, officers, employees and agents will be governed;
- developing and recommending to the Board policies and processes designed to provide for effective and efficient governance, including but not limited to: policies for evaluation of the Board and the chairperson; the director nomination process, including board membership criteria, minimum qualifications for directors, and stockholder nomination of directors; stockholder-director communications; stockholder communication regarding stockholder proposals; director attendance at annual meetings; and succession planning for the Chief Executive Officer, the Board chairperson and other Board leaders;

- annually reviewing the composition of the Board against a matrix of skills and characteristics focused on the governance and business needs and requirements of the Company, and reporting to the Board regarding suggested changes in Board composition which will guide the committee in the selection, recruitment and recommendation of directors;

- meeting as necessary to consider the nomination and screening of Board member candidates and evaluating the performance of the Board and its members; and

- overseeing organization, membership and evaluation of Board committees and committee members, and making appropriate recommendations to the Board with respect to such matters.

The Governance/Nominating Committee believes that candidates for director should have certain minimum qualifications, including the ability to read and understand basic financial statements, being over 21 years of age and having the highest personal integrity and ethics. The Governance/Nominating Committee also intends to consider such factors as possessing relevant expertise upon which to be able to offer advice and guidance to management, having sufficient time to devote to the affairs of the Company, demonstrated excellence in his or her field, having the ability to exercise sound business judgment and having the commitment to rigorously represent the long-term interests of the Company's stockholders. Candidates for director nominees are reviewed in the context of the current composition of the Board of Directors, the operating requirements of the Company and the long-term interests of stockholders. In conducting this assessment, the Governance/Nominating Committee considers diversity, age, skills, and such other factors as it deems appropriate given the current needs of the Board of Directors and the Company, to maintain a balance of knowledge, experience and capability. In the case of incumbent directors whose terms of office are set to expire, the Governance/Nominating Committee reviews these directors' overall service to the Company during their terms, including the number of meetings attended, level of participation, quality of performance, and any other relationships and transactions that might impair the directors' independence. In the case of new director candidates, the Governance/Nominating Committee also determines whether the nominee is independent for Nasdaq purposes, which determination is based upon applicable Nasdaq listing standards, applicable SEC rules and regulations and the advice of counsel, if necessary. The Governance/Nominating Committee conducts any appropriate and necessary inquiries into the backgrounds and qualifications of possible candidates after considering the function and needs of the Board of Directors. The Governance/Nominating Committee meets to discuss and consider the candidates' qualifications and then selects a nominee by majority vote.

The Governance/Nominating Committee will consider director candidates recommended by stockholders. The Governance/Nominating Committee does not intend to alter the manner in which it evaluates candidates, including the minimum criteria set forth above, based on whether or not the candidate was recommended by a stockholder. To nominate a director for the Fiscal 2010 Annual Meeting, stockholders must submit such nomination in writing to our Secretary at 651 Campus Drive, St. Paul, Minnesota 55112 not later than the close of business on December 5, 2010, nor earlier than the close of business on November 5, 2010; provided, however, that in the event that the date of the Fiscal 2010 Annual Meeting changes more than 30 days from March 5, 2011, the written proposal must be delivered not earlier than the close of business on the 120th day prior to the date of the Fiscal 2010 Annual Meeting and not later than the close of business on the later of the 90th day prior to the date of the Fiscal 2010 Annual Meeting or the 10th day following the day on which public announcement of the date of the Fiscal 2010 Annual Meeting is first made by the Company. You are advised to review the Company's Bylaws for requirements relating to director nominees.

VOTE REQUIRED

The Board recommends that you vote **"FOR"** each of the nominees to the Board set forth in this Proposal 1. Under applicable Delaware law, the election of each nominee requires the affirmative vote by a plurality of the voting power of the shares present and entitled to vote on the election of directors at the Annual Meeting at which a quorum is present.

PROPOSAL 2

RATIFICATION OF SELECTION OF INDEPENDENT AUDITORS

The Audit Committee has selected PricewaterhouseCoopers LLP as the Company's independent auditors for the fiscal year ending June 30, 2010, and has further directed that management submit the selection of independent auditors for ratification by the stockholders at the Annual Meeting. PricewaterhouseCoopers LLP also served as the Company's independent auditors for the fiscal year ended June 30, 2009. Representatives of PricewaterhouseCoopers LLP are expected to be present at the Annual Meeting. They will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

Neither the Company's Bylaws nor other governing documents or law require stockholder ratification of the selection of PricewaterhouseCoopers LLP as the Company's independent auditors. However, the Audit Committee of the Board of Directors is submitting the selection of PricewaterhouseCoopers LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the Audit Committee of the Board of Directors will reconsider whether or not to retain that firm. Even if the selection is ratified, the Audit Committee of the Board of Directors in its discretion may direct the appointment of different independent auditors at any time during the year if they determine that such a change would be in the best interests of the Company and its stockholders.

The affirmative vote of the holders of a majority of the shares present in person or represented by proxy and entitled to vote at the Annual Meeting will be required to ratify the selection of PricewaterhouseCoopers LLP. Abstentions will be counted toward the tabulation of votes cast on proposals presented to the stockholders and will have the same effect as negative votes. Broker non-votes are counted towards a quorum, but are not counted for any purpose in determining whether this matter has been approved.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

In connection with the audit of the fiscal 2009 financial statements, the Company entered into an engagement agreement with PricewaterhouseCoopers LLP which sets forth the terms by which PricewaterhouseCoopers LLP will perform audit services for the Company.

The following table represents aggregate fees billed to the Company for the fiscal years ended June 30, 2009, and June 30, 2008, by PricewaterhouseCoopers LLP, the Company's principal accountant. All fees described below were approved by the Audit Committee.

	2009	2008
Audit Fees(1)	$631,270	$1,129,226
Audit-Related Fees(2)	175,500	—
Tax Fees(3)	112,373	45,685
All Other Fees(4)	11,000	1,500
	$930,143	$1,176,411

(1) Audit Fees were principally for services rendered for the audit and/or review of our consolidated financial statements. Also includes fees for services rendered in connection with the filing of registration statements and other documents with the SEC, the issuance of accountant consents and comfort letters and assistance in responding to SEC comment letters.

(2) Audit-Related Fees were for due diligence and consulting related to the merger.

(3) Tax Fees consist of fees billed in the indicated year for professional services performed by PricewaterhouseCoopers LLP with respect to tax compliance, tax advice and tax planning.

(4) All Other Fees consist of fees billed in the indicated year for other permissible work performed by PricewaterhouseCoopers LLP that is not included within the above category descriptions.

PRE-APPROVAL POLICIES AND PROCEDURES

Pursuant to its written charter, the Audit Committee is required to pre-approve the audit and non-audit services performed by our independent auditors. The Audit Committee may not approve non-audit services prohibited by applicable regulations of the Securities and Exchange Commission if such services are to be provided contemporaneously while serving as independent auditors. The Audit Committee has delegated authority to the Chairman of the Audit Committee to approve the commencement of permissible non-audit related services to be performed by the independent auditors and the fees payable for such services, provided that the full Audit Committee subsequently ratifies and approves all such services. The Audit Committee has determined that the rendering of the services other than audit services by PricewaterhouseCoopers LLP is compatible with maintaining the principal accountant's independence.

VOTE REQUIRED

The Board recommends that you vote **"FOR"** the ratification of PricewaterhouseCoopers LLP as the independent registered public accounting firm for the Company. Ratification of PricewaterhouseCoopers LLP requires the affirmative vote of a majority of the shares present in person or represented by proxy and entitled to vote at the Annual Meeting.

EXECUTIVE COMPENSATION

Overview

This section describes the material elements of the compensation awarded to, earned by or paid to our Chief Executive Officer and the two most highly compensated executive officers as determined in accordance with SEC rules, who are collectively referred to as the "named executive officers." This discussion focuses primarily on the fiscal 2009 information contained in the Summary Compensation Table and related footnotes following this section but also describes compensation actions taken during other periods to the extent it enhances the understanding of our executive compensation disclosure for fiscal 2009. For example, although our fiscal year ends on June 30 of each year, our compensation programs were previously established on a calendar year basis and, therefore, the discussion below includes information regarding periods before the fiscal year. To align the period for our compensation program with the June 30th fiscal year end, our Board adopted an interim compensation plan for the six-month period ended June 30, 2009. Beginning with fiscal 2010, compensation programs for executive officers are established on a fiscal year basis.

Executive Compensation Components for Fiscal 2009

Base Salary

Base salary is an important element of our executive compensation program as it provides executives with a fixed, regular, non-contingent earnings stream to support annual living and other expenses. As a component of total compensation, we generally set base salaries at levels believed to attract and retain an experienced management team that will successfully grow our business and create stockholder value. We also utilize base salaries to reward individual performance and contributions to our overall business objectives, but seek to do so in a manner that does not detract from the executives' incentive to realize additional compensation through our performance-based compensation programs, stock options and restricted stock awards.

The Compensation Committee reviews the Chief Executive Officer's salary annually at the end of each calendar year. The Compensation Committee may recommend adjustments to the Chief Executive Officer's base salary based upon the Compensation Committee's review of his current base salary, incentive cash compensation and equity-based compensation, as well as his performance and comparative market data. The Compensation Committee reviews other executives' salaries throughout the year, with input from the Chief Executive Officer. The Compensation Committee may recommend adjustments to other executive's base salary based upon the Chief Executive Officer's recommendation and the reviewed executive's responsibilities, experience and performance, as well as comparative market data.

In utilizing comparative data, the Compensation Committee seeks to recommend salaries for each executive at a level that is appropriate after giving consideration to experience for the relevant position and the executive's performance. The Compensation Committee reviews performance for both our company (based upon achievement of strategic initiatives) and each individual executive. Based upon these factors, the Compensation Committee may recommend adjustments to base salaries to better align individual compensation with comparative market compensation, to provide merit-based increases based upon individual or company achievement, or to account for changes in roles and responsibilities.

Our employment agreement with David L. Martin, President and Chief Executive Officer, provides that his annual base salary for calendar 2008 would be $370,000 and that his base salary for subsequent years is to be determined by the Board. We offered this amount as part of a package of compensation for Mr. Martin sufficient to induce him to join our company. The compensation package for Mr. Martin is designed to provide annual cash compensation, including both base salary and potential cash incentive earnings, sufficient to induce him to join CSI combined with the equity compensation described below, although less than the annual cash compensation Mr. Martin received at his previous employer and, we believe, less than Mr. Martin likely could have obtained with other, more established employers. The equity portion of Mr. Martin's compensation package, as described below, was designed to provide sufficient potential growth in value to induce Mr. Martin to join us despite the lower cash compensation. Based on the recommendation of the Compensation Committee, the Board approved an increase to Mr. Martin's base salary rate from $370,000 to $395,000 for calendar 2009.

Laurence Betterley commenced employment as our Chief Financial Officer on April 14, 2008. Our employment agreement with Mr. Betterley provides that his initial annual base salary was $225,000, and that his base salary is to be subsequently adjusted at the discretion of the Board. This base salary was negotiated with Mr. Betterley as part of the compensation package offered to induce him to join our company. The base salary was set at an amount that we believed to be generally consistent with the base salaries paid by other growth stage medical device companies for similar positions. Effective January 1, 2009, the Board approved an increase to Mr. Betterley's base salary rate from $225,000 to $250,000.

Scott Kraus had been a senior sales director and was promoted to Vice President of Sales in April 2009, at which time the Board set his annual base salary at $190,000. Mr. Kraus is a party to our standard employment agreement, which was not amended in connection with his promotion.

Annual Cash Incentive Compensation for the First and Second Quarters of Fiscal 2009

In February 2008, the Board adopted an incentive plan for calendar 2008, which included the first two quarters of fiscal 2009. The plan conditioned the payment of incentive compensation to all participants, including Mr. Martin, upon our achievement of revenue and gross margin financial goals. In contrast to previous incentive plans, none of our executive officers was subject to individual goals. Under the plan, our executive officers were eligible to receive annual cash incentive compensation with target bonus levels ranging from 50%, in the case of the President and Chief Executive Officer, to 40%, in the case of other executive officers, of their yearly base salaries. Participants were eligible to earn 50% to 150% of their target bonus amount depending upon our performance relative to the plan criteria; however, in the event of extraordinary revenue performance above the goals set by the Board, all of the executive officers could receive incentive payments greater than 150% of their targets based upon a formula established by the Board, with no maximum payout set under the plan. The plan provided for two separate payments to the participants, the first based upon company performance in the first six months of calendar 2008 and the second based upon company performance in the entire calendar year. The plan criteria were the same for all of the named executive officers. The plan was designed to reward the executive officers for achieving and surpassing the financial goals set by the Compensation Committee and Board of Directors. We believed that the financial goals were aggressive but attainable if our performance was strong.

Annual Cash Incentive Compensation for the Third and Fourth Quarters of Fiscal 2009

We adopted a new cash incentive plan for the six months ended June 30, 2009. As described above, our prior cash incentive plans established calendar year incentive periods, and the purpose of the new cash incentive plan was to align the period for our compensation program with our June 30th fiscal year end.

The plan conditioned the payment of incentive compensation to all participants upon our achievement of revenue and adjusted EBITDA financial goals. Target bonus amounts were split evenly between these two goals. None of the executive officers were subject to individual goals under this plan. No plan participant received a bonus unless we achieved certain minimum adjusted EBITDA goals. Target bonus levels as a percentage of base salary for the six-month period were 75% for the President and Chief Executive Officer and 50% for the other named executive officers. Depending upon our performance against the goals, participants were eligible to earn 50% to 200% of their target bonus amount for adjusted EBITDA and 50% to 150% of their target bonus amount for revenue; however, in the event of extraordinary revenue performance above the goals set by the Board, the participants could receive incentive payments greater than 150% of their targets for the revenue goal based upon a formula established by the Board, with no maximum payout set under the plan. The plan criteria were the same for all of the executive officers. The plan was designed to reward the executive officers for achieving and surpassing the financial goals set by the Compensation Committee and Board. In addition to incentives under this plan, Scott Kraus, Vice President of Sales, received monthly sales commissions based on our monthly revenue.

Stock Option and Other Equity Awards

Consistent with our compensation philosophies related to performance-based compensation, long-term stockholder value creation and alignment of executive interests with those of stockholders, we make periodic grants of long-term compensation in the form of stock options or restricted stock to our executive officers and across our organization generally.

Stock options provide executive officers with the opportunity to purchase common stock at a price fixed on the grant date regardless of future market price. A stock option becomes valuable only if the common stock price increases above the option exercise price and the holder of the option remains employed during the period required for the option shares to vest. This provides an incentive for an option holder to remain employed by us. In addition, stock options link a significant portion of an employee's compensation to stockholders' interests by providing an incentive to achieve corporate goals and increase stockholder value. Under our 2007 Equity Incentive Plan, we may also make grants of restricted stock awards, restricted stock units, performance share awards, performance unit awards and stock appreciation rights to officers and other employees. We adopted this plan to give us flexibility in the types of awards that we could grant to our executive officers and other employees.

The Compensation Committee consulted Lyons, Benenson & Company, a third-party compensation consulting firm, to determine competitive levels of stock option grants for officers in comparable positions with companies of comparable size and stage of development. Based on the guidance from Lyons and the experience of the members of the Compensation Committee, the Compensation Committee considered the relative ownership levels of each officer based upon levels before and after becoming a public company and has identified target levels of option grants for each of our officers. Furthermore, the Compensation Committee considered each named executive officer's role and responsibilities, ability to influence long term value creation, retention and incentive factors and current stock and option holdings at the time of grant, as well as individual performance, which is a significant factor in the Compensation Committee's decisions. We granted options in fiscal 2008 to each of our officers to bring the total number of shares subject to options held by each such officer, including shares subject to any previously granted options, closer to the levels identified by the Compensation Committee as appropriate for that position, while also taking into consideration performance of the officer and the limitations imposed by the number of shares authorized for issuance under our stock option plans. The Compensation Committee did not consider specific performance objectives but generally concluded that each of our executive officers had performed well and deserved option grants intended to move their equity ownership closer to the Compensation Committee's targeted levels.

In December 2007, we granted stock options to our executive officers at the time, including to Mr. Martin to purchase 242,625 shares of common stock, which were to vest in full on the third anniversary of the grant date, provided that we had completed an initial public offering or a change of control transaction before December 31, 2008. We included this vesting restriction on the grants of stock options in order to provide additional incentives to our executive officers to complete an initial public offering or complete an alternate transaction that would provide stockholder liquidity. In fiscal 2009, these options were amended by the Board of Directors to provide for vesting of

50% of the options on the first anniversary, and 50% of the options on the second anniversary, of the closing of the merger, which occurred on February 25, 2009.

From time to time we may make one-time grants of stock options or restricted stock to recognize promotion or consistent long-term contribution, or for specific incentive purposes. On March 2, 2009, following the closing of the merger, the Board granted 32,350 stock options to Mr. Martin and 14,234 to Mr. Betterley, which provide for vesting of 50% of the options on the first anniversary, and 50% of the options on the second anniversary of the grant date, and on April 29, 2009, following his promotion to Vice President of Sales, the Board granted Mr. Kraus 20,000 shares of restricted stock, which shares vest ratably in three annual installments, beginning on April 29, 2010.

We also grant stock options or other equity awards to executive officers in connection with their initial employment. In connection with our negotiations with Mr. Betterley to join us as Chief Financial Officer, we provided Mr. Betterley with a grant of 48,525 shares of restricted stock under the 2007 Equity Incentive Plan, which shares vest ratably in three annual installments, beginning on April 14, 2009. We have made grants of restricted stock to various employees under the 2007 Equity Incentive Plan. In the future, we intend to grant restricted stock instead of, or in addition to, stock options to our executive officers, because we can typically use fewer shares from our available pool in making restricted stock grants. We believe that restricted stock is as effective as stock options in motivating performance of employees.

Although we do not have any detailed stock retention or ownership guidelines, the Board and Compensation Committee generally encourage our executives to have a financial stake in our company in order to align the interests of our stockholders and management, and view stock options as a means of furthering this goal. We will continue to evaluate whether to implement a stock ownership policy for our officers and directors.

Limited Perquisites; Other Benefits

It is generally our policy not to extend significant perquisites to our executives beyond those that are available to our employees generally, such as 401(k) plan, health, dental and life insurance benefits. We have given car allowances to certain named executives and moving allowances for executives who have relocated. We also pay for housing, commuting and related costs for our Chief Executive Officer.

Potential Payments Upon Termination or Change of Control

The majority of our stock option agreements provide that in the event of a change of control (the sale by us of substantially all of our assets and the consequent discontinuance of our business, or in the event of a merger, exchange or liquidation), the vesting of all options will accelerate and the options will be immediately exercisable as of the effective date of the change of control. Our restricted stock agreements also provide for the acceleration of vesting as of the effective date of a change of control.

Under the terms of the employment agreement with Mr. Martin, we will pay Mr. Martin an amount equal to 12 months of his then current base salary and 12 months of our share of health insurance costs if Mr. Martin is terminated by us without cause, or if Mr. Martin terminates his employment for good reason, as defined in the agreement. "Good reason" is generally defined as the assignment of job responsibilities to Mr. Martin that are not comparable in status or responsibility to those job responsibilities set forth in the agreement, a reduction in Mr. Martin's base salary without his consent, or our failure to provide Mr. Martin the benefits promised under his employment agreement. As a condition to receiving his severance benefits, Mr. Martin is required to execute a release of claims agreement in favor of us.

Under the terms of the employment agreement with Mr. Betterley, we will pay Mr. Betterley an amount equal to 12 months of his then current base salary and 12 months of our share of health insurance costs if Mr. Betterley is terminated by us without cause, or if Mr. Betterley terminates his employment for good reason, as defined in the agreement. "Good reason" is generally defined as the assignment of job responsibilities to Mr. Betterley that are not comparable in status or responsibility to those job responsibilities set forth in the agreement, a reduction in Mr. Betterley's base salary without his consent, or our failure to provide Mr. Betterley the benefits promised under

his employment agreement. As a condition to receiving his severance benefits, Mr. Betterley is required to execute a release of claims agreement in favor of us.

We agreed to the payment of severance benefits in the employment agreements with Mr. Martin and Mr. Betterley because they each requested these severance benefits and we believed it was necessary to provide such benefits in order to obtain the agreements with them. We believe that other medical device manufacturers provide substantially similar severance benefits to their senior officers and that providing severance benefits to our Chief Executive Officer and Chief Financial Officer is therefore consistent with market practices. We believe that such benefits are reasonable to protect the Chief Executive Officer and Chief Financial Officer against the risk of having no compensation while they seek alternative employment following a termination of their employment with us.

Summary Compensation Table for Fiscal 2009 and 2008

The following table provides information regarding the compensation earned during the fiscal years ended June 30, 2009, and June 30, 2008, by each of the named executive officers.

Name and Principal Position	Fiscal Year	Salary ($)	Stock Awards(1) ($)	Option Awards(1) ($)	Nonequity Incentive Plan Compensation ($)	All Other Compensation ($)	Total ($)
David L. Martin	2009	395,000	—	713,376	308,108	97,849	1,514,333
President and Chief Executive Officer(2)	2008	377,629	—	314,552	215,928	94,427	1,002,536
Laurence L. Betterley	2009	236,731	278,462	16,108	127,473	—	658,774
Chief Financial Officer(3)	2008	43,269	64,011	—	23,438	—	130,718
Scott Kraus	2009	158,923	165,417	22,640	242,723	7,800	589,703
Vice President of Sales(4)							

(1) The value of stock awards and options in this table represent the amounts recognized for financial statement reporting purposes for fiscal 2009 in accordance with FAS 123(R), and thus may include amounts from awards granted in and prior to fiscal 2009. The assumptions used to determine the valuation of the awards are discussed in Management's Discussion and Analysis of Financial Condition and Results of Operations and in Note 6 to our consolidated financial statements, each included in the Company's Annual Report on Form 10-K for the 2009 fiscal year, filed with the Securities and Exchange Commission on September 29, 2009.

(2) The amount under "Non-Equity Incentive Plan Compensation" for Mr. Martin for 2009 consists of (i) incentive compensation of $184,663 paid to Mr. Martin at the end of calendar 2008 under our calendar 2008 incentive plan, and (ii) incentive compensation of $123,445 paid for company performance through June 30, 2009, under our incentive plan for the six months ended June 30, 2009.

The amount under "Non-Equity Incentive Plan Compensation" for Mr. Martin for 2008 consists of (i) incentive compensation of $92,500 paid to Mr. Martin at the end of calendar 2007 to satisfy our commitment to pay Mr. Martin 25% of his initial base salary of $370,000 under his employment agreement dated December 19, 2006, which award was based upon his performance in calendar 2008, and (ii) incentive compensation of $123,428 paid for company performance through June 30, 2008, under our incentive plan for calendar 2008.

The amounts under "All Other Compensation" for Mr. Martin (i) for 2009 consist of payments for housing, furniture rental, cleaning and related expenses of $54,635 and car and transportation expenses of $43,214, and (ii) for 2008 consist of payments for housing, furniture rental, cleaning and related expenses of $68,499, car and transportation expenses of $17,471, and reimbursement of $8,457 for transportation costs of visits to Minnesota by his family.

(3) Mr. Betterley commenced employment on April 14, 2008.

The amount under "Non-Equity Incentive Plan Compensation" for Mr. Betterley for 2009 consists of (i) incentive compensation of $75,387 paid to Mr. Betterley at the end of calendar 2008 under our calendar 2008 incentive plan, and (ii) incentive compensation of $52,086 paid for company performance through June 30, 2009, under our incentive plan for the six months ended June 30, 2009.

The amount under "Non-Equity Incentive Plan Compensation" for Mr. Betterley for 2008 consists of incentive compensation paid for company performance through June 30, 2008, under our incentive plan for calendar 2008.

(4) Mr. Kraus was promoted to Vice President of Sales in April 2009, prior to which he was a senior sales director for the Company. This table only includes information regarding compensation paid to or earned by Mr. Kraus in fiscal 2009, the year in which he became an executive officer.

The amount under "Non-Equity Incentive Plan Compensation" for Mr. Kraus consists of (i) incentive compensation of $30,210 paid to Mr. Kraus for company performance through June 30, 2009, under our incentive plan for the six months ended June 30, 2009, and (ii) commissions of $212,513 paid to Mr. Kraus in fiscal 2009.

Outstanding Equity Awards at Fiscal Year-end for Fiscal 2009

The following table sets forth certain information regarding outstanding equity awards held by the named executive officers as of June 30, 2009.

	Option Awards					Stock Awards	
	Grant Date	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercised Options Unexercisable	Option Exercise Price(1)	Option Expiration Date	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights that Have Not Vested	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights that Have Not Vested
David L. Martin(2)(3)(5)	7/17/06	71,170	0	$ 8.83	7/16/11	—	—
	8/15/06	25,880	12,940	8.83	8/14/11	—	—
	2/15/07	271,740	77,640	8.83	2/14/12	—	—
	6/12/07	60,387	30,193	7.90	6/11/17	—	—
	12/12/07	0	242,625	12.15	12/11/17	—	—
	3/2/09	0	32,350	8.75	3/2/19		
Laurence L. Betterley(4)	4/14/08	—	—	—	—	32,350	$249,419
	3/2/09	0	14,234	8.75	3/2/19		
Scott W. Kraus(5)	10/3/06	17,254	8,626	$ 8.83	10/2/11	—	—
	4/18/07	2,157	1,078	8.83	4/17/17	—	—
	8/7/07	6,470	3,235	8.83	8/6/17	—	—

(1) See Note 6 to the consolidated financial statements included in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2009, filed with the SEC on September 29, 2009, for a discussion of the methodology for determining the exercise price.

(2) The August 2006 and June 2007 options vest at the rate of one-third per year starting on the first anniversary of the grant date. The February 2007 options vest at the rate of 9,705 shares per month starting March 15, 2007. The December 2007 grant was to vest in full on the third anniversary of the grant date provided that we had completed an initial public offering or a change of control transaction before December 31, 2008. The December 2007 options were amended by the Board of Directors to provide for vesting of 50% of the options on the first anniversary, and 50% of the options on the second anniversary, of the closing of the merger. The March 2009 options vest at the rate of one-half per year starting on the first anniversary of the grant date.

(3) Certain of our stock option agreements provide that in the event of a change of control (the sale by the company of substantially all of its assets and the consequent discontinuance of its business, or in the event of a merger, exchange or liquidation), the vesting of all options will accelerate and the options will be immediately exercisable as of the effective date of the change of control.

(4) Restricted stock awards vest at the rate of one-third per year starting on the first anniversary of the grant date. As of June 30, 2009, 16,175 shares of Mr. Betterley's restricted stock had vested.

(5) All option awards vest at the rate of one-third per year starting on the first anniversary of the grant date, except for the grants made (a) on March 2, 2009, which vest at the rate of one-half per year starting on the first anniversary of the grant date, and (b) on December 12, 2007, which were to vest in full on the third anniversary of the grant date provided that CSI had completed an initial public offering or a change of control transaction before December 31, 2008. The December 2007 options were amended by the Board of Directors to provide for vesting of 50% of the options on the first anniversary, and 50% of the options on the second anniversary, of the closing of the merger.

DIRECTOR COMPENSATION

The non-employee members of the Board are reimbursed for travel, lodging and other reasonable expenses incurred in attending board or committee meetings. Prior to the merger, upon initial election to the Board, the non-employee directors of CSI-MN were granted an option to purchase 60,000 shares of common stock, and in subsequent years, each non-employee director received an annual stock option grant to purchase a quantity of common stock that is determined by the Board on an annual basis. Prior to January 1, 2009, the directors of CSI-MN were not compensated for service as board and committee members or for attending meetings.

The Board adopted a director compensation plan that became effective upon the completion of the merger. For the six-month period ended June 30, 2009, each director received the following compensation:

- $20,000 for service as a board member;
- $10,000 for service as a chairman of a board committee;
- $5,000 for service as a member of a board committee;
- $1,200 per board or committee meeting attended in the event more than six of each such meetings are held during the period; and
- a restricted stock unit award with a value of $50,000, granted following the completion of the merger, and payable in cash beginning six months after the termination of the director's board membership.

The former directors of Replidyne who continued as directors of the combined company, Edward Brown and Augustine Lawlor, received the amounts stated above on a prorated basis for the period from February 25, 2009, through June 30, 2009.

For the twelve month period ending June 30, 2010, each non-employee director will receive the following compensation:

- $40,000 for service as a board member;
- $20,000 for service as a chairman of a board committee;
- $10,000 for service as a member of a board committee;
- $1,200 per board or committee meeting attended in the event more than 12 of each such meeting are held during the period; and
- a restricted stock unit award with a value of $100,000, to be granted following completion of the audit of the Company's financial statements for the fiscal year ending June 30, 2010, and payable in cash beginning six months after the termination of the director's board membership.

In addition, the Chairman of the Board receives an annual retainer of $40,000, which may, at the election of the Chairman, be paid in shares of common stock based on the fair market value of the Company's common stock on the date of payment.

Director Compensation Table for Fiscal 2009

The following table summarizes the compensation paid to each non-employee director in the fiscal year ended June 30, 2009. Information for compensation of directors of Replidyne, including Messrs. Brown and Lawlor, for Replidyne's fiscal year ended December 31, 2009 (which includes the first two quarters of our fiscal 2009), can be found in Replidyne's Form 10-K filed with the SEC on February 24, 2009. The information in the following table sets forth compensation for the directors of CSI-MN who continued as directors of the combined company following the merger, and the former Replidyne directors who continued as directors of the combined company following the merger.

Name	Fees Earned or Paid in Cash ($)	Stock Awards (1)(2) ($)	Option Awards (1)(2)(3) ($)	Total ($)
Brent G. Blackey	30,000	44,057	83,191	157,248
Edward Brown	20,750	29,371	0	50,121
John H. Friedman	30,000	44,057	5,905	79,962
Geoffrey O. Hartzler, M.D.	35,000	44,057	0	79,057
Roger J. Howe, Ph.D.	20,000	44,057	0	64,057
Augustine Lawlor	20,750	29,371	0	50,121
Glen D. Nelson, M.D.	20,000	44,057	0	64,057
Gary M. Petrucci	25,000	44,057	0	69,057

(1) The value of stock awards and options in this table represent the amounts recognized for financial statement reporting purposes for fiscal 2009 in accordance with FAS 123(R), and thus may include amounts from awards granted in and prior to fiscal 2009. The assumptions used to determine the valuation of the awards are discussed in Management's Discussion and Analysis of Financial Condition and Results of Operations and in Note 6 to our consolidated financial statements, each included in the Company's Annual Report on Form 10-K for the 2009 fiscal year, filed with the Securities and Exchange Commission on September 29, 2009.

(2) The aggregate number of stock awards held by each of the directors listed in the table above as of June 30, 2009, was as follows: Mr. Blackey, 5,714 shares; Mr. Brown, 3,977 shares; Mr. Friedman, 5,714 shares; Dr. Hartzler, 5,714 shares; Dr. Howe, 5,714 shares; Mr. Lawlor, 3,977 shares; Dr. Nelson, 5,714 shares; and Mr. Petrucci, 5,714 shares. All of these awards represent restricted stock units granted to the directors on March 2, 2009.

(3) The aggregate number of shares subject to outstanding option awards held by each of the directors listed in the table above as of June 30, 2009, was as follows: Mr. Blackey, 45,290 shares; Mr. Friedman, 58,229 shares; Dr. Hartzler, 129,275 shares; Dr. Howe, 176,484 shares; Dr. Nelson, 48,524 shares; and Mr. Petrucci, 308,075 shares. Messrs. Brown and Lawlor did not hold any shares subject to outstanding option awards on June 30, 2009.

TRANSACTIONS WITH RELATED PERSONS

Pursuant to its written charter adopted as of the closing of the merger (and subsequently amended), the Audit Committee has the responsibility to review and approve all transactions to which a related party and we may be a party prior to their implementation to assess whether such transactions meet applicable legal requirements. Except as described in this proxy statement, since the beginning of fiscal 2009, there were no related party transactions arising or existing requiring disclosure under applicable Nasdaq listing standards, SEC rules and regulations or the Company's policy and procedures.

Loan Guarantees

On September 12, 2008, we entered into a loan and security agreement with Silicon Valley Bank. The agreement originally included a $3.0 million term loan, a $5.0 million accounts receivable line of credit, and two term loans for an aggregate of $5.5 million that were guaranteed by certain of our affiliates. One of our directors and one entity affiliated with one of our directors agreed to act as guarantors of these term loans. Those guarantors are

director Glen D. Nelson, M.D., who guaranteed $1.0 million, and Easton Capital Investment Group, which guaranteed $2.0 million. Our director John H. Friedman is the Managing Partner of Easton Capital Investment Group. In consideration for guaranteeing the term loans, we issued the guarantors warrants to purchase shares of our common stock at an exercise price of $9.28 per share in the following amounts: Easton Capital Investment Group, 107,833 shares, and Dr. Nelson, 53,916 shares. These warrants are immediately exercisable and have terms of five years from the date of grant. The guarantees were released on April 30, 2009.

The issuance of the warrants to the guarantors was approved by the Board and not separately by the Audit Committee, but Dr. Nelson and Mr. Friedman recused themselves from the Board discussions relating to this matter and did not vote on it.

Preferred Stockholder Conversion Agreement

Concurrently with the execution of the merger agreement with Replidyne, the holders of approximately 68% of CSI-MN's outstanding preferred stock, calculated on an as-converted to common stock basis, entered into an agreement pursuant to which all outstanding shares of CSI-MN preferred stock were automatically converted into shares of common stock, effective as of immediately prior to the effective time of the merger. Parties to this agreement included entities affiliated with John H. Friedman and Glen D. Nelson, M.D., who are directors of the Company. In consideration for entering into such agreement, we issued to the holders of preferred stock warrants to purchase 2,264,264 shares of common stock at an exercise price of $8.83 per share, pro rata to each such holder based on its percentage of the outstanding shares of preferred stock on an as-converted to common stock basis.

The preferred stockholder conversion agreement was approved by the Board and not separately by the Audit Committee. The directors who were not holders of preferred stock or affiliated with entities that held preferred stock formed a special committee to negotiate this agreement with representatives of the preferred stockholders, including Dr. Nelson and Mr. Friedman.

Registration Rights Agreement

Effective as of March 16, 2009, we entered into a registration rights agreement with certain stockholders, including the following stockholders who are directors or entities affiliated with directors: Easton Hunt Capital Partners, L.P.; Easton Capital Partners, LP; GDN Holdings LLC; Glen D. Nelson; Brent G. Blackey; Gary M. Petrucci; Healthcare Ventures VI, L.P.; Healthcare Ventures VIII, L.P.; TPG Biotechnology Partners, L.P.; TPG Ventures, L.P.; and Edward Brown. In addition, the following parties to the registration rights agreement are officers: Paul Koehn and Robert J. Thatcher. The registration rights agreement provides the stockholders who are parties with the right to demand that we file a registration statement or request that their shares be covered by a registration statement that we are otherwise filing, as follows:

Demand Rights. At any time after six months after the closing of the merger, which occurred on February 25, 2009, the holders of an aggregate of at least 20% of the stock subject to the agreement may demand that we file a registration statement on up to three occasions, covering those securities held by the demanding holders.

Piggyback Rights. Parties to the registration rights agreement are also entitled to piggyback registration rights that entitle them to participate in any registration undertaken by us (except registrations for business combinations or employee benefit plans) subject to the right of an underwriter to cut back participation of the parties.

Shelf Registration Rights. In addition, when we are a registrant entitled to use Form S-3, the parties to the registration rights agreement may demand that we file a registration statement on Form S-3, provided that at least $1 million of stock is included in the registration.

The registration rights agreement was approved by the Board immediately following the closing of the merger and not separately by the Audit Committee. The registration rights agreement was intended to continue the registration rights previously granted to certain significant stockholders of Replidyne and to certain significant and management shareholders of CSI-MN who would continue to hold shares subject to restrictions on transfer under the federal securities laws following the merger. All of our other stockholders held or received registered shares immediately following the closing of the merger and therefore were not subject to restrictions under the securities laws with respect to those shares.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth as of January 12, 2010, certain information regarding beneficial ownership of our common stock by:

- Each person known to us to beneficially own 5% or more of our common stock;
- Each executive officer named in the Summary Compensation Table on page 18 who in this proxy statement are collectively referred to as the "named executive officers;"
- Each of our directors (including nominees); and
- All of our executive officers (as that term is defined under the rules and regulations of the SEC) and directors as a group.

We have determined beneficial ownership in accordance with Rule 13d-3 under the Exchange Act. Beneficial ownership generally means having sole or shared voting or investment power with respect to securities. Unless otherwise indicated in the footnotes to the table, each stockholder named in the table has sole voting and investment power with respect to the shares of common stock set forth opposite the stockholder's name. We have based our calculation of the percentage of beneficial ownership on 14,832,698 shares of CSI common stock outstanding on January 12, 2010. Unless otherwise noted below, the address for each person or entity listed in the table is c/o Cardiovascular Systems, Inc., 651 Campus Drive, St. Paul, Minnesota 55112.

Beneficial Owner	Amount and Nature of Beneficial Ownership	Percentage of Shares Beneficially Owned
Named Executive Officers and Directors		
David L. Martin(1)	688,068	4.6%
Laurence L. Betterley(2)	86,398	*
Scott W. Kraus(3)	106,038	*
Brent G. Blackey(4)	52,292	*
Edward Brown(5)	293,341	2.0%
John H. Friedman(6)	66,229	*
Geoffrey O. Hartzler, M.D.(7)	233,223	1.6%
Roger J. Howe, Ph.D.(8)	163,544	1.1%
Augustine Lawlor(9)	435,905	2.9%
Glen D. Nelson, M.D.(10)	450,003	3.0%
Gary M. Petrucci(11)	575,382	3.9%
All Directors and Executive Officers as a Group (16 individuals)(12)	3,295,299	22.2%
5% Stockholders		
Easton Capital Investment Group(13)	1,379,876	9.3%
Maverick Capital, Ltd.(14)	2,183,154	14.7%
Mitsui & Co., Ltd.(15)	776,861	5.2%

* Less than 1% of the outstanding shares.

(1) Includes 519,757 shares issuable upon the exercise of options exercisable within 60 days of January 12, 2010, and 113,132 shares of restricted stock that are subject to a risk of forfeiture.

(2) Includes 55,606 shares of restricted stock that are subject to a risk of forfeiture.

(3) Includes 40,241 shares issuable upon the exercise of options and warrants exercisable within 60 days of January 12, 2010, and 33,850 shares of restricted stock that are subject to a risk of forfeiture.

(4) Includes 35,089 shares issuable upon the exercise of options and warrants exercisable within 60 days of January 12, 2010. Does not include 11,528 vested restricted stock units that represent the right to receive a

cash payment from the Company equal in value to the market price of one share per unit of the Company's common stock as of the date that is six months following the date of the termination of Mr. Blackey's board membership.

(5) Includes 192,704 shares held by TPG Biotechnology Partners, L.P. and 82,586 shares held by TPG Ventures, L.P. TPG Biotechnology Partners, L.P. and TPG Ventures, L.P. (the "TPG Funds") are indirectly controlled by Tarrant Capital Advisors, Inc. Mr. Brown is a Managing Director of TPG Ventures, L.P. and disclaims beneficial ownership to the shares held by the TPG Funds. Does not include 9,791 vested restricted stock units that represent the right to receive a cash payment from the Company equal in value to the market price of one share per unit of the Company's common stock as of the date that is six months following the date of the termination of Mr. Brown's board membership.

(6) Includes 58,229 shares issuable upon the exercise of options exercisable within 60 days of January 12, 2010 issued to Mr. Friedman that are held for the benefit of entities affiliated with Easton Capital Investment Group. Does not include 11,528 vested restricted stock units that represent the right to receive a cash payment from the Company equal in value to the market price of one share per unit of the Company's common stock as of the date that is six months following the date of the termination of Mr. Friedman's board membership, issued to Mr. Friedman that are held for the benefit of entities affiliated with Easton Capital Investment Group.

(7) Includes 116,335 shares issuable upon the exercise of options exercisable within 60 days of January 12, 2010. Does not include 11,528 vested restricted stock units that represent the right to receive a cash payment from the Company equal in value to the market price of one share per unit of the Company's common stock as of the date that is six months following the date of the termination of Dr. Hartzler's board membership.

(8) Includes 163,544 options issuable upon the exercise of options exercisable within 60 days of January 12, 2010. Does not include 11,528 vested restricted stock units that represent the right to receive a cash payment from the Company equal in value to the market price of one share per unit of the Company's common stock as of the date that is six months following the date of the termination of Dr. Howe's board membership.

(9) Includes 361,235 shares held by HealthCare Ventures VI, L.P. and 74,670 shares held by HealthCare Ventures VIII, L.P. Mr. Lawlor is a general partner of HealthCare Partners VI, L.P., which is the general partner of HealthCare Ventures VI, L.P. Mr. Lawlor is a managing director of HealthCare Partners VIII, LLC, which is the general partner of HealthCare Partners VIII, L.P., which is the general partner of HealthCare Ventures VIII, L.P. Mr. Lawlor disclaims beneficial ownership of these shares except to the extent of his pecuniary interest therein. Does not include 9,791 vested restricted stock units that represent the right to receive a cash payment from the Company equal in value to the market price of one share per unit of the Company's common stock as of the date that is six months following the date of the termination of Mr. Lawlor's board membership.

(10) Includes 42,054 shares issuable upon the exercise of options exercisable within 60 days of January 12, 2010. Also includes 246,524 shares and 122,605 shares issuable upon the exercise of warrants exercisable within 60 days of January 12, 2010, held by GDN Holdings, LLC, of which Dr. Nelson is the sole owner. Does not include 11,528 vested restricted stock units that represent the right to receive a cash payment from the Company equal in value to the market price of one share per unit of the Company's common stock as of the date that is six months following the date of the termination of Dr. Nelson's board membership.

(11) Includes 320,346 shares issuable upon the exercise of options and warrants exercisable within 60 days of January 12, 2010. Also includes 32,350 shares held by Applecrest Partners LTD Partnership, of which Mr. Petrucci is the General Partner. Does not include 11,528 vested restricted stock units that represent the right to receive a cash payment from the Company equal in value to the market price of one share per unit of the Company's common stock as of the date that is six months following the date of the termination of Mr. Petrucci's board membership.

(12) Includes 1,787,631 shares issuable upon the exercise of options and warrants exercisable within 60 days of January 12, 2010, and 353,152 shares of restricted stock that are subject to a risk of forfeiture.

(13) Includes 398,679 shares and 316,061 shares issuable upon the exercise of warrants exercisable within 60 days of January 12, 2010, held by Easton Hunt Capital Partners, L.P. and 398,679 shares and 208,228 shares issuable upon the exercise of warrants exercisable within 60 days of January 12, 2010, held by Easton Capital Partners, LP. Investment decision of Easton Hunt Capital Partners, L.P. are made by EHC GP, LP through its General Partner, EHC, Inc. Mr. Friedman, one of the Company's directors, is the President and Chief

Executive Officers of EHC, Inc. Investment decisions of Easton Capital Partners, LP are made by its General Partner, ECP GP, LLC, through its manager ECP GP, Inc. Mr. Friedman is the President and Chief Executive Officer of EHC, Inc. and ECP GP, Inc. Mr. Friedman shares voting and investment power of the shares owned by Easton Hunt Capital Partners, L.P. and Easton Capital Partners, L.P. Also includes 58,229 shares issuable upon the exercise of options exercisable within 60 days of January 12, 2010, issued to Mr. Friedman that are held for the benefit of entities affiliated with Easton Capital Investment Group. Does not include 11,528 vested restricted stock units that represent the right to receive a cash payment from the Company equal in value to the market price of one share per unit of the Company's common stock as of the date that is six months following the date of the termination of Mr. Friedman's board membership, issued to Mr. Friedman that are held for the benefit of entities affiliated with Easton Capital Investment Group. Mr. Friedman disclaims beneficial ownership of securities held by entities affiliated with Easton Capital Investment Group except as to his pecuniary interest therein. The address for the entities affiliated with Easton Capital Investment Group is 767 Third Avenue, 7th Floor, New York, New York, 10017.

(14) Includes (i) 601,116 shares and 359,018 shares issuable upon the exercise of warrants exercisable within 60 days of January 12, 2010, held by Maverick Fund, L.D.C.; (ii) 242,682 shares and 144,942 shares issuable upon the exercise of warrants exercisable within 60 days of January 12, 2010, held by Maverick Fund USA, Ltd.; and (iii) 523,020 shares and 312,375 shares issuable upon the exercise of warrants exercisable within 60 days of January 12, 2010, by Maverick Fund II, Ltd. Maverick Capital, Ltd. is an investment adviser registered under Section 203 of the Investment Advisers Act of 1940 and, as such, may be deemed to have beneficial ownership of the shares held by Maverick Fund, L.D.C., Maverick Fund USA, Ltd., and Maverick Fund II, Ltd., and through the investment discretion it exercises over these accounts. Maverick Capital Management, LLC is the general partner of Maverick Capital, Ltd. Lee S. Ainslie III is the manager of Maverick Capital Management, LLC who possesses sole investment discretion pursuant to Maverick Capital Management, LLC's regulations. The address for the entities affiliated with Maverick Capital, Ltd. is 300 Crescent Court, 18th Floor, Dallas, Texas 75201.

(15) Includes (i) 5,176 shares and 2,591 shares issuable upon the exercise of warrants exercisable within 60 days of January 12, 2010, held by Mitsui & Co. Venture Partners, Inc.; (ii) 256,235 shares and 128,312 warrants issuable upon the exercise of warrants exercisable within 60 days of January 12, 2010, held by Mitsui & Co. (U.S.A.), Inc.; and (iii) 256,235 shares and 128,312 shares issuable upon the exercise of warrants exercisable within 60 days of January 12, 2010, held by MCVP Holding, Inc. Mitsui & Co. Ltd. is the direct 100% owner of each of Mitsui & Co. (U.S.A.), Inc. and MCVP Holding, Inc., and the indirect majority owner of Mitsui & Co. Venture Partners, Inc. Accordingly, Mitsui & Co. Ltd. may be deemed to be the beneficial owner of the shares of Common Stock held by Mitsui & Co. Venture Partners, Inc., Mitsui & Co. (U.S.A.), Inc., and MCVP Holding, Inc. Mitsui & Co. Ltd. disclaims beneficial ownership with respect to any shares directly owned by Mitsui & Co. Venture Partners, Inc., Mitsui & Co. (U.S.A.), Inc., and MCVP Holding, Inc.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires the Company's directors and executive officers, and persons who own more than ten percent of a registered class of the Company's equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of common stock and other equity securities of the Company. Officers, directors and greater than ten percent stockholders are required by SEC regulation to furnish the Company with copies of all Section 16(a) forms they file.

To the Company's knowledge, based on a review of the copies of such reports furnished to the Company during the fiscal year ended June 30, 2009, all reports needed to be filed have been filed for the fiscal year ended June 30, 2009.

EQUITY COMPENSATION PLAN INFORMATION

The following table presents the equity compensation plan information as of June 30, 2009:

	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants, and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity compensation plans approved by security holders	3,662,592	$10.42	234,687(1)
Equity compensation plans not approved by security holders	3,161,415(2)	$ 8.87	—
TOTAL	6,824,007	$ 9.70	234,687

(1) Includes 42,600 shares of common stock available for issuance under the Company's 2007 Equity Incentive Plan, as amended (the "2007 Plan"), and 192,087 shares of common stock available for issuance under the Company's Employee Stock Purchase Plan, as amended (the "ESPP").

The 2007 Plan includes a renewal provision whereby the number of shares shall automatically be increased on the first day of each fiscal year beginning July 1, 2008, and ending July 1, 2017, by the lesser of (i) 970,500 shares, (ii) 5% of the outstanding common shares on such date, or (iii) a lesser amount determined by the Board. On July 1, 2009 the number of shares available for grant was increased by 705,695 under the 2007 Plan's renewal provision.

The ESPP allows for an annual increase in reserved shares on July 1 equal to the lesser of (i) one percent of the outstanding common shares outstanding (ii) 180,000 shares, provided that the Board may designate a smaller amount of shares to be reserved. On July 1, 2009, 141,139 shares were added to ESPP.

(2) Represents outstanding warrants to selling agents and investors issued in connection with financing transactions, warrants issued to former preferred stockholders in connection with the merger, and non-qualified stock options granted to employees, directors and consultants outside of the 2007 Plan and our other equity incentive plans. For information regarding these warrants and options, refer to our consolidated financial statements for the years ended June 30, 2009 and 2008.

FORM 10-K

A COPY OF THE COMPANY'S FORM 10-K ANNUAL REPORT FOR THE FISCAL YEAR ENDED JUNE 30, 2009 (WITHOUT EXHIBITS), ACCOMPANIES THIS NOTICE OF MEETING AND PROXY STATEMENT. NO PART OF THE ANNUAL REPORT IS INCORPORATED HEREIN AND NO PART THEREOF IS TO BE CONSIDERED PROXY SOLICITING MATERIAL. THE COMPANY WILL FURNISH WITHOUT CHARGE TO EACH PERSON WHOSE PROXY IS BEING SOLICITED, UPON WRITTEN REQUEST OF ANY SUCH PERSON, ANY EXHIBIT DESCRIBED IN THE LIST ACCOMPANYING THE FORM 10-K, UPON THE PAYMENT, IN ADVANCE, OF REASONABLE FEES RELATED TO THE COMPANY'S FURNISHING SUCH EXHIBIT(S). REQUESTS FOR COPIES OF SUCH EXHIBIT(S) SHOULD BE DIRECTED TO CSI'S SECRETARY AT 651 CAMPUS DRIVE, ST. PAUL, MINNESOTA 55112.

OTHER MATTERS

The Board of Directors and management know of no other matters that will be presented for consideration at the Annual Meeting. However, since it is possible that matters of which the Board and management are not now aware may come before the meeting or any adjournment of the meeting, the proxies confer discretionary authority with respect to acting thereon, and the persons named in such properly executed proxies intend to vote, act and consent in accordance with their best judgment with respect thereto. Upon receipt of such proxies (in the form enclosed) in time for voting, the shares represented thereby will be voted as indicated thereon and in the proxy statement.

By Order of the Board of Directors

David L. Martin
President, Chief Executive Officer and Director

St. Paul, Minnesota
January 26, 2010

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended June 30, 2009

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission file number: 000-52082

CARDIOVASCULAR SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**41-1698056**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
651 Campus Drive **St. Paul, Minnesota** *(Address of principal executive offices)*	**55112-3495** *(Zip Code)*

Registrant's telephone number, including area code:
(651) 259-1600

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, One-tenth of One Cent ($0.001) Par Value Per Share	NASDAQ Global Market

Securities registered pursuant to Section 12(g) of the Act:
None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☑

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☑

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☐ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☑

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☑
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

As of December 31, 2008, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was $9,236,344 based on the closing sale price as reported on the NASDAQ Global Market.

The number of shares of the registrant's common stock outstanding as of September 24, 2009 was 14,598,226.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the proxy statement for the registrant's 2009 Annual Meeting of Stockholders are incorporated by reference into Items 10, 11, 12, 13 and 14 of Part III of this report.

Table of Contents

We make available, free of charge, copies of our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act on our web site, *http://www.csi360.com*, as soon as reasonably practicable after filing such material electronically or otherwise furnishing it to the SEC. We are not including the information on our web site as a part of, or incorporating it by reference into, our Form 10-K.

PART I

Item 1. *Business.*

Special Note Regarding Forward Looking Statements

This report contains plans, intentions, objectives, estimates and expectations that constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which are subject to the "safe harbor" created by those sections. Forward-looking statements are based on our management's beliefs and assumptions and on information currently available to our management. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "would," "expect," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "potential" and similar expressions intended to identify forward-looking statements. Examples of these statements include, but are not limited to, any statements regarding our future financial performance, results of operations or sufficiency of capital resources to fund our operating requirements, and other statements that are other than statements of historical fact. Our actual results could differ materially from those discussed in these forward-looking statements due to a number of factors, including the risks and uncertainties are described more fully by us in Part I, Item 1A and Part II, Item 7 of this report and in our other filings with the SEC. You should not place undue reliance on these forward-looking statements, which apply only as of the date of this report. You should read this report completely and with the understanding that our actual future results may be materially different from what we expect. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

Corporate Information

We were incorporated as Replidyne, Inc. in Delaware in 2000. On February 25, 2009, Replidyne, Inc. completed its business combination with Cardiovascular Systems, Inc., a Minnesota corporation ("CSI-MN"), in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated as of November 3, 2008, by and among Replidyne, Responder Merger Sub, Inc., a wholly-owned subsidiary of Replidyne ("Merger Sub"), and CSI-MN (the "Merger Agreement"). Pursuant to the Merger Agreement, Merger Sub merged with and into CSI-MN, with CSI-MN continuing after the merger as the surviving corporation and a wholly-owned subsidiary of Replidyne. At the effective time of the merger, Replidyne changed its name to Cardiovascular Systems, Inc. ("CSI") and CSI-MN changed its name to CSI Minnesota, Inc. As of immediately following the effective time of the merger, former CSI-MN stockholders owned approximately 80.2% of the outstanding common stock of the combined company, and Replidyne stockholders owned approximately 19.8% of the outstanding common stock of the combined company. Following the merger of Merger Sub with CSI-MN, CSI-MN merged with and into CSI, with CSI continuing after the merger as the surviving corporation. These transactions are referred to herein as the "merger." Unless the context otherwise requires, all references herein to the "Company," "CSI," "we," "us" and "our" refer to CSI-MN prior to the completion of the merger and to CSI following the completion of the merger and the name change, and all references to "Replidyne" refer to Replidyne prior to the completion of the merger and the name change.

Replidyne was a biopharmaceutical company focused on discovering, developing, in-licensing and commercializing anti-infective products.

CSI-MN was incorporated in Minnesota in 1989. From 1989 to 1997, we engaged in research and development on several different product concepts that were later abandoned. Since 1997, we have devoted substantially all of our resources to the development of the Diamondback 360° and our Viper line of ancillary products.

Our principal executive office is located at 651 Campus Drive, St. Paul, Minnesota 55112. Our telephone number is (651) 259-2800, and our website is www.csi360.com. The information contained in or connected to our website is not incorporated by reference into, and should not be considered part of, this Annual Report on Form 10-K.

We have received federal registration of certain marks including "Diamondback 360°" and "CSI." We have applied for federal registration of certain marks, including "ViperWire", "ViperWire Advance", "ViperSheath", "ViperSlide", "ViperTrack", and "ViperCaddy." All other trademarks, trade names and service marks appearing in this Form 10-K are the property of their respective owners.

Business Overview

We are a medical device company focused on developing and commercializing minimally invasive treatment solutions for vascular disease. Interventional endovascular treatment of peripheral artery disease, or PAD, was our initial area of focus. PAD is caused by the accumulation of plaque in peripheral arteries, most commonly occurring in the pelvis and legs, and affects approximately eight to 12 million people in the United States, as cited by the authors of the PARTNERS study published in the Journal of the American Medical Association in 2001. However, as reported in an article published in Podiatry Today in 2006, only approximately 2.5 million of those eight to 12 million people are treated. PAD is a progressive disease, and, if left untreated, can lead to limb amputation or death.

Our primary product, the Diamondback 360® PAD System, is a catheter-based platform capable of treating a broad range of plaque types in leg arteries both above and below the knee and addresses many of the limitations associated with existing treatment alternatives. In August 2007, the U.S. Food and Drug Administration, or FDA, granted us 510(k) clearance for use of the Diamondback 360° as a therapy for treatment of patients with PAD. We commenced a limited commercial introduction of the Diamondback 360° in the United States in September 2007 and began a full commercial launch during the quarter ended March 31, 2008. As of June 30, 2009, we were selling the Diamondback 360° in 556 accounts that had completed an estimated 15,000 procedures.

The Diamondback 360°'s single-use catheter incorporates a flexible drive shaft with an offset crown coated with diamond grit. With the aid of fluoroscopy, the physician positions the crown at a plaque-containing lesion in the peripheral artery and removes the plaque by causing the crown to orbit against it. This mechanism of action creates a smooth lumen, or channel, in the vessel. The Diamondback 360° is designed to differentiate between plaque and compliant arterial tissue, a concept that we refer to as "differential sanding." Normal arteries are compliant; they have the ability to expand and contract as needed to supply blood flow to the legs and feet. Arteries burdened with fibrotic (moderate) and/or calcified (hardened) plaque due to PAD lose their compliance which makes other therapies such as angioplasty, stenting, surgical bypass and directional atherectomy problematic. The Diamondback 360° sands plaque into small particles and restores both blood flow and vessel compliance. The particles created by the Diamondback 360° are generally smaller than red blood cells and are carried away by the bloodstream. The small size of the particles avoids the need for plaque collection reservoirs. The Diamondback 360° can treat the diseased arteries with less than three minutes of sanding time, potentially reducing the overall procedure time.

We have conducted three clinical trials involving 207 patients to demonstrate the safety and efficacy of the Diamondback 360° in treating PAD. In particular, our pivotal OASIS clinical trial was a prospective 20-center United States study that involved 124 patients with 201 lesions and successfully met FDA targets. The OASIS Study demonstrated a low 2.4% incidence of target lesion revascularization at six months. In addition, the Diamondback 360° achieved a 100% limb salvage rate at six months in a group of patients with mostly below-the-knee disease. We were the first company to conduct a prospective multi-center clinical trial with a prior investigational device exemption, or IDE, in support of a 510(k) clearance for this device category. We continue to support device performance through a rigorous clinical program and have initiated two post-market, randomized feasibility studies to further differentiate the outcomes of the Diamondback 360° from those of conventional balloon angioplasty. In addition, we believe that the Diamondback 360° provides a platform that can be leveraged across multiple market segments. We are seeking premarket approval, or PMA, to use the Diamondback 360° to treat patients with coronary artery disease and have submitted an IDE to the FDA.

In addition to the Diamondback 360°, we are expanding our product portfolio through internal product development and establishment of business relationships. We now offer multiple accessory devices designed to complement the use of the Diamondback 360°, and we have entered into distribution agreements with Invatec, Inc. and Asahi-Intecc, Ltd.

Market Overview

PAD is a circulatory problem in which plaque deposits build up on the walls of arteries, reducing blood flow to the limbs. The most common early symptoms of PAD are pain, cramping or fatigue in the leg or hip muscles while walking. Symptoms may progress to include numbness, tingling or weakness in the leg and, in severe cases, burning or aching pain in the leg, foot or toes while resting. As PAD progresses, additional signs and symptoms occur, including cooling or color changes in the skin of the legs or feet, and sores on the legs or feet that do not heal. If untreated, PAD may lead to critical limb ischemia, a condition in which the amount of oxygenated blood being delivered to the limb is insufficient to keep the tissue alive. Critical limb ischemia often leads to large non-healing ulcers, infections, gangrene and, eventually, limb amputation or death.

PAD affects approximately eight to 12 million people in the United States, as cited by the authors of the PARTNERS study published in the Journal of the American Medical Association in 2001. According to 2007 statistics from the American Heart Association, PAD becomes more common with age and affects approximately 12% to 20% of the population over 65 years old. An aging population, coupled with increasing incidence of diabetes and obesity, is likely to increase the prevalence of PAD. In many older PAD patients, particularly those with diabetes, PAD is characterized by fibrotic (moderate) or calcified (hardened) plaque deposits that have not been successfully treated with existing non-invasive treatment techniques. PAD may involve arteries either above or below the knee. Arteries above the knee are generally long, straight and relatively wide, while arteries below the knee are shorter and branch into arteries that are progressively smaller in diameter.

Despite the severity of PAD, it remains relatively underdiagnosed. According to an article published in Podiatry Today in 2006, only approximately 2.5 million of the eight to 12 million people in the United States with PAD are diagnosed. Although we believe the rate of diagnosis of PAD is increasing, underdiagnosis continues due to patients failing to display symptoms or physicians misinterpreting symptoms as normal aging. Recent emphasis on PAD education from medical associations, insurance companies and other groups, coupled with publications in medical journals, is increasing physician and patient awareness of PAD risk factors, symptoms and treatment options. The PARTNERS study advocated increased PAD screening by primary care physicians.

Physicians treat a significant portion of the 2.5 million people in the United States who are diagnosed with PAD using medical management, which includes lifestyle changes, such as diet and exercise and drug treatment. For instance, within a reference group of over 1,000 patients from the PARTNERS study, 54% of the patients with a prior diagnosis of PAD were receiving antiplatelet medication treatment. While medications, diet and exercise may improve blood flow, they do not treat the underlying obstruction and many patients have difficulty maintaining lifestyle changes. Additionally, many prescribed medications are contraindicated, or inadvisable, for patients with heart disease, which often exists in PAD patients. As a result of these challenges, many medically managed patients develop more severe symptoms that require procedural intervention.

Our Solution

The Diamondback 360° represents a new approach to the treatment of PAD that provides physicians and patients with a procedure that addresses many of the limitations of traditional treatment alternatives. The Diamondback 360°'s single-use catheter incorporates a flexible drive shaft with an offset crown coated with diamond grit. Physicians position the crown at the site of an arterial plaque lesion and remove the plaque by causing the crown to orbit against it, creating a smooth lumen, or channel, in the vessel. The Diamondback 360° is a device designed to differentiate between plaque and compliant arterial tissue, a concept that we refer to as "differential sanding."

Normal arteries are compliant; they have the ability to expand and contract as needed to supply blood flow to the legs and feet. Arteries burdened with fibrotic (moderate) and/or calcified (hardened) plaque due to PAD lose their compliance which makes other therapies such as angioplasty, stenting, surgical bypass and atherectomy problematic. The Diamondback 360° sands plaque into small particles and restores both blood flow and vessel compliance. The particles created by the Diamondback 360° are generally smaller than red blood cells and are carried away by the bloodstream. The small size of the particles avoids the need for plaque collection reservoirs. The Diamondback 360° can treat the diseased arteries with less than three minutes of sanding time, potentially reducing the overall procedure time.

We believe that the Diamondback 360° offers the following key benefits:

Strong Safety Profile

- *Differential Sanding Reduces Risk of Adverse Events.* The Diamondback 360° is designed to differentiate between plaque and compliant arterial tissue. The diamond grit coated offset crown engages and removes plaque from the artery wall with minimal likelihood of penetrating or damaging the fragile, internal elastic lamina layer of the arterial wall because compliant tissue flexes away from the crown. Furthermore, the Diamondback 360° rarely penetrates even the middle inside layer of the artery and the two elastic layers that border it. The Diamondback 360°'s perforation rate was 2.4% during our pivotal OASIS trial. Analysis by an independent pathology laboratory of more than 434 consecutive cross sections of porcine arteries treated with the Diamondback 360° revealed there was minimal to no damage, on average, to the medial layer, which is typically associated with restenosis. In addition, the safety profile of the Diamondback 360° was found to be non-inferior to that of angioplasty, which is often considered the safest of interventional methods. This was demonstrated in our OASIS trial, which had a low 4.8% rate of device-related serious adverse events, or SAEs.

- *Reduces the Risk of Distal Embolization.* The Diamondback 360° sands plaque away from artery walls in a manner that produces particles of such a small size — generally smaller than red blood cells — that they are carried away by the bloodstream. The small size of the particles avoids the need for plaque collection reservoirs on the catheter and reduces the need for ancillary distal protection devices, commonly used with directional cutting atherectomy, and also significantly reduces the risk that larger pieces of removed plaque will block blood flow downstream.

- *Allows Continuous Blood Flow During Procedure.* The Diamondback 360° allows for continuous blood flow during the procedure, except when used in chronic total occlusions. Other devices may restrict blood flow due to the size of the catheter required or the use of distal protection devices, which could result in complications such as excessive heat and tissue damage.

Proven Efficacy

- *Efficacy Demonstrated in a 124-Patient Clinical Trial.* Our pivotal OASIS clinical trial was a prospective 20-center study that involved 124 patients with 201 lesions and performance targets were established cooperatively with the FDA before the trial began. Despite 55% of the lesions consisting of calcified plaque and 48% of the lesions having a length greater than three centimeters, the performance of the device in the OASIS trial successfully met the FDA's study endpoints.

- *Treats Difficult, Fibrotic and Calcified Lesions.* The Diamondback 360° enables physicians to remove plaque from long, fibrotic, calcified or bifurcated lesions in peripheral arteries both above and below the knee. Other PAD devices have demonstrated limited effectiveness in treating these challenging lesions.

- *Orbital Motion Improves Device-to-Lumen Ratio.* The orbiting action of the Diamondback 360° can create a lumen of approximately 2.0 times the diameter of the crown. The variable device-to-lumen ratio allows the continuous removal of plaque as the opening of the lumen increases during the operation of the device. Non-orbiting rotational atherectomy catheters remove plaque by abrading the lesion with a spinning, abrasive burr, which acts in a manner similar to a drill and only creates a lumen the same size or slightly smaller than the size of the burr.

- *Differential Sanding Creates Smooth Lumens.* The differential sanding of the Diamondback 360° creates a smooth surface inside the lumen. We believe that the smooth lumen created by the Diamondback 360° increases the velocity of blood flow and decreases the resistance to blood flow which may decrease potential for restenosis, or renarrowing of the arteries.

Ease of Use

- *Utilizes Familiar Techniques.* Physicians using the Diamondback 360° employ techniques similar to those used in angioplasty, which are familiar to interventional cardiologists, vascular surgeons and interventional

radiologists who are trained in endovascular techniques. The Diamondback 360°'s simple user interface requires minimal additional training. The system's ability to differentiate between diseased and compliant tissue reduces the risk of complications associated with user error and potentially broadens the user population.

- *Single Insertion to Complete Treatment.* The Diamondback 360°'s orbital technology and differential sanding process in most cases allows for a single insertion to treat lesions. Because the particles of plaque sanded away are of such small sizes, the Diamondback 360° does not require a collection reservoir that needs to be repeatedly emptied or cleaned during the procedure. Rather, the Diamondback 360° allows for multiple passes of the device over the lesion until plaque is removed and a smooth lumen is created.

- *Limited Use of Fluoroscopy.* The relative simplicity of our process and predictable crown location allows physicians to significantly reduce fluoroscopy use, thus limiting radiation exposure.

Cost and Time Efficient Procedure

- *Short Procedure Time.* The Diamondback 360° has a short procedure time typically ranging from two to six minutes.

- *Single Crown Can Create Various Lumen Sizes Limiting Hospital Inventory Costs.* The Diamondback 360°'s orbital mechanism of action allows a single-sized device to create various diameter lumens inside the artery. Adjusting the rotational speed of the crown changes the orbit to create the desired lumen diameter, thereby potentially avoiding the need to use multiple catheters of different sizes to treat multiple lesions. The Diamondback 360° can create a lumen that is 100% larger than the actual diameter of the device, for a device-to-lumen ratio of approximately 1.0 to 2.0.

- *Single Insertion Reduces Procedural Time.* Since the physician does not need to insert and remove multiple catheters or clean a plaque collection reservoir to complete the procedure, there is a potential for decreased procedure time.

Our Strategy

Our goal is to be the leading provider of minimally invasive solutions for the treatment of vascular disease. The key elements of our strategy include:

- *Drive Adoption Through Our Direct Sales Organization and Key Physician Leaders.* We expect to continue to drive adoption of the Diamondback 360° through our direct sales force, which targets interventional cardiologists, vascular surgeons and interventional radiologists. We commenced a limited commercial introduction in September 2007 and broadened its commercialization efforts to a full commercial launch in the quarter ended March 31, 2008. As of June 30, 2009, we had a 124 person direct sales force driving product adoption in 556 hospitals in the United States. Over 15,000 Diamondback 360° procedures were completed as of June 30, 2009. As a key element of our strategy, we focus on educating and training physicians on the Diamondback 360° through our direct sales force and during seminars where physician industry leaders discuss case studies and treatment techniques using the Diamondback 360°.

- *Collect Additional Clinical Evidence on Benefits of the Diamondback 360°.* We are focused on using clinical evidence to demonstrate the advantages of our system and drive physician acceptance. We have conducted three clinical trials to demonstrate the safety and efficacy of the Diamondback 360° in treating PAD, involving 207 patients, including our pivotal OASIS trial. In addition, we have initiated two clinically rigorous, randomized post-market feasibility trials to further differentiate the performance of the Diamondback 360° from conventional balloon angioplasty. In both of these studies, the CALCIUM 360° and COMPLIANCE 360°, acute procedural success and device safety will be verified by an independent core lab, and the long-term durability of the procedure will be evaluated.

- *Expand Product Portfolio within the Market for Treatment of Peripheral Arteries.* In addition to the Diamondback 360°, we are expanding our product portfolio. We now offer multiple accessory devices

designed to complement the use of the Diamondback 360°. Within the past 12 months, we have launched the following products:

- *ViperSlide™ Lubricant* — an exclusive lubricant designed to optimize the smooth operation of the Diamondback 360°
- *ViperSheath™ Introducer Sheath* — 5-7 French kink-resistant and crush-resistant vascular access tools offered in 45 cm and 85 cm lengths
- *ViperTrack™ Radiopaque Tape* — a radiopaque tape to assist in measuring lesion lengths and marking lesion locations
- *ViperCaddy™ Guide Wire Management* — a secure guide wire holder that is easy to use and provides a steady grip on the multiple guide wires used during an interventional procedure.

We are continuing to actively pursue internal product development to further expand our portfolio of PAD treatment solutions.

- *Leverage Technology Platform into Coronary Market.* Based on the excellent clinical performance of the Diamondback 360° in treating lower extremity PAD, we intend to leverage the device's capabilities to expand into the interventional coronary market. A coronary application would address a large market opportunity, further leveraging our core technology and expanding its market potential. In 2008, we completed the ORBIT I trial, a 50-patient study in India which investigated the safety of the Diamondback 360° device in treating calcified coronary artery lesions. Results successfully met both safety and efficacy endpoints. An IDE application was recently submitted to the FDA for ORBIT II, a pivotal trial in the United States to evaluate the safety and effectiveness of the Diamondback 360° in treating severely calcified coronary lesions.
- *Pursue Strategic Acquisitions and Partnerships.* We have recently entered into agreements with both Invatec, Inc. and Asahi-Intecc, Ltd. In April 2009, we signed a sales agency agreement with Invatec, Inc. to distribute the Invatec balloon catheter line, including the SubMarine Plus™ PTA Balloon Catheter, the Admiral Xtreme™ PTA Balloon Catheter and the Amphirion Deep™ PTA Balloon Catheter. These balloons are typically used at low pressure, if needed, following the restoration of vessel compliance with the Diamondback 360°. In August 2009, we signed an exclusive distribution agreement with Asahi-Intecc, Ltd. to market its peripheral guide wire line in the United States. We offer two Asahi 0.18 wire platforms: the Astato 30 and Treasure 12. The Astato 30 is a high-penetration guide wire specially designed to break through fibrous caps and calcium deposits, and treat long, complex lesions. The Treasure 12 has a one-piece core to provide control, torque performance and tactile feedback to the physician.

In addition to adding to our product portfolio through internal development efforts, we intend to continue to explore the acquisition of other product lines, technologies or companies that may leverage our sales force or complement our strategic objectives. We plan to continue to evaluate distribution agreements, licensing transactions and other strategic partnerships.

Our Product

Components of the Diamondback 360°

The Diamondback 360° consists of a single-use, low-profile catheter that travels over our proprietary ViperWire™ Guide Wire. The system is used in conjunction with a reusable external control unit.

Catheter. The catheter consists of:

- a control handle, which allows precise movement of the crown and predictable crown location;
- a flexible drive shaft with a diamond grit coated offset crown, which tracks and orbits over the guidewire; and
- a sheath, which covers the drive shaft and permits delivery of saline or medications to the treatment area.

The crown is available in two configurations — classic and solid. The classic crown addresses treatment needs in arteries typically below the knee and in more tortuous anatomy, while the solid crown addresses treatment needs in larger arteries typically above the knee. The crown is available in multiple sizes, including 1.25, 1.50, 1.75, 2.00 and 2.25 millimeter diameters. The catheter length is 135 centimeters which addresses procedural approach and target lesion locations both above and below the knee.

ViperWire Guidewire. The ViperWire, which is located within the catheter, maintains device position in the vessel and is the rail on which the catheter operates. The ViperWire is available in two levels of firmness.

Control Unit. The control unit incorporates a touch-screen interface on an easily maneuverable, lightweight pole. Using an external air supply, the control unit regulates air pressure to drive the turbine located in the catheter handle to speeds ranging up to 200,000 revolutions per minute. Saline, delivered by a pumping mechanism on the control unit, bathes the device shaft and crown. The constant flow of saline reduces the risk of heat generation.

Technology Overview

The two technologies used in the Diamondback 360° are plaque modification through differential sanding and plaque removal.

Plaque Modification through Differential Sanding. The Diamondback 360°'s design allows the device to differentiate between compliant and diseased arterial tissue. This property is common with sanding material such as the diamond grit used in the Diamondback 360°. The diamond preferentially engages and sands harder material. The Diamondback 360° also treats soft plaque, which is less compliant than a normal vessel wall. Arterial lesions tend to be harder and stiffer than compliant, undiseased tissue, and they often are fibrotic or calcified. The Diamondback 360° sands the lesion but does not damage more compliant parts of the artery. The mechanism is a function of the centrifugal force generated by the Diamondback 360° as it rotates. As the crown moves outward, the centrifugal force is offset by the counterforce exerted by the arterial wall. If the tissue is compliant, it flexes away, rather than generating an opposing force that would allow the Diamondback 360° to engage and sand the wall. Diseased tissue provides resistance and is able to generate an opposing force that allows the Diamondback 360° to engage and sand the plaque. The sanded plaque is broken down into particles generally smaller than circulating red blood cells that are washed away downstream with the patient's natural blood flow. Of 36 consecutive experiments that we performed in carbon blocks, animal and cadaver models:

- 93.1% of particles were smaller than a red blood cell, with a 99% confidence interval; and
- 99.3% of particles were smaller than the lumen of the capillaries (which provide the connection between the arterial and venous system), with a 99% confidence interval.

The small particle size minimizes the risk of vascular bed overload, or a saturation of the peripheral vessels with large particles, which may cause slow or reduced blood flow to the foot. We believe that the small size of the particles also allows them to be managed by the body's natural cleansing of the blood, whereby various types of white blood cells eliminate worn-out cells and other debris in the bloodstream.

Plaque Removal. The system operates on the principles of centrifugal force. As the speed of the crown's rotation increases, it creates centrifugal force, which increases the crown's orbit and presses the diamond grit coated offset crown against the lesion or plaque, removing a small amount of plaque with each orbit. The characteristics of the orbit and the resulting lumen size can be adjusted by modifying three variables:

- *Speed.* An increase in speed creates a larger lumen. Our current system allows the user to choose between three rotational speeds. The fastest speed can result in a device-to-lumen ratio of 1.0 to 2.0, for a lumen that is approximately 100% larger than the actual diameter of the device.
- *Crown Characteristics.* The crown can be designed with various weights (as determined by different materials and density) and coated with diamond grit of various width, height and configurations. Our current system offers the choice between a hollow, lightweight crown and a solid, heavier crown, which could potentially increase the device-to-lumen ratio. We are developing a crown utilizing an alternative material that potentially will enhance the device's orbit and more effectively modify and remove plaque from the arterial wall.

- *Drive Shaft Characteristics.* The drive shaft can be designed with various shapes and degrees of rigidity. We are developing a new drive shaft that may enhance the ability to advance the device more smoothly and effectively through tortuous anatomy and challenging lesion morphologies and potentially enhance the device's performance.

We view the Diamondback 360° as a platform that can be used to develop additional products by adjusting one or more of the speed, crown and shaft variables.

Applications

The Diamondback 360° can be used to treat plaque in multiple anatomic locations.

Below-the-Knee Peripheral Artery Disease. Arteries below the knee have small diameters and may be diffusely diseased, calcified or both, limiting the effectiveness of traditional devices. The Diamondback 360° is effective in both diffuse and calcified vessels as demonstrated in the OASIS trial, where 94.5% of lesions treated were below the knee.

Above-the-Knee Peripheral Artery Disease. Plaque in arteries above the knee may also be diffuse, fibrotic and calcific; however, these arteries are longer, straighter and wider than below-the-knee vessels. While effective in difficult-to-treat below-the-knee vessels, and indicated for vessels up to four millimeters in diameter, our product is also being used to treat lesions above the knee. The Millennium Research Group estimates that there will be approximately 258,600 procedures to treat above-the-knee PAD in 2010 and that there will be approximately 71,220 procedures to treat below-the-knee PAD in 2010.

Coronary Artery Disease. Given the many similarities between peripheral and coronary artery disease, we have developed a modified version of the Diamondback 360° to treat coronary arteries. We have conducted numerous bench studies, four pre-clinical animal studies, and our ORBIT I 50-patient human clinical study to evaluate the Diamondback 360° in coronary artery disease. In the bench studies, we evaluated the system for conformity to specifications and patient safety, and, under conditions of expected clinical use, no safety issues were observed. In three of the animal studies, the system was used to treat a large number of stented and non-stented arterial lesions. The system was able to safely debulk lesions without evidence or observations of significant distal embolization, and the treated vessels in the animal studies showed only minimal to no damage. The fourth animal study evaluated the safety of the system for the treatment of coronary stenosis. There were no device-related adverse events associated with system treatment during this study, with some evidence of injury observed in 17% of the tissue sections analyzed, although 75% of these injuries were minimal or mild. A coronary application would require us to conduct a clinical trial and receive PMA from the FDA. We participated in three pre-IDE meetings with the FDA and completed the human feasibility portion of a coronary trial in the summer of 2008 in India, enrolling 50 patients. The FDA has agreed to accept the data from the India trial to support an IDE submission and we have submitted the IDE based on the results of this trial.

Clinical Trials and Studies for Our Products

We have conducted three clinical trials to demonstrate the safety and efficacy of the Diamondback 360° in treating PAD, enrolling a total of 207 patients in our PAD I and PAD II pilot trials and our pivotal OASIS trial. We have recently completed a retrospective study evaluating the long-term results of 64 patients from the OASIS Trial in order to determine durability of procedure results. In addition, we have also initiated two post-market, randomized feasibility studies to further differentiate the performance of the Diamondback 360° from conventional balloon angioplasty.

The common metrics used to evaluate the efficacy of plaque removal devices for PAD include:

Metric	Description
Absolute Plaque Reduction	Absolute plaque reduction is the difference between the pre-treatment percent stenosis, or the narrowing of the vessel, and the post-treatment percent stenosis as measured angiographically.
Target Lesion Revascularization	Target lesion revascularization rate, or TLR rate, is the percentage of patients at follow-up who have another peripheral intervention precipitated by their worsening symptoms, such as an angioplasty, stenting or surgery to reopen the treated lesion site.
Ankle Brachial Index	The Ankle Brachial Index, or ABI, is a measurement that is useful to evaluate the adequacy of circulation in the legs and improvement or worsening of leg circulation over time. The ABI is a ratio between the blood pressure in a patient's ankle and a patient's arm, with a ratio above 0.9 being normal.

The common metrics used to evaluate the safety of atherectomy devices for PAD include:

Metric	Description
Serious Adverse Events	Serious adverse events, or SAEs, include any experience that is fatal or life-threatening, is permanently disabling, requires or prolongs hospitalization, or requires intervention to prevent permanent impairment or damage. SAEs may or may not be related to the device.
Perforations	Perforations occur when the artery is punctured during atherectomy treatment. Perforations may be nonserious or an SAE depending on the treatment required to repair the perforation.

Inclusion criteria for trials often limit size of lesion and severity of disease, as measured by the Rutherford Class, which utilizes a scale of I to VI, with I being mild and VI being most severe, and the Ankle Brachial Index.

PAD I Feasibility Trial

Our first trial was a two-site, 17-patient feasibility clinical trial in Europe, which we refer to as PAD I, that began in March 2005. Patients enrolled in the trial had lesions that were less than 10 cm in length in arteries between 1.5 mm and 6.0 mm in diameter, with Rutherford Class scores of IV or lower. Patients were evaluated at the time of the procedure and at 30 days following treatment. The purpose of PAD I was to obtain the first human clinical experience and evaluate the safety of the Diamondback 360°. This was determined by estimating the cumulative incidence of patients experiencing one or more SAEs within 30 days post-treatment.

The results of PAD I were presented at the Transcatheter Therapeutics conference, or TCT, in 2005 and published in American Journal of Cardiology. Results confirmed that the Diamondback 360° was safe and established that the Diamondback 360° could be used to treat vessels in the range of 1.5 mm to 4.0 mm, which are found primarily below the knee. Also, PAD I showed that removal of plaque, could be accomplished and the resulting device-to-lumen ratio was approximately 1.0 to 2.0. The SAE rate in PAD I was 6% (one of 17 patients).

PAD II Feasibility Trial

After being granted the CE Mark in May 2005, we began a 66-patient European clinical trial at seven sites, which we refer to as PAD II, in August 2005. All patients had stenosis in vessels below the femoral artery of between

1.5 mm and 4.0 mm in diameter, with at least 50% blockage. The primary objectives of this study were to evaluate the acute (30 days or less) risk of experiencing an SAE post procedure and provide evidence of device effectiveness. Effectiveness was confirmed angiographically and based on the percentage of absolute plaque reduction.

The PAD II results demonstrated safe and effective debulking in vessels with diameters ranging from 1.5 mm to 4.0 mm with a mean absolute plaque reduction of 55%. The SAE rate in PAD II was 9% (six of 66 patients), which did not differ significantly from existing non-invasive treatment options.

OASIS Pivotal Trial

We received an IDE to begin our pivotal United States trial, OASIS, in September 2005. OASIS was a 124-patient, 20-center, prospective trial that began enrollment in January 2006.

Patients included in the trial had:

- an ABI of less than 0.9;
- a Rutherford Class score of V or lower; and
- treated arteries of between 1.5 mm and 4.0 mm or less in diameter via angiogram measurement, with a well-defined lesion of at least 50% diameter stenosis and lesions of no greater than 10.0 cm in length.

The primary efficacy study endpoint was absolute plaque reduction of the target lesions from baseline to immediately post procedure. The primary safety endpoint was the cumulative incidence of SAEs at 30 days.

In the OASIS trial, 94.5% of lesions treated were below the knee, an area where lesions have traditionally gone untreated until they require bypass surgery or amputation. Of the lesions treated in OASIS, 55% were comprised of calcified plaque which presents a challenge to proper expansion and apposition of balloons and stents, and 48% were diffuse, or greater then 3 cm in length, which typically requires multiple balloon expansions or stent placements. Competing plaque removal devices are often ineffective with these difficult to treat lesions.

The average time of treatment in the OASIS trial was three minutes per lesion, which compares favorably to the treatment time required by other plaque removal devices. We believe physicians using other plaque removal devices require approximately ten to 20 minutes of treatment time to achieve desired results, although treatment times may vary depending upon the nature of the procedure, the condition of the patient and other factors. The following table is a summary of the OASIS trial results:

Item	FDA Target	OASIS Result
Absolute Plaque Reduction	55%	59.4%
SAEs at 30 days	8% mean, with an upper bound of 16%	4.8% mean, device-related; 9.7% mean, overall
TLR	20% or less	2.4%
Perforations	N/A	1 serious perforation
ABI at baseline	N/A	0.68 ± 0.2*
ABI at 30 days	N/A	0.9 ± 0.18*
ABI at 6 months	N/A	0.83 ± 0.23*

* Mean ± Standard Deviation

We submitted our OASIS data and received 510(k) clearance from the FDA for use of the Diamondback 360°, including the initial version of the control unit, with a hollow crown as a therapy for patients with PAD in August 2007. The FDA's labeling requirements reflected the inclusion criteria for the OASIS trial listed above. We received 510(k) clearances in October 2007 for the updated control unit used with the Diamondback 360° and in November 2007 for the Diamondback 360° with a solid crown. In May 2005, we received the CE mark, allowing for the commercial use of the Diamondback 360° within the European Union; however, our current plans are to focus sales in the United States.

OASIS Long-Term Study

A retrospective study evaluating the long-term results of 64 patients from the pivotal OASIS trial has been completed. Outcomes were analyzed out to a mean of 29 months and include limb salvage rate, target lesion revascularization rate (TLR) and ankle-brachial index (ABI). TLR, or reintervention in the originally treated lesion, was 13.6%. A 100% limb salvage rate was maintained. ABI scores, a measure of blood flow to the ankle, remained significantly improved. This 29 month data of OASIS patients adds to our confidence in the safety and efficacy of the Diamondback 360°.

Post-Market Feasibility Studies

In June 2009, the first patient was enrolled in the COMPLIANCE 360° clinical trial, the first of two PAD post-market studies scheduled to begin in calendar 2009. This prospective, randomized, multi-center study will evaluate the clinical benefit of modifying plaque to change large vessel compliance above the knee with the Diamondback 360°. The study compares the performance of the Diamondback 360°, plus low-pressure balloon inflation, if desired, with that of high-pressure balloon inflation alone. The study calls for enrolling 50 patients at five U.S. medical centers.

Hospital internal review board (IRB) submissions are in progress for the CALCIUM 360° study, a prospective, randomized, multi-center study, which will compare the effectiveness of the Diamondback 360° to balloon dilation in treating heavily calcified lesions below the knee. Calcified plaque exists in about 75 percent of lesions below the knee. This study will also enroll 50 patients at five U.S. medical centers.

Sales and Marketing

We market and sell the Diamondback 360° through a direct sales force in the United States. As of June 30, 2009, we had a 124-person direct sales force, including a Vice President of Sales, five clinical specialists, eight associate sales managers, 93 district sales managers, 11 regional sales managers, two sales directors, a director of customer operations, and three customer service specialists. Upon receiving 510(k) clearance from the FDA on August 30, 2007, we began limited commercialization of the Diamondback 360° in September 2007. We commenced our full commercial launch in the quarter ended March 31, 2008. As of June 30, 2009, we were selling the Diamondback 360° in 556 accounts in the United States that had completed an estimated 15,000 procedures.

While we sell directly to hospitals, we have targeted sales and marketing efforts to interventional cardiologists, vascular surgeons and interventional radiologists with experience using similar catheter-based procedures, such as angioplasty, stenting, and cutting or laser atherectomy. Physician referral programs and peer-to-peer education are other key elements of our sales strategy. Patient referrals come from general practitioners, podiatrists, nephrologists and endocrinologists.

We target our marketing efforts to practitioners through physician education, medical conferences, seminars, peer reviewed journals and marketing materials. Our sales and marketing program focuses on:

- educating physicians regarding the proper use and application of the Diamondback 360°;
- developing relationships with key opinion leaders; and
- facilitating regional referral marketing programs.

We are not marketing our products internationally and do not expect to do so in the near future; however, we will continue to evaluate international opportunities.

Research and Development

As of June 30, 2009, we had 29 employees in our research and development department, comprised primarily of scientists, engineers and physicians, all of whom report to our Executive Vice President. Our research and development efforts are focused in the development of products to penetrate our three key target markets:

below-the-knee, above-the-knee and coronary vessels. Research and development expenses for fiscal 2009, fiscal 2008 and fiscal 2007 were $14.7 million, $16.1 million and $8.4 million, respectively.

Manufacturing

We use internally-manufactured and externally-sourced components to manufacture the Diamondback 360°. Most of the externally-sourced components are available from multiple suppliers; however, a few key components, including the diamond grit coated crown, are single sourced. We assemble the shaft, crown and handle components on-site, and test, pack, seal and label the finished assembly before sending the packaged product to a contract sterilization facility. The sterilization facility sends samples to an independent laboratory to test for sterility. Upon return from the sterilizer, product is held in inventory prior to shipping to our customers.

The current floor plan at our manufacturing facility allows for finished goods of approximately 8,000 units of the Diamondback 360° and for approximately 50 control units. The manufacturing areas, including the shaft manufacturing and the controlled-environment assembly areas, are equipped to accommodate approximately 30,000 units per shift annually.

We are registered with the FDA as a medical device manufacturer. We have opted to maintain quality assurance and quality management certifications to enable us to market our products in the member states of the European Union, the European Free Trade Association and countries that have entered into Mutual Recognition Agreements with the European Union. We are ISO 13485:2003 certified, and our renewal is due by December 2009. During the time of commercialization, we have had two minor instances of recall, involving one single lot of Diamondback 360° devices (eight units), and two boxes of ViperWires (ten wires), related to "Use By" date labeling issues. While these recalls were reported to the FDA, according to regulations, they did not provide a risk to patient safety.

Third-Party Reimbursement and Pricing

Third-party payors, including private insurers, and government insurance programs, such as Medicare and Medicaid, pay for a significant portion of patient care provided in the United States. The single largest payor in the United States is the Medicare program, a federal governmental health insurance program administered by the Centers for Medicare and Medicaid Services, or CMS. Medicare covers certain medical care expenses for eligible elderly and disabled individuals, including a large percentage of the population with PAD who could be treated with the Diamondback 360°. In addition, private insurers often follow the coverage and reimbursement policies of Medicare. Consequently, Medicare's coverage and reimbursement policies are important to our operations.

CMS has established Medicare reimbursement codes describing atherectomy products and procedures using atherectomy products, and many private insurers follow these policies. We believe that physicians and hospitals that treat PAD with the Diamondback 360° will generally be eligible to receive reimbursement from Medicare and private insurers for the cost of the single-use catheter and the physician's services.

The continued availability of insurance coverage and reimbursement for newly approved medical devices is uncertain. The commercial success of our products in both domestic and international markets will be dependent on whether third-party coverage and reimbursement is available for patients that use our products. Medicare, Medicaid, health maintenance organizations and other third-party payors are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement of new medical devices, and, as a result, they may not continue to provide adequate payment for our products. To position our device for acceptance by third-party payors, we may have to agree to a lower net sales price than we might otherwise charge. The continuing efforts of governmental and commercial third-party payors to contain or reduce the costs of healthcare may limit our revenue.

In some foreign markets, pricing and profitability of medical devices are subject to government control. In the United States, we expect that there will continue to be federal and state proposals for similar controls. Also, the trends toward managed healthcare in the United States and proposed legislation intended to reduce the cost of government insurance programs could significantly influence the purchase of healthcare services and products and may result in lower prices for our products or the exclusion of our products from reimbursement programs.

Competition

The medical device industry is highly competitive, subject to rapid change and significantly affected by new product introductions and other activities of industry participants. The Diamondback 360° competes with a variety of other products or devices for the treatment of vascular disease, including stents, balloon angioplasty catheters and atherectomy catheters, as well as products used in vascular surgery. Large competitors in the stent and balloon angioplasty market segments include Abbott Laboratories, Boston Scientific, Cook, Johnson & Johnson and Medtronic. We also compete against manufacturers of atherectomy catheters including, among others, ev3, Spectranetics, Boston Scientific and Pathway Medical Technologies, as well as other manufacturers that may enter the market due to the increasing demand for treatment of vascular disease. Several other companies provide products used by surgeons in peripheral bypass procedures. Other competitors include pharmaceutical companies that manufacture drugs for the treatment of mild to moderate PAD and companies that provide products used by surgeons in peripheral bypass procedures. We are not aware of any competing catheter systems either currently on the market or in development that also use an orbital motion to create lumens larger than the catheter itself.

Because of the size of the peripheral and coronary market opportunities, competitors and potential competitors have historically dedicated significant resources to aggressively promote their products. We believe that the Diamondback 360° competes primarily on the basis of:

- safety and efficacy;
- predictable clinical performance;
- ease of use;
- price;
- physician relationships;
- customer service and support; and
- adequate third-party reimbursement.

Patents and Intellectual Property

We rely on a combination of patent, copyright and other intellectual property laws, trade secrets, nondisclosure agreements and other measures to protect our proprietary rights. As of August 31, 2009, we held 22 issued U.S. patents and have 23 U.S. patent applications pending, as well as 48 issued or granted foreign patents and 24 foreign patent applications, each of which corresponds to aspects of our U.S. patents and applications. Our issued U.S. patents expire between 2010 and 2027, and our most important patent, U.S. Patent No. 6,494,890, is due to expire in 2017. Our issued patents and patent applications relate primarily to the design and operation of certain interventional atherectomy devices, including the Diamondback 360°. These patents and applications include claims covering key aspects of certain rotational atherectomy devices including the design, manufacture and therapeutic use of certain atherectomy abrasive heads, drive shafts, control systems, handles and couplings. As we continue to research and develop our atherectomy technology, we intend to file additional U.S. and foreign patent applications related to the design, manufacture and therapeutic uses of atherectomy devices. In addition, we hold eight registered U.S. trademarks and have eight U.S., three Canadian and three European trademark applications pending.

We also rely on trade secrets, technical know-how and continuing innovation to develop and maintain our competitive position. We seek to protect our proprietary information and other intellectual property by requiring our employees, consultants, contractors, outside scientific collaborators and other advisors to execute non-disclosure and assignment of invention agreements on commencement of their employment or engagement. Agreements with our employees also forbid them from bringing the proprietary rights of third parties to us. We also require confidentiality or material transfer agreements from third parties that receive our confidential data or materials.

Government Regulation of Medical Devices

Governmental authorities in the United States at the federal, state and local levels and in other countries extensively regulate, among other things, the development, testing, manufacture, labeling, promotion, advertising, distribution, marketing and export and import of medical devices such as the Diamondback 360°.

Failure to obtain approval to market our products under development and to meet the ongoing requirements of these regulatory authorities could prevent us from marketing and continuing to market our products.

United States

The Federal Food, Drug, and Cosmetic Act, or FDCA, and the FDA's implementing regulations govern medical device design and development, preclinical and clinical testing, premarket clearance or approval, registration and listing, manufacturing, labeling, storage, advertising and promotion, sales and distribution, export and import, and post-market surveillance. Medical devices and their manufacturers are also subject to inspection by the FDA. The FDCA, supplemented by other federal and state laws, also provides civil and criminal penalties for violations of its provisions. We manufacture and market medical devices that are regulated by the FDA, comparable state agencies and regulatory bodies in other countries.

Unless an exemption applies, each medical device we wish to commercially distribute in the United States will require marketing authorization from the FDA prior to distribution. The two primary types of FDA marketing authorization are premarket notification (also called 510(k) clearance) and premarket approval (also called PMA approval). The type of marketing authorization applicable to a device — 510(k) clearance or PMA approval — is generally linked to classification of the device. The FDA classifies medical devices into one of three classes (Class I, II or III) based on the degree of risk FDA determines to be associated with a device and the extent of control deemed necessary to ensure the device's safety and effectiveness. Devices requiring fewer controls because they are deemed to pose lower risk are placed in Class I or II. Class I devices are deemed to pose the least risk and are subject only to general controls applicable to all devices, such as requirements for device labeling, premarket notification, and adherence to the FDA's current good manufacturing practice requirements, as reflected in its Quality System Regulation, or QSR. Class II devices are intermediate risk devices that are subject to general controls and may also be subject to special controls such as performance standards, product-specific guidance documents, special labeling requirements, patient registries or postmarket surveillance. Class III devices are those for which insufficient information exists to assure safety and effectiveness solely through general or special controls, and include life-sustaining, life-supporting or implantable devices, and devices not "substantially equivalent" to a device that is already legally marketed.

Most Class I devices and some Class II devices are exempted by regulation from the 510(k) clearance requirement and can be marketed without prior authorization from FDA. Class I and Class II devices that have not been so exempted are eligible for marketing through the 510(k) clearance pathway. By contrast, devices placed in Class III generally require PMA approval prior to commercial marketing. The PMA approval process is generally more stringent, time-consuming and expensive than the 510(k) clearance process.

510(k) Clearance. To obtain 510(k) clearance for a medical device, an applicant must submit a premarket notification to the FDA demonstrating that the device is "substantially equivalent" to a predicate device legally marketed in the United States. A device is substantially equivalent if, with respect to the predicate device, it has the same intended use and has either (i) the same technological characteristics or (ii) different technological characteristics and the information submitted demonstrates that the device is as safe and effective as a legally marketed device and does not raise different questions of safety or effectiveness. A showing of substantial equivalence sometimes, but not always, requires clinical data. Generally, the 510(k) clearance process can exceed 90 days and may extend to a year or more.

After a device has received 510(k) clearance for a specific intended use, any modification that could significantly affect its safety or effectiveness, such as a significant change in the design, materials, method of manufacture or intended use, will require a new 510(k) clearance or PMA approval (if the device as modified is not substantially equivalent to a legally marketed predicate device). The determination as to whether new authorization is needed is initially left to the manufacturer; however, the FDA may review this determination to evaluate the

regulatory status of the modified product at any time and may require the manufacturer to cease marketing and recall the modified device until 510(k) clearance or PMA approval is obtained. The manufacturer may also be subject to significant regulatory fines or penalties.

We received 510(k) clearance for use of the Diamondback 360° as a therapy in patients with PAD in the United States on August 22, 2007. We received additional 510(k) clearances for the control unit used with the Diamondback 360° on October 25, 2007 and for the solid crown version of the Diamondback 360° on November 9, 2007.

Premarket Approval. A PMA application requires the payment of significant user fees and must be supported by valid scientific evidence, which typically requires extensive data, including technical, preclinical, clinical and manufacturing data, to demonstrate to the FDA's satisfaction the safety and efficacy of the device. A PMA application must also include a complete description of the device and its components, a detailed description of the methods, facilities and controls used to manufacture the device, and proposed labeling. After a PMA application is submitted and found to be sufficiently complete, the FDA begins an in-depth review of the submitted information. During this review period, the FDA may request additional information or clarification of information already provided. Also during the review period, an advisory panel of experts from outside the FDA may be convened to review and evaluate the application and provide recommendations to the FDA as to the approvability of the device. In addition, the FDA will conduct a pre-approval inspection of the manufacturing facility to ensure compliance with the FDA's Quality System Regulations, or QSR, which requires manufacturers to follow design, testing, control, documentation and other quality assurance procedures.

FDA review of a PMA application is required by statute to take no longer than 180 days, although the process typically takes significantly longer, and may require several years to complete. The FDA can delay, limit or deny approval of a PMA application for many reasons, including:

- the systems may not be safe or effective to the FDA's satisfaction;
- the data from preclinical studies and clinical trials may be insufficient to support approval;
- the manufacturing process or facilities used may not meet applicable requirements; and
- changes in FDA approval policies or adoption of new regulations may require additional data.

If the FDA evaluations of both the PMA application and the manufacturing facilities are favorable, the FDA will either issue an approval letter or an approvable letter, which usually contains a number of conditions that must be met in order to secure final approval of the PMA. When and if those conditions have been fulfilled to the satisfaction of the FDA, the agency will issue a PMA approval letter authorizing commercial marketing of the device for certain indications. If the FDA's evaluation of the PMA or manufacturing facilities is not favorable, the FDA will deny approval of the PMA or issue a not approvable letter. The FDA may also determine that additional clinical trials are necessary, in which case the PMA approval may be delayed for several months or years while the trials are conducted and then the data submitted in an amendment to the PMA. Even if a PMA application is approved, the FDA may approve the device with an indication that is narrower or more limited than originally sought. The agency can also impose restrictions on the sale, distribution or use of the device as a condition of approval, or impose post approval requirements such as continuing evaluation and periodic reporting on the safety, efficacy and reliability of the device for its intended use.

New PMA applications or PMA supplements may be required for modifications to the manufacturing process, labeling, device specifications, materials or design of a device that is approved through the PMA process. PMA approval supplements often require submission of the same type of information as an initial PMA application, except that the supplement is limited to information needed to support any changes from the device covered by the original PMA application and may not require as extensive clinical data or the convening of an advisory panel.

We are currently seeking PMA to use the Diamondback 360° as a therapy in treating patients with coronary artery disease and have submitted an IDE to the FDA.

Clinical Trials. Clinical trials are almost always required to support a PMA application and are sometimes required for a 510(k) clearance. These trials generally require submission of an application for an IDE to the FDA.

The IDE application must be supported by appropriate data, such as animal and laboratory testing results, showing that it is safe to test the device in humans and that the testing protocol is scientifically sound. The IDE application must be approved in advance by the FDA for a specified number of patients, unless the product is deemed a non-significant risk device and eligible for more abbreviated IDE requirements. Generally, clinical trials for a significant risk device may begin once the IDE application is approved by the FDA and the study protocol and informed consent are approved by appropriate institutional review boards at the clinical trial sites.

FDA approval of an IDE allows clinical testing to go forward but does not bind the FDA to accept the results of the trial as sufficient to prove the product's safety and efficacy, even if the trial meets its intended success criteria. With certain exceptions, changes made to an investigational plan after an IDE is approved must be submitted in an IDE supplement and approved by FDA (and by governing institutional review boards when appropriate) prior to implementation.

All clinical trials must be conducted in accordance with regulations and requirements collectively known as good clinical practice. Good clinical practices include the FDA's IDE regulations, which describe the conduct of clinical trials with medical devices, including the recordkeeping, reporting and monitoring responsibilities of sponsors and investigators, and labeling of investigation devices. They also prohibit promotion, test marketing or commercialization of an investigational device and any representation that such a device is safe or effective for the purposes being investigated. Good clinical practices also include the FDA's regulations for institutional review board approval and for protection of human subjects (such as informed consent), as well as disclosure of financial interests by clinical investigators.

Required records and reports are subject to inspection by the FDA. The results of clinical testing may be unfavorable or, even if the intended safety and efficacy success criteria are achieved, may not be considered sufficient for the FDA to grant approval or clearance of a product. The commencement or completion of any clinical trials may be delayed or halted, or be inadequate to support approval of a PMA application or clearance of a premarket notification for numerous reasons, including, but not limited to, the following:

- the FDA or other regulatory authorities do not approve a clinical trial protocol or a clinical trial (or a change to a previously approved protocol or trial that requires approval), or place a clinical trial on hold;
- patients do not enroll in clinical trials or follow up at the rate expected;
- patients do not comply with trial protocols or experience greater than expected adverse side effects;
- institutional review boards and third-party clinical investigators may delay or reject the trial protocol or changes to the trial protocol;
- third-party clinical investigators decline to participate in a trial or do not perform a trial on the anticipated schedule or consistent with the clinical trial protocol, investigator agreements, good clinical practices or other FDA requirements;
- third-party organizations do not perform data collection and analysis in a timely or accurate manner;
- regulatory inspections of the clinical trials or manufacturing facilities, which may, among other things, require corrective action or suspension or termination of the clinical trials;
- changes in governmental regulations or administrative actions;
- the interim or final results of the clinical trial are inconclusive or unfavorable as to safety or efficacy; and
- the FDA concludes that the trial design is inadequate to demonstrate safety and efficacy.

Continuing Regulation. After a device is approved and placed in commercial distribution, numerous regulatory requirements continue to apply. These include:

- establishment registration and device listing upon the commencement of manufacturing;
- the QSR, which requires manufacturers, including third-party manufacturers, to follow design, testing, control, documentation and other quality assurance procedures during medical device design and manufacturing processes;

- labeling regulations, which prohibit the promotion of products for unapproved or "off-label" uses and impose other restrictions on labeling and promotional activities;
- medical device reporting regulations, which require that manufacturers report to the FDA if a device may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if malfunctions were to recur;
- corrections and removal reporting regulations, which require that manufacturers report to the FDA field corrections; and
- product recalls or removals if undertaken to reduce a risk to health posed by the device or to remedy a violation of the FDCA caused by the device that may present a risk to health.

In addition, the FDA may require a company to conduct postmarket surveillance studies or order it to establish and maintain a system for tracking its products through the chain of distribution to the patient level.

Failure to comply with applicable regulatory requirements, including those applicable to the conduct of clinical trials, can result in enforcement action by the FDA, which may lead to any of the following sanctions:

- warning letters or untitled letters;
- fines, injunctions and civil penalties;
- product recall or seizure;
- unanticipated expenditures;
- delays in clearing or approving or refusal to clear or approve products;
- withdrawal or suspension of FDA approval;
- orders for physician notification or device repair, replacement or refund;
- operating restrictions, partial suspension or total shutdown of production or clinical trials; and
- criminal prosecution.

We and our contract manufacturers, specification developers and suppliers are also required to manufacture our products in compliance with current Good Manufacturing Practice, or GMP, requirements set forth in the QSR.

The QSR requires a quality system for the design, manufacture, packaging, labeling, storage, installation and servicing of marketed devices, and includes extensive requirements with respect to quality management and organization, device design, buildings, equipment, purchase and handling of components, production and process controls, packaging and labeling controls, device evaluation, distribution, installation, complaint handling, servicing and record keeping. The FDA enforces the QSR through periodic announced and unannounced inspections that may include the manufacturing facilities of subcontractors. If the FDA believes that we or any of our contract manufacturers or regulated suppliers is not in compliance with these requirements, it can shut down our manufacturing operations, require recall of our products, refuse to clear or approve new marketing applications, institute legal proceedings to detain or seize products, enjoin future violations or assess civil and criminal penalties against us or our officers or other employees. Any such action by the FDA would have a material adverse effect on our business.

Fraud and Abuse

Our operations will be directly, or indirectly through our customers, subject to various state and federal fraud and abuse laws, including, without limitation, the FDCA, federal Anti-Kickback Statute and False Claims Act. These laws may impact, among other things, our proposed sales, marketing and education programs. In addition, these laws require us to screen individuals and other companies, suppliers and vendors in order to ensure that they are not "debarred" by the federal government and therefore prohibited from doing business in the healthcare industry.

The federal Anti-Kickback Statute prohibits persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual, or the furnishing or arranging for a good or service, for which payment may be made under a federal healthcare program such as the Medicare and Medicaid programs. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the statute has been violated. The Anti-Kickback Statute is broad and prohibits many arrangements and practices that are lawful in businesses outside of the healthcare industry. Many states have also adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs.

The federal False Claims Act prohibits persons from knowingly filing or causing to be filed a false claim to, or the knowing use of false statements to obtain payment from, the federal government. Various states have also enacted laws modeled after the federal False Claims Act.

In addition to the laws described above, the Health Insurance Portability and Accountability Act of 1996 created two new federal crimes: healthcare fraud and false statements relating to healthcare matters. The healthcare fraud statute prohibits knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private payors. The false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services.

Voluntary industry codes, federal guidance documents and a variety of state laws address the tracking and reporting of marketing practices relative to gifts given and other expenditures made to doctors and other healthcare professionals. In addition to impacting our marketing and educational programs, internal business processes will be affected by the numerous legal requirements and regulatory guidance at the state, federal and industry levels.

International Regulation

International sales of medical devices are subject to foreign government regulations, which may vary substantially from country to country. The time required to obtain approval in a foreign country may be longer or shorter than that required for FDA approval and the requirements may differ. For example, the primary regulatory environment in Europe with respect to medical devices is that of the European Union, which includes most of the major countries in Europe. Other countries, such as Switzerland, have voluntarily adopted laws and regulations that mirror those of the European Union with respect to medical devices. The European Union has adopted numerous directives and standards regulating the design, manufacture, clinical trials, labeling and adverse event reporting for medical devices. Devices that comply with the requirements of a relevant directive will be entitled to bear the CE conformity marking, indicating that the device conforms to the essential requirements of the applicable directives and, accordingly, can be commercially distributed throughout European Union, although actual implementation of the these directives may vary on a country-by-country basis. The method of assessing conformity varies depending on the class of the product, but normally involves a combination of submission of a design dossier, self-assessment by the manufacturer, a third-party assessment and, review of the design dossier by a "Notified Body." This third-party assessment generally consists of an audit of the manufacturer's quality system and manufacturing site, as well as review of the technical documentation used to support application of the CE mark to one's product and possibly specific testing of the manufacturer's product. An assessment by a Notified Body of one country within the European Union is required in order for a manufacturer to commercially distribute the product throughout the European Union. We obtained CE marking approval for sale of the Diamondback 360° in May 2005.

Environmental Regulation

Our operations are subject to regulatory requirements relating to the environment, waste management and health and safety matters, including measures relating to the release, use, storage, treatment, transportation, discharge, disposal and remediation of hazardous substances. We are currently classified and licensed as a Very Small Quantity Hazardous Waste Generator within Ramsey County, Minnesota.

Employees

As of June 30, 2009, we had 239 employees, including 49 employees in manufacturing, 124 employees in sales, 12 employees in marketing, four employees in clinicals, 20 employees in general and administrative, and 30 employees in research and development, all of which are full-time employees. None of our employees are represented by a labor union or parties to a collective bargaining agreement, and we believe that our employee relations are good.

Item 1A. *Risk Factors.*

Risks Relating to Our Business and Operations

We have a history of net losses and anticipate that we will continue to incur losses.

We are not profitable and have incurred net losses in each fiscal year since our formation in 1989. In particular, we had net losses of $31.9 million in fiscal 2009, $39.2 million in fiscal 2008, and $15.6 million in fiscal 2007. As of June 30, 2009, we had an accumulated deficit of approximately $127.4 million. We commenced commercial sales of the Diamondback 360° PAD System in September 2007, and our short commercialization experience makes it difficult for us to predict future performance. We also expect to incur significant additional expenses for sales and marketing and manufacturing as we continue to commercialize the Diamondback 360° and additional expenses as we seek to develop and commercialize future versions of the Diamondback 360° and other products. Additionally, we expect that our general and administrative expenses will increase as our business grows and we incur the legal and regulatory costs associated with being a public company. As a result, we expect our operating losses to continue but generally decline as we continue our commercialization activities, develop additional product enhancements, increase manufacturing capacity, and make further regulatory submissions.

We have a limited history selling the Diamondback 360°, which is currently our primary product, and our inability to market this product successfully would have a material adverse effect on our business and financial condition.

Although we also sell a variety of ancillary products, the Diamondback 360° is our primary product and we are largely dependent on it. The Diamondback 360° received 510(k) clearance from the FDA in the United States for use as a therapy in patients with PAD in August 2007. We initiated a limited commercial introduction of the Diamondback 360° in the United States in September 2007 and we therefore have limited experience in the commercial manufacture and marketing of this product. Our ability to generate revenue will depend upon our ability to further successfully commercialize the Diamondback 360° and to develop, manufacture and receive required regulatory clearances and approvals and patient reimbursement for treatment with future versions of the Diamondback 360°. As we continue to commercialize the Diamondback 360°, we will need to expand our sales force to reach our target market. Developing a sales force is expensive and time consuming and could delay or limit the success of any product launch. Thus, we may not be able to expand our sales and marketing capabilities on a timely basis or at all. If we are unable to adequately increase these capabilities, we will need to contract with third parties to market and sell the Diamondback 360° and any other products that we may develop. To the extent that we enter into arrangements with third parties to perform sales, marketing and distribution services on our behalf, our product revenues could be lower than if we marketed and sold our products on a direct basis. Furthermore, any revenues resulting from co-promotion or other marketing and sales arrangements with other companies will depend on the skills and efforts of others, and we do not know whether these efforts will be successful. Some of these companies may have current products or products under development that compete with ours, and they may have an incentive not to devote sufficient efforts to marketing our products. If we fail to successfully develop, commercialize and market the Diamondback 360° or any future versions of this product that we develop, our business will be materially adversely affected.

The Diamondback 360° and future products may never achieve broad market acceptance.

The Diamondback 360° and future products we may develop may never gain broad market acceptance among physicians, patients and the medical community. The degree of market acceptance of any of our products will depend on a number of factors, including:

- the actual and perceived effectiveness and reliability of our products;
- the prevalence and severity of any adverse patient events involving our products, including infection, perforation or dissection of the artery wall, internal bleeding, limb loss and death;
- the results of any long-term clinical trials relating to use of our products;
- the availability, relative cost and perceived advantages and disadvantages of alternative technologies or treatment methods for conditions treated by our systems;
- the degree to which treatments using our products are approved for reimbursement by public and private insurers;
- the strength of our marketing and distribution infrastructure; and
- the level of education and awareness among physicians and hospitals concerning our products.

Failure of the Diamondback 360° to significantly penetrate current or new markets would negatively impact our business, financial condition and results of operations.

If longer-term or more extensive clinical trials performed by us or others indicate that procedures using the Diamondback 360° or any future products are not safe, effective and long lasting, physicians may choose not to use our products. Furthermore, unsatisfactory patient outcomes or injuries could cause negative publicity for our products. Physicians may be slow to adopt our products if they perceive liability risks arising from the use of these products. It is also possible that as our products become more widely used, latent defects could be identified, creating negative publicity and liability problems for us, thereby adversely affecting demand for our products. If the Diamondback 360° and our future products do not achieve an adequate level of acceptance by physicians, patients and the medical community, our overall business and profitability would be harmed.

Our future growth depends on physician adoption of the Diamondback 360°, which requires physicians to change their screening and referral practices.

We believe that we must educate physicians to change their screening and referral practices. For example, although there is a significant correlation between PAD and coronary artery disease, many physicians do not routinely screen for PAD while screening for coronary artery disease. We target our sales efforts to interventional cardiologists, vascular surgeons and interventional radiologists because they are often the primary care physicians diagnosing and treating both coronary artery disease and PAD. However, the initial point of contact for many patients may be general practitioners, podiatrists, nephrologists and endocrinologists, each of whom commonly treats patients experiencing complications resulting from PAD. If we do not educate referring physicians about PAD in general and the existence of the Diamondback 360° in particular, they may not refer patients to interventional cardiologists, vascular surgeons or interventional radiologists for the procedure using the Diamondback 360°, and those patients may instead be surgically treated or treated with an alternative interventional procedure. If we are not successful in educating physicians about screening for PAD or referral opportunities, our ability to increase our revenue may be impaired.

Our customers may not be able to achieve adequate reimbursement for using the Diamondback 360°, which could affect the acceptance of our product and cause our business to suffer.

The availability of insurance coverage and reimbursement for newly approved medical devices and procedures is uncertain. The commercial success of our products is substantially dependent on whether third-party insurance coverage and reimbursement for the use of such products and related services are available. We expect the Diamondback 360° to generally be purchased by hospitals and other providers who will then seek reimbursement from various public and private third-party payors, such as Medicare, Medicaid and private insurers, for the services

provided to patients. We can give no assurance that these third-party payors will provide adequate reimbursement for use of the Diamondback 360° to permit hospitals and doctors to consider the product cost-effective for patients requiring PAD treatment, or that current reimbursement levels for the Diamondback 360° will continue. In addition, the overall amount of reimbursement available for PAD treatment could decrease in the future. Failure by hospitals and other users of our product to obtain sufficient reimbursement could cause our business to suffer.

Medicare, Medicaid, health maintenance organizations and other third-party payors are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement, and, as a result, they may not cover or provide adequate payment for use of the Diamondback 360°. In order to position the Diamondback 360° for acceptance by third-party payors, we may have to agree to lower prices than we might otherwise charge. The continuing efforts of governmental and commercial third-party payors to contain or reduce the costs of healthcare may limit our revenue.

We expect that there will continue to be federal and state proposals for governmental controls over healthcare in the United States. Governmental and private sector payors have instituted initiatives to limit the growth of healthcare costs using, for example, price regulation or controls and competitive pricing programs. Some third-party payors also require demonstrated superiority, on the basis of randomized clinical trials, or pre-approval of coverage, for new or innovative devices or procedures before they will reimburse healthcare providers who use such devices or procedures. Also, the trend toward managed healthcare in the United States and proposed legislation intended to reduce the cost of government insurance programs could significantly influence the purchase of healthcare services and products and may result in necessary price reductions for our products or the exclusion of our products from reimbursement programs. It is uncertain whether the Diamondback 360° or any future products we may develop will be viewed as sufficiently cost-effective to warrant adequate coverage and reimbursement levels.

If third-party coverage and reimbursement for the Diamondback 360° is limited or not available, the acceptance of the Diamondback 360° and, consequently, our business will be substantially harmed.

Healthcare reform legislation could adversely affect our revenue and financial condition.

In recent years, there have been numerous initiatives on the federal and state levels for comprehensive reforms affecting the payment for, the availability of and reimbursement for healthcare services in the United States. These initiatives have ranged from proposals to fundamentally change federal and state healthcare reimbursement programs, including providing comprehensive healthcare coverage to the public under governmental funded programs, to minor modifications to existing programs. Recently, President Obama and members of Congress have proposed significant reforms to the U.S. healthcare system. Both the U.S. Senate and House of Representatives have conducted hearings about U.S. healthcare reform. The Obama administration's fiscal year 2010 budget included proposals to limit Medicare payments and increase taxes. In addition, members of Congress have proposed a single-payer healthcare system, a government health insurance option to compete with private plans and other expanded public healthcare measures. The ultimate content or timing of any future healthcare reform legislation, and its impact on us, is impossible to predict. If significant reforms are made to the healthcare system in the United States, or in other jurisdictions, those reforms may have an adverse effect on our financial condition and results of operations.

We have limited data and experience regarding the safety and efficacy of the Diamondback 360°. Any long-term data that is generated may not be positive or consistent with our limited short-term data, which would affect market acceptance of this product.

Our success depends on the acceptance of the Diamondback 360° by the medical community as safe and effective. Because our technology is relatively new in the treatment of PAD, we have performed clinical trials only with limited patient populations. The long-term effects of using the Diamondback 360° in a large number of patients are not known and the results of short-term clinical use of the Diamondback 360° do not necessarily predict long-term clinical benefit or reveal long-term adverse effects. For example, we do not have sufficient experience with the Diamondback 360° to evaluate its relative effectiveness in different plaque morphologies, including hard, calcified lesions and soft, non-calcified lesions. If the results obtained from any future clinical trials or clinical or

commercial experience indicate that the Diamondback 360° is not as safe or effective as other treatment options or as current short-term data would suggest, adoption of this product may suffer and our business would be harmed.

Even if we believe that the data collected from clinical trials or clinical experience indicate positive results, each physician's actual experience with our device will vary. Clinical trials conducted with the Diamondback 360° have involved procedures performed by physicians who are very technically proficient. Consequently, both short and long-term results reported in these studies may be significantly more favorable than typical results achieved by physicians, which could negatively impact market acceptance of the Diamondback 360°.

We face significant competition and may be unable to sell the Diamondback 360° at profitable levels.

We compete against very large and well-known stent and balloon angioplasty device manufacturers, including Abbott Laboratories, Boston Scientific, Cook, Johnson & Johnson and Medtronic. We may have difficulty competing effectively with these competitors because of their well-established positions in the marketplace, significant financial and human capital resources, established reputations and worldwide distribution channels. We also compete against manufacturers of atherectomy catheters including, among others, ev3, Spectranetics, Boston Scientific and Pathway Medical Technologies, as well as other manufacturers that may enter the market due to the increasing demand for treatment of vascular disease. Several other companies provide products used by surgeons in peripheral bypass procedures. Other competitors include pharmaceutical companies that manufacture drugs for the treatment of mild to moderate PAD and companies that provide products used by surgeons in peripheral bypass procedures.

Our competitors may:

- develop and patent processes or products earlier than we will;
- obtain regulatory clearances or approvals for competing medical device products more rapidly than we will;
- market their products more effectively than we will; or
- develop more effective or less expensive products or technologies that render our technology or products obsolete or non-competitive.

We have encountered and expect to continue to encounter potential customers who, due to existing relationships with our competitors, are committed to or prefer the products offered by these competitors. If we are unable to compete successfully, our revenue will suffer. Increased competition might lead to price reductions and other concessions that might adversely affect our operating results. Competitive pressures may decrease the demand for our products and could adversely affect our financial results.

Our ability to compete depends on our ability to innovate successfully. If our competitors demonstrate the increased safety or efficacy of their products as compared to ours, our revenue may decline.

The market for medical devices is highly competitive, dynamic and marked by rapid and substantial technological development and product innovations. Our ability to compete depends on our ability to innovate successfully, and there are few barriers that would prevent new entrants or existing competitors from developing products that compete directly with our products. Demand for the Diamondback 360° could be diminished by equivalent or superior products and technologies offered by competitors. Our competitors may produce more advanced products than ours or demonstrate superior safety and efficacy of their products. If we are unable to innovate successfully, the Diamondback 360° could become obsolete and our revenue would decline as our customers purchase competitor products.

We have limited commercial manufacturing experience and could experience difficulty in producing the Diamondback 360° or will need to depend on third parties to manufacture the product.

We have limited experience in commercially manufacturing the Diamondback 360° and have no experience manufacturing this product in the volume that we anticipate will be required if we achieve planned levels of commercial sales. As a result, we may not be able to develop and implement efficient, low-cost manufacturing capabilities and processes that will enable us to manufacture the Diamondback 360° or future products in

significant volumes, while meeting the legal, regulatory, quality, price, durability, engineering, design and production standards required to market our products successfully. If we fail to develop and implement these manufacturing capabilities and processes, we may be unable to profitably commercialize the Diamondback 360° and any future products we may develop because the per unit cost of our products is highly dependent upon production volumes and the level of automation in our manufacturing processes. There are technical challenges to increasing manufacturing capacity, including equipment design and automation capabilities, material procurement, problems with production yields and quality control and assurance. Increasing our manufacturing capacity will require that we invest substantial additional funds and hire and retain additional management and technical personnel who have the necessary manufacturing experience. We may not successfully complete any required increase in manufacturing capacity in a timely manner or at all. If we are unable to manufacture a sufficient supply of our products, maintain control over expenses or otherwise adapt to anticipated growth, or if we underestimate growth, we may not have the capability to satisfy market demand and our business will suffer.

The forecasts of demand we use to determine order quantities and lead times for components purchased from outside suppliers may be incorrect. Lead times for components may vary significantly depending on the type of component, the size of the order, time required to fabricate and test the components, specific supplier requirements and current market demand for the components and subassemblies. Failure to obtain required components or subassemblies when needed and at a reasonable cost would adversely affect our business.

In addition, we may in the future need to depend upon third parties to manufacture the Diamondback 360° and future products. We also cannot assure you that any third-party contract manufacturers will have the ability to produce the quantities of our products needed for development or commercial sales or will be willing to do so at prices that allow the products to compete successfully in the market. Additionally, we can give no assurance that even if we do contract with third-party manufacturers for production that these manufacturers will not experience manufacturing difficulties or experience quality or regulatory issues. Any difficulties in locating and hiring third-party manufacturers, or in the ability of third-party manufacturers to supply quantities of our products at the times and in the quantities we need, could have a material adverse effect on our business.

We depend upon third-party suppliers, including single source suppliers to us and our customers, making us vulnerable to supply problems and price fluctuations.

We rely on third-party suppliers to provide us with certain components of our products and to provide key components or supplies to our customers for use with our products. We rely on single source suppliers for the components of the Diamondback 360°. We purchase components from these suppliers on a purchase order basis and carry only limited levels of inventory for these components. If we underestimate our requirements, we may not have an adequate supply, which could interrupt manufacturing of our products and result in delays in shipments and loss of revenue. We depend on these suppliers to provide us and our customers with materials in a timely manner that meet ours and their quality, quantity and cost requirements. These suppliers may encounter problems during manufacturing for a variety of reasons, including unanticipated demand from larger customers, failure to follow specific protocols and procedures, failure to comply with applicable regulations, equipment malfunction, quality or yield problems, and environmental factors, any of which could delay or impede their ability to meet our demand and our customers' demand. Our reliance on these outside suppliers also subjects us to other risks that could harm our business, including:

- interruption of supply resulting from modifications to, or discontinuation of, a supplier's operations;
- delays in product shipments resulting from defects, reliability issues or changes in components from suppliers;
- price fluctuations due to a lack of long-term supply arrangements for key components with our suppliers;
- our suppliers may make errors in manufacturing components, which could negatively affect the efficacy or safety of our products or cause delays in shipment of our products;
- our suppliers may discontinue production of components, which could significantly delay our production and sales and impair operating margins;

- we and our customers may not be able to obtain adequate supplies in a timely manner or on commercially acceptable terms;
- we and our customers may have difficulty locating and qualifying alternative suppliers for ours and their sole-source supplies;
- switching components may require product redesign and new regulatory submissions, either of which could significantly delay production and sales;
- we may experience production delays related to the evaluation and testing of products from alternative suppliers and corresponding regulatory qualifications;
- our suppliers manufacture products for a range of customers, and fluctuations in demand for the products these suppliers manufacture for others may affect their ability to deliver components to us or our customers in a timely manner; and
- our suppliers may encounter financial hardships unrelated to us or our customers' demand for components or other products, which could inhibit their ability to fulfill orders and meet requirements.

Other than existing, unfulfilled purchase obligations, our suppliers have no contractual obligations to supply us with, and we are not contractually obligated to purchase from them, any of our supplies. Any supply interruption from our suppliers or failure to obtain additional suppliers for any of the components used in our products would limit our ability to manufacture our products and could have a material adverse effect on our business, financial condition and results of operations. We have no reason to believe that any of our current suppliers could not be replaced if they were unable to deliver components to us in a timely manner or at an acceptable price and level of quality. However, if we lost one of these suppliers and were unable to obtain an alternate source on a timely basis or on terms acceptable to us, our production schedules could be delayed, our margins could be negatively impacted, and we could fail to meet our customers' demand. Our customers rely upon our ability to meet committed delivery dates and any disruption in the supply of key components would adversely affect our ability to meet these dates and could result in legal action by our customers, cause us to lose customers or harm our ability to attract new customers, any of which could decrease our revenue and negatively impact our growth. In addition, to the extent that our suppliers use technology or manufacturing processes that are proprietary, we may be unable to obtain comparable materials or components from alternative sources.

Manufacturing operations are often faced with a supplier's decision to discontinue manufacturing a component, which may force us or our customers to make last time purchases, qualify a substitute part, or make a design change which may divert engineering time away from the development of new products.

We will need to increase the size of our organization and we may experience difficulties managing growth. If we are unable to manage the anticipated growth of our business, our future revenue and operating results may be adversely affected.

The growth we may experience in the future will provide challenges to our organization, requiring us to rapidly expand our sales and marketing personnel and manufacturing operations. Our sales and marketing force has increased from six employees on January 1, 2007 to 136 employees on June 30, 2009, and we expect to continue to grow our sales and marketing force. We also expect to significantly expand our manufacturing operations to meet anticipated growth in demand for our products. Rapid expansion in personnel means that less experienced people may be producing and selling our product, which could result in unanticipated costs and disruptions to our operations. If we cannot scale and manage our business appropriately, our anticipated growth may be impaired and our financial results will suffer.

We anticipate future losses and may require additional financing, and our failure to obtain additional financing when needed could force us to delay, reduce or eliminate our product development programs or commercialization efforts.

We anticipate future losses and therefore may be dependent on additional financing to execute our business plan. Although we expect to achieve our first profitable quarter during fiscal year 2011, our plans for expansion may

still require additional financing. In particular, we may require additional capital in order to continue to conduct the research and development and obtain regulatory clearances and approvals necessary to bring any future products to market and to establish effective marketing and sales capabilities for existing and future products. Our operating plan may change, and we may need additional funds sooner than anticipated to meet our operational needs and capital requirements for product development, clinical trials and commercialization. Additional funds may not be available when we need them on terms that are acceptable to us, or at all. If adequate funds are not available on a timely basis, we may terminate or delay the development of one or more of our products, or delay establishment of sales and marketing capabilities or other activities necessary to commercialize our products.

Our future capital requirements will depend on many factors, including:

- the costs of expanding our sales and marketing infrastructure and our manufacturing operations;
- the degree of success we experience in commercializing the Diamondback 360°;
- the number and types of future products we develop and commercialize;
- the costs, timing and outcomes of regulatory reviews associated with our future product candidates;
- the costs of preparing, filing and prosecuting patent applications and maintaining, enforcing and defending intellectual property-related claims; and
- the extent and scope of our general and administrative expenses.

Raising additional capital through debt financing may restrict our operations.

To the extent that we raise additional capital through debt financing, the terms may include provisions that adversely affect your rights as a stockholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions such as incurring additional debt, making capital expenditures or declaring dividends. Any of these events could adversely affect our ability to achieve our product development and commercialization goals and have a material adverse effect on our business, financial condition and results of operations.

We do not intend to market the Diamondback 360° internationally in the near future, which will limit our potential revenue from this product.

As a part of our product development and regulatory strategy, we do not intend to market the Diamondback 360° internationally in the near future in order to focus our resources and efforts on the U.S. market, as international efforts would require substantial additional sales and marketing, regulatory and personnel expenses. Our decision to market this product only in the United States will limit our ability to reach all of our potential markets and will limit our potential sources of revenue. In addition, our competitors will have an opportunity to further penetrate and achieve market share abroad until such time, if ever, that we market the Diamondback 360° or other products internationally.

We are dependent on our senior management team and scientific personnel, and our business could be harmed if we are unable to attract and retain personnel necessary for our success.

We are highly dependent on our senior management, especially David L. Martin, our President and Chief Executive Officer. Our success will depend on our ability to retain senior management and to attract and retain qualified personnel in the future, including scientists, clinicians, engineers and other highly skilled personnel and to integrate current and additional personnel in all departments. Competition for senior management personnel, as well as scientists, clinical and regulatory specialists, engineers and sales personnel, is intense and we may not be able to retain our personnel. The loss of members of our senior management, scientists, clinical and regulatory specialists, engineers and sales personnel could prevent us from achieving our objectives of continuing to grow the company. The loss of a member of our senior management or professional staff would require the remaining senior executive officers to divert immediate and substantial attention to seeking a replacement. In particular, we expect to substantially increase the size of our sales force, which will require management's attention. In that regard, ev3 Inc., ev3 Endovascular, Inc., and FoxHollow Technologies, Inc. have brought an action against us that, if successful,

could limit our ability to retain the services of certain sales personnel that were formerly employed by those companies and make it more difficult to recruit and hire such sales and other personnel in the future. We do not carry key person life insurance on any of our employees.

We may incur significant costs due to the application of Section 409A of the Internal Revenue Code.

The estimated fair value of the common stock underlying our stock options was originally estimated in good faith by our board of directors based upon the best information available regarding the company on the dates of grant, including financing activity, development of our business, the FDA process and launch of our product, the initial public offering process and our financial results. During the fiscal years ended June 30, 2007 and June 30, 2008, we did not obtain valuations from an independent valuation firm contemporaneously with each option grant date. As further discussed under "Management's Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies and Significant Judgments and Estimates," we hired an independent valuation firm to determine the estimated fair value of our common stock for financial reporting purposes as of various dates, including June 29, 2007, September 30, 2007, December 31, 2007, March 31, 2008 and June 30, 2008. Our board considered these estimates when estimating the fair market value of our common stock on each option grant date that followed the board's receipt of an estimate from the valuation firm, but certain grants were later deemed to have been made at less than fair market value when such valuation estimates were retrospectively applied. With respect to options granted from June 12, 2007 through February 14, 2008, the estimated fair value of the common stock determined by the independent valuation firm was higher than the exercise price of stock options we had previously granted at or near such dates by a weighted average per share amount of approximately $0.79.

If the Internal Revenue Service were to determine that the fair market value of our common stock was higher than the exercise price of any of our stock options as of the grant date of such options, either in accordance with our financial reporting valuations or under a different methodology, then we and our optionholders may experience adverse tax consequences under Section 409A of the Internal Revenue Code and related provisions, including the imposition of future tax liabilities and penalties based on the spread between the fair market value and the exercise price at the time of option vesting and on future increases (if any) in the value of our stock or the company after the vesting date. These liabilities may be significant. The imposition of such liabilities may affect a significant portion of our employees and could adversely affect employee morale and our business operations.

We may be subject to damages or other remedies as a result of pending litigation.

On December 28, 2007, ev3 Inc., ev3 Endovascular, Inc. and FoxHollow Technologies, Inc. filed a complaint against us and certain of our employees alleging, among other things, misappropriation and use of their confidential information by us and certain of our employees who were formerly employees of FoxHollow. The complaint also alleges that certain of our employees violated their employment agreements with FoxHollow requiring them to refrain from soliciting FoxHollow employees. There can be no assurance as to the outcome of this litigation. We are defending this litigation vigorously. If we are not successful in defending it, we could be required to pay substantial damages and be subject to equitable relief that could include a requirement that we terminate the employment of certain employees, including certain key sales personnel who were formerly employed by FoxHollow. In any event, the defense of this litigation, regardless of the outcome, could result in substantial legal costs and diversion of our management's time and efforts from the operation of our business. If the plaintiffs in this litigation are successful, it could have a material adverse effect on our business, operations and financial condition.

Risks Related to Government Regulation

Our ability to market the Diamondback 360° in the United States is limited to use as a therapy in patients with PAD, and if we want to expand our marketing claims, we will need to file for additional FDA clearances or approvals and conduct further clinical trials, which would be expensive and time-consuming and may not be successful.

The Diamondback 360° received FDA 510(k) clearance in the United States for use as a therapy in patients with PAD. This general clearance restricts our ability to market or advertise the Diamondback 360° beyond this use and could affect our growth. While off-label uses of medical devices are common and the FDA does not regulate

physicians' choice of treatments, the FDA does restrict a manufacturer's communications regarding such off-label use. We will not actively promote or advertise the Diamondback 360° for off-label uses. In addition, we cannot make comparative claims regarding the use of the Diamondback 360° against any alternative treatments without conducting head-to-head comparative clinical trials, which would be expensive and time consuming. If our promotional activities fail to comply with the FDA's regulations or guidelines, we may be subject to FDA warnings or enforcement action.

If we determine to market the Diamondback 360° in the United States for other uses, for instance, use in the coronary arteries, we would need to conduct further clinical trials and obtain premarket approval from the FDA. In 2008, we completed the ORBIT I trial, a 50-patient study in India which investigated the safety of the Diamondback 360° in treating calcified coronary artery lesions, and results successfully met both safety and efficacy endpoints. An investigational device exemption, or IDE application was recently submitted to the FDA for ORBIT II, a pivotal trial in the United States to evaluate the safety and effectiveness of the Diamondback 360° in treating severely calcified coronary lesions. Clinical trials are complex, expensive, time consuming, uncertain and subject to substantial and unanticipated delays. Before we may begin clinical trials, we must submit and obtain approval for an IDE, that describes, among other things, the manufacture of, and controls for, the device and a complete investigational plan. Clinical trials generally involve a substantial number of patients in a multi-year study. We may encounter problems with our clinical trials, and any of those problems could cause us or the FDA to suspend those trials, or delay the analysis of the data derived from them.

A number of events or factors, including any of the following, could delay the completion of our clinical trials in the future and negatively impact our ability to obtain FDA clearance or approval for, and to introduce, a particular future product:

- failure to obtain approval from the FDA or any foreign regulatory authority to commence an investigational study;
- conditions imposed on us by the FDA or any foreign regulatory authority regarding the scope or design of our clinical trials;
- delays in obtaining or maintaining required approvals from institutional review boards or other reviewing entities at clinical sites selected for participation in our clinical trials;
- insufficient supply of our future product candidates or other materials necessary to conduct our clinical trials;
- difficulties in enrolling patients in our clinical trials;
- negative or inconclusive results from clinical trials, results that are inconsistent with earlier results, or the likelihood that the part of the human anatomy involved is more prone to serious adverse events, necessitating additional clinical trials;
- serious or unexpected side effects experienced by patients who use our future product candidates; or
- failure by any of our third-party contractors or investigators to comply with regulatory requirements or meet other contractual obligations in a timely manner.

Our clinical trials may not begin as planned, may need to be redesigned, and may not be completed on schedule, if at all. Delays in our clinical trials may result in increased development costs for our future product candidates, which could cause our stock price to decline and limit our ability to obtain additional financing. In addition, if one or more of our clinical trials is delayed, competitors may be able to bring products to market before we do, and the commercial viability of our future product candidates could be significantly reduced.

Even if we believe that a clinical trial demonstrates promising safety and efficacy data, such results may not be sufficient to obtain FDA clearance or approval. Without conducting and successfully completing further clinical trials, our ability to market the Diamondback 360° will be limited and our revenue expectations may not be realized.

We may become subject to regulatory actions if we are found to have promoted the Diamondback 360° for unapproved uses.

If the FDA determines that our promotional materials, training or other activities constitute promotion of our product for an unapproved use, it could request that we cease use of or modify our training or promotional materials or subject us to regulatory enforcement actions, including the issuance of an untitled or warning letter, injunction, seizure, civil fine and criminal penalties. It is also possible that other federal, state or foreign enforcement authorities might take action if they consider promotional, training or other materials to constitute promotion of our product for an unapproved or uncleared use, which could result in significant fines or penalties under other statutory authorities, such as laws prohibiting false claims for reimbursement.

The Diamondback 360° may in the future be subject to product recalls that could harm our reputation.

The FDA and similar governmental authorities in other countries have the authority to require the recall of commercialized products in the event of material regulatory deficiencies or defects in design or manufacture. A government mandated or voluntary recall by us could occur as a result of component failures, manufacturing errors or design or labeling defects. During the time of commercialization, we have had two minor instances of recall, involving one single lot of Diamondback 360° devices (eight units), and two boxes of ViperWires (ten wires), related to "Use By" date labeling issues. Any additional recalls of our product would divert managerial and financial resources, harm our reputation with customers and have an adverse effect on our financial condition and results of operations.

If we or our suppliers fail to comply with ongoing regulatory requirements, or if we experience unanticipated problems, our products could be subject to restrictions or withdrawal from the market.

The Diamondback 360° and related manufacturing processes, clinical data, adverse events, recalls or corrections and promotional activities, are subject to extensive regulation by the FDA and other regulatory bodies. In particular, we and our component suppliers are required to comply with the FDA's Quality System Regulation, or QSR, and other regulations, which cover the methods and documentation of the design, testing, production, control, quality assurance, labeling, packaging, storage and shipping of any product for which we obtain marketing clearance or approval. The FDA enforces the QSR through announced and unannounced inspections. We and certain of our third-party manufacturers have not yet been inspected by the FDA. Failure by us or one of our component suppliers to comply with the QSR requirements or other statutes and regulations administered by the FDA and other regulatory bodies, or failure to adequately respond to any observations, could result in, among other things:

- warning or other letters from the FDA;
- fines, injunctions and civil penalties;
- product recall or seizure;
- unanticipated expenditures;
- delays in clearing or approving or refusal to clear or approve products;
- withdrawal or suspension of approval or clearance by the FDA or other regulatory bodies;
- orders for physician notification or device repair, replacement or refund;
- operating restrictions, partial suspension or total shutdown of production or clinical trials; and
- criminal prosecution.

If any of these actions were to occur, it would harm our reputation and cause our product sales to suffer.

Furthermore, any modification to a device that has received FDA clearance or approval that could significantly affect its safety or efficacy, or that would constitute a major change in its intended use, design or manufacture, requires a new clearance or approval from the FDA. If the FDA disagrees with any determination by us that new

clearance or approval is not required, we may be required to cease marketing or to recall the modified product until we obtain clearance or approval. In addition, we could be subject to significant regulatory fines or penalties.

Regulatory clearance or approval of a product may also require costly post-marketing testing or surveillance to monitor the safety or efficacy of the product. Later discovery of previously unknown problems with our products, including unanticipated adverse events or adverse events of unanticipated severity or frequency, manufacturing problems, or failure to comply with regulatory requirements such as the QSR, may result in restrictions on such products or manufacturing processes, withdrawal of the products from the market, voluntary or mandatory recalls, fines, suspension of regulatory approvals, product seizures, injunctions or the imposition of civil or criminal penalties.

The use, misuse or off-label use of the Diamondback 360° may increase the risk of injury, which could result in product liability claims and damage to our business.

The use, misuse or off-label use of the Diamondback 360° may result in injuries that lead to product liability suits, which could be costly to our business. The Diamondback 360° is not FDA-cleared or approved for treatment of the carotid arteries, the coronary arteries, within bypass grafts or stents, of thrombus or where the lesion cannot be crossed with a guidewire or a significant dissection is present at the lesion site. We cannot prevent a physician from using the Diamondback 360° for off-label applications. The application of the Diamondback 360° to coronary or carotid arteries, as opposed to peripheral arteries, is more likely to result in complications that have serious consequences, including heart attacks or strokes which could result, in certain circumstances, in death.

We will face risks related to product liability claims, which could exceed the limits of available insurance coverage.

If the Diamondback 360° is defectively designed, manufactured or labeled, contains defective components or is misused, we may become subject to costly litigation by our customers or their patients. The medical device industry is subject to substantial litigation, and we face an inherent risk of exposure to product liability claims in the event that the use of our product results or is alleged to have resulted in adverse effects to a patient. In most jurisdictions, producers of medical products are strictly liable for personal injuries caused by medical devices. We may be subject in the future to claims for personal injuries arising out of the use of our products. Product liability claims could divert management's attention from our core business, be expensive to defend and result in sizable damage awards against us. A product liability claim against us, even if ultimately unsuccessful, could have a material adverse effect on our financial condition, results of operations and reputation. While we have product liability insurance coverage for our products and intend to maintain such insurance coverage in the future, there can be no assurance that we will be adequately protected from the claims that will be brought against us.

Compliance with environmental laws and regulations could be expensive. Failure to comply with environmental laws and regulations could subject us to significant liability.

Our operations are subject to regulatory requirements relating to the environment, waste management and health and safety matters, including measures relating to the release, use, storage, treatment, transportation, discharge, disposal and remediation of hazardous substances. Although we are currently classified as a Very Small Quantity Hazardous Waste Generator within Ramsey County, Minnesota, we cannot ensure that we will maintain our licensed status as such, nor can we ensure that we will not incur material costs or liability in connection with our operations, or that our past or future operations will not result in claims or injury by employees or the public. Environmental laws and regulations could also become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violations.

We and our distributors must comply with various federal and state anti-kickback, self-referral, false claims and similar laws, any breach of which could cause a material adverse effect on our business, financial condition and results of operations.

Our relationships with physicians, hospitals and the marketers of our products are subject to scrutiny under various federal anti-kickback, self-referral, false claims and similar laws, often referred to collectively as healthcare fraud and abuse laws.

Healthcare fraud and abuse laws are complex, and even minor, inadvertent violations can give rise to claims that the relevant law has been violated. If our operations are found to be in violation of these laws, we, as well as our employees, may be subject to penalties, including monetary fines, civil and criminal penalties, exclusion from federal and state healthcare programs, including Medicare, Medicaid, Veterans Administration health programs, workers' compensation programs and TRICARE (the healthcare system administered by or on behalf of the U.S. Department of Defense for uniformed services beneficiaries, including active duty and their dependents, retirees and their dependents), and forfeiture of amounts collected in violation of such prohibitions. Individual employees may need to defend such suits on behalf of us or themselves, which could lead to significant disruption in our present and future operations. Certain states in which we intend to market our products have similar fraud and abuse laws, imposing substantial penalties for violations. Any government investigation or a finding of a violation of these laws would likely have a material adverse effect on our business, financial condition and results of operations.

Anti-kickback laws and regulations prohibit any knowing and willful offer, payment, solicitation or receipt of any form of remuneration in return for the referral of an individual or the ordering or recommending of the use of a product or service for which payment may be made by Medicare, Medicaid or other government-sponsored healthcare programs. In addition, the cost of non-compliance with these laws could be substantial, since we could be subject to monetary fines and civil or criminal penalties, and we could also be excluded from federally funded healthcare programs, including Medicare and Medicaid, for non-compliance.

We have entered into consulting agreements with physicians, including some who may make referrals to us or order our product. One of these physicians was one of 20 principal investigators in our OASIS clinical trial at the same time he was acting as a paid consultant for us. In addition, some of these physicians own our stock, which they purchased in arm's-length transactions on terms identical to those offered to non-physicians, or received stock options from us as consideration for consulting services performed by them. We believe that these consulting agreements and equity investments by physicians are common practice in our industry, and while these transactions were structured with the intention of complying with all applicable laws, including the federal ban on physician self-referrals, commonly known as the "Stark Law," state anti-referral laws and other applicable anti-kickback laws, it is possible that regulatory or enforcement agencies or courts may in the future view these transactions as prohibited arrangements that must be restructured or for which we would be subject to other significant civil or criminal penalties, or prohibit us from accepting referrals from these physicians. Because our strategy relies on the involvement of physicians who consult with us on the design of our product, we could be materially impacted if regulatory or enforcement agencies or courts interpret our financial relationships with our physician advisors who refer or order our product to be in violation of applicable laws and determine that we would be unable to achieve compliance with such applicable laws. This could harm our reputation and the reputations of our clinical advisors.

The scope and enforcement of all of these laws is uncertain and subject to rapid change, especially in light of the lack of applicable precedent and regulations. There can be no assurance that federal or state regulatory or enforcement authorities will not investigate or challenge our current or future activities under these laws. Any investigation or challenge could have a material adverse effect on our business, financial condition and results of operations. Any state or federal regulatory or enforcement review of us, regardless of the outcome, would be costly and time consuming. Additionally, we cannot predict the impact of any changes in these laws, whether these changes are retroactive or will have effect on a going-forward basis only.

We incur significant costs as a result of operating as a public company, and our management is required to devote substantial time to compliance initiatives.

As a public company, we incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act, as well as rules subsequently implemented by the Securities and Exchange Commission and the Nasdaq Global Market, have imposed various requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Our management and other personnel devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations have increased our legal and financial compliance costs and made some activities more time consuming and costly. While we have developed and instituted a corporate compliance program based on what we believe are the current appropriate best practices and continue to update the program in response to newly implemented or changing regulatory requirements, we cannot ensure that it is or will be in compliance with all potentially applicable regulations.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective internal controls for financial reporting and disclosure controls and procedures. In particular, we must perform system and process evaluation and testing of our internal controls over financial reporting to allow management and, at certain times, our independent registered public accounting firm to report on the effectiveness of our internal controls over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Our testing, or the subsequent testing by our independent registered public accounting firm, when required, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses. Moreover, if we are not able to comply with the requirements of Section 404 in a timely manner, or if we or our independent registered public accounting firm identifies deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by Nasdaq, the SEC or other regulatory authorities, which would require additional financial and management resources.

These obligations divert management's time and attention away from our business. Our management may not be able to effectively and timely implement controls and procedures that adequately respond to the increased regulatory compliance and reporting requirements that are applicable. If we fail to staff our accounting and finance function adequately or maintain internal controls adequate to meet the demands that are placed upon us a public company, including the requirements of the Sarbanes-Oxley Act, we may be unable to report our financial results accurately or in a timely manner, and our business and stock price may suffer. The costs of being a public company, as well as diversion of management's time and attention, may have a material adverse effect on our business, financial condition and results of operations.

Additionally, these laws and regulations could make it more difficult or more 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. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, board committees or as executive officers.

Risks Relating to Our Intellectual Property

Our inability to adequately protect our intellectual property could allow our competitors and others to produce products based on our technology, which could substantially impair our ability to compete.

Our success and ability to compete depends, in part, upon our ability to maintain the proprietary nature of our technologies. We rely on a combination of patents, copyrights and trademarks, as well as trade secrets and nondisclosure agreements, to protect our intellectual property. As of August 31, 2009, we had a portfolio of 22 issued U.S. patents and 48 issued or granted non-U.S. patents covering aspects of our core technology, which expire between 2010 and 2027. However, our issued patents and related intellectual property may not be adequate to protect us or permit us to gain or maintain a competitive advantage. The issuance of a patent is not conclusive as to its scope, validity or enforceability. The scope, validity or enforceability of our issued patents can be challenged in litigation or proceedings before the U.S. Patent and Trademark Office, or the USPTO. In addition, our pending patent applications include claims to numerous important aspects of our products under development that are not currently protected by any of our issued patents. We cannot assure you that any of our pending patent applications

will result in the issuance of patents to us. The USPTO may deny or require significant narrowing of claims in our pending patent applications. Even if any patents are issued as a result of pending patent applications, they may not provide us with significant commercial protection or be issued in a form that is advantageous to us. Proceedings before the USPTO could result in adverse decisions as to the priority of our inventions and the narrowing or invalidation of claims in issued patents. Further, if any patents we obtain or license are deemed invalid and unenforceable, or have their scope narrowed, it could impact our ability to commercialize or license our technology.

Changes in either the patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property. For instance, the U.S. Supreme Court has recently modified some tests used by the USPTO in granting patents during the past 20 years, which may decrease the likelihood that we will be able to obtain patents and increase the likelihood of challenge of any patents we obtain or license. In addition, the USPTO has adopted new rules of practice (the application of which has been enjoined as a result of litigation) that limit the number of claims that may be filed in a patent application and the number of continuation or continuation-in-part applications that may be filed. These new rules may result in patent applicants being unable to secure all of the rights that they would otherwise have been entitled to in the absence of the new rules and, therefore, may negatively affect our ability to obtain comprehensive patent coverage. The laws of some foreign countries may not protect our intellectual property rights to the same extent as the laws of the United States, if at all.

To protect our proprietary rights, we may, in the future, need to assert claims of infringement against third parties to protect our intellectual property. The outcome of litigation to enforce our intellectual property rights in patents, copyrights, trade secrets or trademarks is highly unpredictable, could result in substantial costs and diversion of resources, and could have a material adverse effect on our financial condition, reputation and results of operations regardless of the final outcome of such litigation. In the event of an adverse judgment, a court could hold that some or all of our asserted intellectual property rights are not infringed, invalid or unenforceable, and could order us to pay third-party attorneys' fees. Despite our efforts to safeguard our unpatented and unregistered intellectual property rights, we may not be successful in doing so or the steps taken by us in this regard may not be adequate to detect or deter misappropriation of our technology or to prevent an unauthorized third party from copying or otherwise obtaining and using our products, technology or other information that we regard as proprietary. In addition, we may not have sufficient resources to litigate, enforce or defend our intellectual property rights. Additionally, third parties may be able to design around our patents.

We also rely on trade secrets, technical know-how and continuing innovation to develop and maintain our competitive position. In this regard, we seek to protect our proprietary information and other intellectual property by requiring our employees, consultants, contractors, outside scientific collaborators and other advisors to execute non-disclosure and assignment of invention agreements on commencement of their employment or engagement. Agreements with our employees also forbid them from bringing the proprietary rights of third parties to us. We also require confidentiality or material transfer agreements from third parties that receive our confidential data or materials. However, trade secrets are difficult to protect. We cannot provide any assurance that employees and third parties will abide by the confidentiality or assignment terms of these agreements, or that we will be effective securing necessary assignments from these third parties. Despite measures taken to protect our intellectual property, unauthorized parties might copy aspects of our products or obtain and use information that we regard as proprietary. Enforcing a claim that a third party illegally obtained and is using any of our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Finally, others may independently discover trade secrets and proprietary information, and this would prevent us from asserting any such trade secret rights against these parties.

Our inability to adequately protect our intellectual property could allow our competitors and others to produce products based on our technology, which could substantially impair our ability to compete.

Claims of infringement or misappropriation of the intellectual property rights of others could prohibit us from commercializing products, require us to obtain licenses from third parties or require us to develop non-infringing alternatives, and subject us to substantial monetary damages and injunctive relief.

The medical technology industry is characterized by extensive litigation and administrative proceedings over patent and other intellectual property rights. The likelihood that patent infringement or misappropriation claims

may be brought against us increases as we achieve more visibility in the marketplace and introduce products to market. All issued patents are entitled to a presumption of validity under the laws of the United States. Whether a product infringes a patent involves complex legal and factual issues, the determination of which is often uncertain. Therefore, we cannot be certain that we have not infringed the intellectual property rights of such third parties or others. Our competitors may assert that our products are covered by U.S. or foreign patents held by them. We are aware of numerous patents issued to third parties that relate to the manufacture and use of medical devices for interventional cardiology. The owners of each of these patents could assert that the manufacture, use or sale of our products infringes one or more claims of their patents. Because patent applications may take years to issue, there may be applications now pending of which we are unaware that may later result in issued patents that we infringe. If another party has filed a U.S. patent application on inventions similar to ours, we may have to participate in an interference proceeding declared by the USPTO to determine priority of invention in the United States. The costs of these proceedings can be substantial, and it is possible that such efforts would be unsuccessful if unbeknownst to us, the other party had independently arrived at the same or similar invention prior to our own invention, resulting in a loss of our U.S. patent position with respect to such inventions. There could also be existing patents of which we are unaware that one or more aspects of its technology may inadvertently infringe. In some cases, litigation may be threatened or brought by a patent-holding company or other adverse patent owner who has no relevant product revenues and against whom our patents may provide little or no deterrence.

Any infringement or misappropriation claim could cause us to incur significant costs, place significant strain on our financial resources, divert management's attention from our business and harm our reputation. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations. Although patent and intellectual property disputes in the medical device area have often been settled through licensing or similar arrangements, costs associated with such arrangements may be substantial and could include ongoing royalties. If the relevant patents were upheld in litigation as valid and enforceable and we were found to infringe, we could be prohibited from commercializing any infringing products unless we could obtain licenses to use the technology covered by the patent or are able to design around the patent. We may be unable to obtain a license on terms acceptable to us, if at all, and we may not be able to redesign any infringing products to avoid infringement. Further, any redesign may not receive FDA clearance or approval or may not receive such clearance or approval in a timely manner. Any such license could impair operating margins on future product revenue. A court could also order us to pay compensatory damages for such infringement, and potentially treble damages, plus prejudgment interest and third-party attorneys' fees. These damages could be substantial and could harm our reputation, business, financial condition and operating results. A court also could enter orders that temporarily, preliminarily or permanently enjoin us and our customers from making, using, selling, offering to sell or importing infringing products, or could enter an order mandating that we undertake certain remedial activities. Depending on the nature of the relief ordered by the court, we could become liable for additional damages to third parties. Adverse determinations in a judicial or administrative proceeding or failure to obtain necessary licenses could prevent us from manufacturing and selling our products, which would have a significant adverse impact on our business.

Risks Relating to Ownership of Our Common Stock

Until recently there has not been a public market for our common stock and our stock price is expected to be volatile and you may not be able to resell your shares.

The market price of our common stock could be subject to significant fluctuations. Market prices for securities of early-stage pharmaceutical, medical device, biotechnology and other life sciences companies have historically been particularly volatile. Some of the factors that may cause the market price of our common stock to fluctuate include:

- our ability to develop, obtain regulatory clearances or approvals for and market new and enhanced products on a timely basis;

- changes in governmental regulations or in the status of our regulatory approvals, clearances or future applications;
- our announcements or our competitors' announcements regarding new products, product enhancements, significant contracts, number of hospitals and physicians using our products, acquisitions or strategic investments;
- announcements of technological or medical innovations for the treatment of vascular disease;
- delays or other problems with the manufacturing of the Diamondback 360°;
- volume and timing of orders for the Diamondback 360° and any future products, if and when commercialized;
- changes in the availability of third-party reimbursement in the United States and other countries;
- quarterly variations in our or our competitors' results of operations;
- changes in earnings estimates or recommendations by securities analysts who cover our common stock;
- failure to meet estimates or recommendations by securities analysts who cover our stock;
- changes in healthcare policy;
- product liability claims or other litigation;
- product recalls;
- accusations that we have violated a law or regulation;
- sales of large blocks of our common stock, including sales by our executive officers, directors and significant stockholders;
- disputes or other developments with respect to intellectual property rights;
- changes in accounting principles; and
- general market conditions and other factors, including factors unrelated to our operating performance or the operating performance of our competitors.

In addition, if securities class action litigation is initiated against us, we would incur substantial costs and our management's attention would be diverted from operations. All of these factors could cause the price of our stock to decline, and you may lose some or all of your investment.

Moreover, the stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of individual companies. These broad market fluctuations may also adversely affect the trading price of our common stock.

In the past, following periods of volatility in the market price of a company's securities, stockholders have often instituted class action securities litigation against such company. Such litigation, if instituted, could result in substantial costs and diversion of management attention and resources, which could significantly harm our profitability and reputation.

We do not expect to pay cash dividends, and accordingly, stockholders must rely on stock appreciation for any return on their investment in the company.

We anticipate that we will retain our earnings, if any, for future growth and therefore do not anticipate that we will pay cash dividends in the future. As a result, appreciation of the price of our common stock is the only potential source of return to stockholders. Investors seeking cash dividends should not invest in our common stock.

If equity research analysts do not publish research or reports about our business or if they issue unfavorable research or downgrade the company's common stock, the price of our common stock could decline.

Investors may look to reports of equity research analysts for additional information regarding our industry and operations. Therefore, any trading market for our common stock will rely in part on the research and reports that equity research analysts publish about us and our business. We do not control these analysts. Equity research analysts may elect not to provide research coverage of our common stock, which may adversely affect the market price of our common stock. If equity research analysts do provide research coverage of our common stock, the price of our common stock could decline if one or more of these analysts downgrade the common stock or if they issue other unfavorable commentary about us or our business. If one or more of these analysts ceases coverage of the company, we could lose visibility in the market, which in turn could cause our stock price to decline.

Some provisions of our charter documents and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders.

Provisions in our restated certificate of incorporation and bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us, even if doing so would benefit our stockholders. These provisions include:

- authorizing the issuance of "blank check" preferred stock, the terms of which may be established and shares of which may be issued without stockholder approval;
- limiting the removal of directors by the stockholders;
- prohibiting stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of stockholders;
- eliminating the ability of stockholders to call a special meeting of stockholders; and
- establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings.

In addition, we are subject to Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with an interested stockholder for a period of three years following the date on which the stockholder became an interested stockholder, unless such transactions are approved by such corporation's board of directors. This provision could have the effect of delaying or preventing a change of control, whether or not it is desired by or beneficial to the combined company's stockholders.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

Sales of a substantial number of shares of the combined company's common stock in the public market or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales may have on the prevailing market price of the common stock.

To the extent we raise additional capital by issuing equity securities, including in a debt financing where we issue convertible notes or notes with warrants, our stockholders may experience substantial dilution. We may sell common stock in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock in more than one transaction, existing stockholders may be materially diluted. In addition, new investors could gain rights superior to existing stockholders, such as liquidation and other preferences. We have stock options and warrants outstanding to purchase shares of our capital stock. Our stockholders will incur dilution upon exercise of any outstanding stock options or warrants.

Item 1B. ***Unresolved Staff Comments.***

Not applicable.

Item 2. ***Properties.***

Our principal executive offices are located in a 47,000 square foot facility located in St. Paul, Minnesota. We have leased this facility through November 2012 with an option to renew through November 2017. This facility accommodates our research and development, sales, marketing, manufacturing, finance and administrative activities.

In September 2009, we entered into an agreement to lease a 46,000 square foot production facility in Pearland, Texas beginning April 1, 2010. We have leased this facility through March 2020. This facility will primarily accommodate additional manufacturing activities.

We believe that our current premises, combined with the Pearland, Texas production facility, are substantially adequate for our current and anticipated future needs for the foreseeable future.

Item 3. ***Legal Proceedings.***

On December 28, 2007, ev3 Inc., ev3 Endovascular, Inc. and FoxHollow Technologies, Inc., together referred to as the Plaintiffs, filed a complaint in the Ramsey County District Court for the State of Minnesota against us and Sean Collins and Aaron Lew, who are former employees of FoxHollow currently employed by us, as well as against unknown former employees of Plaintiffs currently employed by us, referred to in the complaint as John Does 1-10. On July 2, 2008, Plaintiffs served and filed with the court a second amended complaint. In this amended pleading, Plaintiffs asserted claims against us as well as ten of our employees, all of whom were formerly employed by one or more of the Plaintiffs. The second amended complaint also continues to refer to "John Doe 1-10" defendants, who are not identified by name.

The second amended complaint alleges the following:

- That certain of our employees (i) violated provisions in their employment agreements with their former employer FoxHollow, barring them from misusing FoxHollow confidential information and from soliciting or encouraging employees of FoxHollow to join us, and (ii) breached a duty of loyalty owed to FoxHollow.
- That we and certain of our employees misappropriated trade secrets of one or more of the Plaintiffs.
- That all defendants engaged in unfair competition and conspired to gain an unfair competitive and economic advantage for us to the detriment of the Plaintiffs.
- That (i) we tortiously interfered with the contracts between FoxHollow and certain of our employees by allegedly procuring breaches of the non-solicitation — encouragement provision in those agreements, and (ii) one of our employees tortiously interfered with the contracts between certain of our employees and FoxHollow by allegedly procuring breaches of the confidential information provision in those agreements.

In the second amended complaint, the Plaintiffs seek, among other forms of relief, an award of damages in an amount greater than $50,000, a variety of forms of injunctive relief, exemplary damages under the Minnesota Trade Secrets Act, and recovery of their attorney fees and litigation costs. Although we have requested the information, the Plaintiffs have not yet disclosed what specific amount of damages they claim.

On December 28, 2007, the Plaintiffs filed with the court a motion for a temporary restraining order, which the court granted in part and denied in part in an order dated January 10, 2008. With regard to former employees of ev3 or FoxHollow who are now employed with us, the court

- enjoined those employees from disclosing trade secrets of ev3 or FoxHollow;
- directed that any of such employees who signed a FoxHollow employment agreement must not disclose the identity of FoxHollow Key Opinion Leaders or Thought Leaders or use this information to aid us;

- ordered that these persons must not maintain, use or disclose any confidential information about the FoxHollow Key Opinion Leaders or Thought Leaders that was received while they were employed with FoxHollow, and that if such information had already been disclosed or used, they were required to advise the recipients of such information in writing that this information is confidential and may not be used by them or disclosed to anyone;

- ordered that if any of these employees contact any physician who is a FoxHollow Key Opinion Leader or Thought Leader, he/she must be able to trace, document and account, with specificity, how he/she was able to identify such prospect through information, records or documents obtained outside his/her employment with Plaintiffs; and

- directed that those employees who are subject to a FoxHollow employee nonsolicitation agreement must not, for one year after leaving FoxHollow, be involved in soliciting or recruiting any current employee of the Plaintiffs to leave that employment or to accept employment with us.

In the memorandum accompanying the January 10, 2008 order, the court noted that Mr. Collins admitted he took certain FoxHollow sales information just prior to the conclusion of his employment with FoxHollow, and noted that Mr. Collins had indicated a willingness to return that information to FoxHollow. Mr. Collins has returned the information.

We believe the January 10, 2008 court order and the continuing confidentiality obligations of our officers and employees who were subject to employment agreements with FoxHollow will have no material impact on our sales efforts and the efforts of our management. In accordance with the court's order, we have undertaken an effort to document and account, with specificity, how our employees identified our existing physician customers through information, records or documents that did not originate with FoxHollow, and we have implemented procedures to document how we identify new physician customers. We believe all of our existing physician customers were identified through appropriate sources, such as publicly-available information, employees' preexisting physician relationships and referrals from existing physician customers. In addition, we do not believe the court order imposes any materially adverse restriction on identifying and contacting new physician prospects since these physicians are typically well-known in their industry and are easily identified through appropriate sources. Accordingly, we do not anticipate that the court order will materially impact our sales efforts.

In July 2008, all defendants in the case filed motions with the district court asking the court to dismiss all claims on the grounds that the claims should be decided exclusively in arbitration in accordance with provisions found in the employment agreements between FoxHollow and eight of the 10 individual defendants. In October 2008, the district court granted this motion with respect to the eight individual defendants who had arbitration provisions in their FoxHollow employment agreements and stayed proceedings in the action against these parties pending the outcome of any subsequent arbitration proceedings. At the same time, the court denied the motions to compel arbitration brought by us and by the two other individual defendants. In late October 2008, both we and the two individual defendants filed appeals from the district court's order denying the motions to compel arbitration. In January 2009, the district court stayed all proceedings in the action pending resolution of the appeals. During the oral argument before the Court of Appeals that occurred in May 2009, counsel for the Plaintiffs informed the court that the Plaintiffs do not intend to commence arbitration proceedings against the eight co-Defendants who prevailed in the district court on motions to compel arbitration. On August 11, 2009, the Court of Appeals issued a decision affirming the district court's order denying the motions by us and the two individual defendants to compel arbitration. In late August 2009, both we and the two individual defendants filed petitions with the Minnesota Supreme Court, asking that court to review the August 11, 2009, decision by the Minnesota Court of Appeals. We anticipate learning by the end of October 2009 whether the Supreme Court will accept review.

The Diamondback 360° is, at least in some applications, considered to be a direct competitor with one of Plaintiffs' products. Our current Chief Executive Officer, Vice President of Business Operations and Vice President of Business Development were formerly employed by FoxHollow. These officers remain subject to confidentiality provisions in their employment agreements with FoxHollow, but the employee nonsolicitation provisions in their agreements with FoxHollow have expired. As of August 31, 2009, 35 of the 126 members of our sales department, or 27.8%, were formerly employed by one or more of the Plaintiffs.

We are defending this litigation vigorously. However, if we are not successful in this litigation, we could be required to pay substantial damages and could be subject to equitable relief that could include a requirement that we terminate or otherwise alter the terms or conditions of employment of certain employees, including certain key sales personnel who were formerly employed by FoxHollow. In any event, the defense of this litigation, regardless of the outcome, could result in substantial legal costs and diversion of our management's time and efforts from the operation of our business.

Item 4. ***Submission of Matters to a Vote of Security Holders.***

None.

Executive Officers of the Registrant.

The information required by Item 10 relating to directors, our code of ethics, procedures for stockholder recommendations of director nominees, the audit committee and compliance with Section 16 of the Exchange Act is incorporated herein by reference to the sections entitled "Election of Directors", "Corporate Governance" and "Section 16(a) Beneficial Ownership Reporting Compliance," which appear in our definitive proxy statement for our 2009 Annual Meeting.

The names, ages and positions of our executive officers are as follows:

Name	Age	Position
David L. Martin	45	President and Chief Executive Officer
Laurence L. Betterley	55	Chief Financial Officer
James E. Flaherty	55	Chief Administrative Officer and Secretary
Brian Doughty	46	Vice President of Commercial Operations
Scott Kraus	39	Vice President of Sales
Paul Koehn	46	Vice President of Manufacturing
Robert J. Thatcher	55	Executive Vice President
Paul Tyska	51	Vice President of Business Development

David L. Martin, President and Chief Executive Officer. Mr. Martin has been our President and Chief Executive Officer since February 2007, and a director since August 2006. Mr. Martin also served as our Interim Chief Financial Officer from January 2008 to April 2008. Prior to joining us, Mr. Martin was Chief Operating Officer of FoxHollow Technologies, Inc. from January 2004 to February 2006, Executive Vice President of Sales and Marketing of FoxHollow Technologies, Inc. from January 2003 to January 2004, Vice President of Global Sales and International Operations at CardioVention Inc. from October 2001 to May 2002, Vice President of Global Sales for RITA Medical Systems, Inc. from March 2000 to October 2001 and Director of U.S. Sales, Cardiac Surgery for Guidant Corporation from September 1999 to March 2000. Mr. Martin has also held sales and sales management positions for The Procter & Gamble Company and Boston Scientific Corporation.

Laurence L. Betterley, Chief Financial Officer. Mr. Betterley joined us in April 2008 as our Chief Financial Officer. Previously, Mr. Betterley was Chief Financial Officer at Cima NanoTech, Inc. from May 2007 to April 2008, Senior Vice President and Chief Financial Officer of PLATO Learning, Inc. from June 2004 to January 2007, Senior Vice President and Chief Financial Officer of Diametrics Medical, Inc. from 1996 to 2003, and Chief Financial Officer of Cray Research Inc. from 1994 to 1996.

James E. Flaherty, Chief Administrative Officer and Secretary. Mr. Flaherty has been our Chief Administrative Officer since January 14, 2008. Mr. Flaherty was our Chief Financial Officer from March 2003 to January 14, 2008. As Chief Administrative Officer, Mr. Flaherty reports directly to our Chief Executive Officer and has responsibility for information technology, facilities, legal matters, financial analysis of business development opportunities and business operations. Prior to joining us, Mr. Flaherty served as an independent financial consultant from 2001 to 2003 and Chief Financial Officer of Zomax Incorporated from 1997 to 2001 and Racotek, Inc. from 1990 to 1996. On June 9, 2005, the Securities and Exchange Commission filed a civil injunctive action charging Zomax Incorporated with violations of federal securities law by filing a materially misstated Form 10-Q

for the period ended June 30, 2000. The SEC further charged that in a conference call with analysts, certain of Zomax's executive officers, including Mr. Flaherty, misrepresented or omitted to state material facts regarding Zomax's prospects of meeting quarterly revenue and earnings targets, in violation of federal securities law. Without admitting or denying the SEC's charges, Mr. Flaherty consented to the entry of a court order enjoining him from any violation of certain provisions of federal securities law. In addition, Mr. Flaherty agreed to disgorge $16,770 plus prejudgment interest and pay a $75,000 civil penalty.

Brian Doughty, Vice President of Commercial Operations. Mr. Doughty joined us in December 2006 as Director of Marketing, was named Vice President of Marketing in August 2007 and became Vice President of Commercial Operations in April 2009. Prior to joining us, Mr. Doughty was Director of Marketing at EKOS Corporation from February 2005 to December 2006, National Sales Initiatives Manager of FoxHollow Technologies, Inc. from September 2004 to February 2005, National Sales Operations Director at Medtronic from August 2000 to September 2004, and Sales Team Leader for Johnson and Johnson from December 1998 to August 2000. Mr. Doughty has also held sales and sales management positions for Ameritech Information Systems.

Scott Kraus, Vice President of Sales. Mr. Kraus has been with us since September 2006, acting as a senior sales director, until becoming Vice President of Sales in April 2009. Previously, Mr. Kraus was at Boston Scientific Corporation where he served as an Account Manager/Regional Sales Manager from April 2006 to September 2006. He held the same position with Guidant Corporation from December 2000 to April 2006, before Boston Scientific's acquisition of Guidant in April 2006. Earlier, he gained sales experience at C.R. Bard, Bristol-Myers Squibb and Surgical Specialties Corporation.

Paul Koehn, Vice President of Manufacturing. Mr. Koehn joined us in March 2007 as Director of Manufacturing and was promoted to Vice President of Manufacturing in October 2007. Previously, Mr. Koehn was Vice President of Operations for Sewall Gear Manufacturing from 2000 to March 2007 and before joining Sewall Gear, Mr. Koehn held various quality and manufacturing management roles with Dana Corporation.

Robert J. Thatcher, Executive Vice President. Mr. Thatcher joined us as Senior Vice President of Sales and Marketing in October 2005 and became Vice President of Operations in September 2006. Mr. Thatcher became Executive Vice President in August 2007. Previously, Mr. Thatcher was Senior Vice President of TriVirix Inc. from October 2003 to October 2005. Mr. Thatcher has more than 29 years of medical device experience in both large and start-up companies. Mr. Thatcher has held various sales management, marketing management and general management positions at Medtronic, Inc., Schneider USA, Inc. (a former division of Pfizer Inc.), Boston Scientific Corporation and several startup companies.

Paul Tyska, Vice President of Business Development. Mr. Tyska joined us in August 2006 as Vice President of Business Development. Previously, Mr. Tyska was employed at FoxHollow Technologies, Inc. since July 2003 where he most recently served as National Sales Director from February 2006 to August 2006. Mr. Tyska has held various positions with Guidant Corporation, CardioThoracic Systems, Inc., W. L. Gore & Associates and ATI Medical Inc.

PART II

Item 5. ***Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.***

Price Range of Common Stock and Dividend Policy

Prior to the closing of the merger on February 25, 2009, the stock of Replidyne was traded on the Nasdaq Global Market under the symbol "RDYN." On February 26, 2009, the stock of CSI began trading on the Nasdaq Global Market under the symbol "CSII." The following table sets forth the high and low sales prices for our common stock (based upon intra-day trading) as reported by the Nasdaq Global Market, as adjusted to reflect a 1-for-10 reverse stock split that occurred on February 25, 2009:

	Common Stock	
	High	Low
Fiscal Year Ended June 30, 2009		
First quarter	$14.30	$11.60
Second quarter	12.70	2.80
Third quarter (through February 25, 2009)	10.30	6.60
Third quarter (from February 26, 2009 through March 31, 2009)	10.15	4.78
Fourth quarter	7.97	5.60
Fiscal Year Ended June 30, 2008		
First quarter	$75.00	$52.30
Second quarter	66.60	30.50
Third quarter	31.00	12.90
Fourth quarter	19.00	12.50

The number of record holders of our common stock on September 23, 2009 was approximately 527. No cash dividends have been previously paid on our common stock and none are anticipated during fiscal year 2010. We are restricted from paying dividends under our Loan and Security Agreement with Silicon Valley Bank.

Recent Sales of Unregistered Securities

Between February 26, 2009 and June 30, 2009, we issued and sold 12,615 unregistered shares of our common stock pursuant to warrant exercises with exercise price of $1.55 per share. The shares were sold in private transactions exempt from registration pursuant to Section 4(2) of the Securities Act. No underwriters were involved in the transactions or received any commissions or other compensation. Proceeds of the sales were used to fund our working capital requirements.

Issuer Purchases of Equity Securities

None.

Securities Authorized For Issuance Under Equity Compensation Plans

For information on our equity compensation plans, refer to Item 12, "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters."

Item 7. ***Management's Discussion and Analysis of Financial Condition and Results of Operations.***

You should read the following discussion and analysis of financial condition and results of operations together with our consolidated financial statements and the related notes included elsewhere in this Form 10-K. This discussion and analysis contains forward-looking statements about our business and operations, based on current expectations and related to future events and our future financial performance, that involve risks and uncertainties.

Our actual results may differ materially from those we currently anticipate as a result of many important factors, including the factors we describe under "Risk Factors" and elsewhere in this Form 10-K.

OVERVIEW

We are a medical device company focused on developing and commercializing interventional treatment systems for vascular disease. Our initial product, the Diamondback 360°, is a minimally invasive catheter system for the treatment of peripheral arterial disease, or PAD.

We were incorporated as Replidyne, Inc. in Delaware in 2000. On February 25, 2009, Replidyne, Inc. completed its business combination with Cardiovascular Systems, Inc., a Minnesota corporation ("CSI-MN"), in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated as of November 3, 2008. Pursuant to the Merger Agreement, CSI-MN continued after the merger as the surviving corporation and a wholly owned subsidiary of Replidyne. Replidyne changed its name to Cardiovascular Systems, Inc. ("CSI") and CSI-MN merged with and into CSI, with CSI continuing after the merger as the surviving corporation. These transactions are referred to herein as the "merger." Unless the context otherwise requires, all references herein to the "Company," "CSI," "we," "us" and "our" refer to CSI-MN prior to the completion of the merger and to CSI following the completion of the merger and the name change, and all references to "Replidyne" refer to Replidyne prior to the completion of the merger and the name change.

At the closing of the merger, Replidyne's net assets, as calculated pursuant to the terms of the Merger Agreement, were approximately $36.6 million. As of immediately following the effective time of the merger, former CSI-MN stockholders owned approximately 80.2% of the outstanding common stock of the combined company, and Replidyne stockholders owned approximately 19.8% of the outstanding common stock of the combined company.

Our common stock was accepted for listing on the Nasdaq Global Market under the symbol "CSII" and trading commenced on February 26, 2009.

Replidyne was a biopharmaceutical company focused on discovering, developing, in-licensing and commercializing anti-infective products.

CSI-MN was incorporated in Minnesota in 1989. From 1989 to 1997, we engaged in research and development on several different product concepts that were later abandoned. Since 1997, we have devoted substantially all of our resources to the development of the Diamondback 360°.

From 2003 to 2005, we conducted numerous bench and animal tests in preparation for application submissions to the FDA. We initially focused our testing on providing a solution for coronary in-stent restenosis but later changed the focus to PAD. In 2006, we obtained an investigational device exemption from the FDA to conduct our pivotal OASIS clinical trial, which was completed in January 2007. The OASIS clinical trial was a prospective 20-center study that involved 124 patients with 201 lesions.

In August 2007, the FDA granted us 510(k) clearance for the use of the Diamondback 360° as a therapy in patients with PAD. We commenced a limited commercial introduction of the Diamondback 360° in the United States in September 2007. This limited commercial introduction intentionally limited the size of our sales force and the number of customers each member of the sales force served in order to focus on obtaining quality and timely product feedback on initial product usages.

We market the Diamondback 360° in the United States through a direct sales force and commenced a full commercial launch in the quarter ended March 31, 2008. We expend significant capital on our sales and marketing efforts to expand our customer base and utilization per customer. We manufacture the Diamondback 360° internally at our facilities.

As of June 30, 2009, we had an accumulated deficit of $127.4 million. We expect our losses to continue but generally decline as we continue our commercialization activities, develop additional product enhancements, increase our manufacturing capacity, and make further regulatory submissions. To date, we have financed our operations primarily through the private placement of equity securities and completion of the merger.

FINANCIAL OVERVIEW

Revenues. We derive substantially all of our revenues from the sale of the Diamondback 360° and other ancillary products. The Diamondback 360° system consists of a disposable, single-use, low-profile catheter that travels over our proprietary ViperWire guidewire and an external control unit that powers the system. Our ancillary products include the ViperSlide™ Lubricant, the ViperSheath™ Introducer Sheath, ViperTrack™ Radiopaque Tape, and ViperCaddy™ Guide Wire Management.

Cost of Goods Sold. We assemble the single-use catheter with components purchased from third-party suppliers, as well as with components manufactured in-house. The control unit and guidewires are purchased from third-party suppliers. Our cost of goods sold consists primarily of raw materials, direct labor, and manufacturing overhead.

Selling, General and Administrative Expenses. Selling, general and administrative expenses include compensation for executive, sales, marketing, finance, information technology, human resources and administrative personnel, including stock-based compensation. Other significant expenses include travel and marketing costs, professional fees, and patent expenses.

Research and Development. Research and development expenses include costs associated with the design, development, testing, enhancement and regulatory approval of our products. Research and development expenses include employee compensation including stock-based compensation, supplies and materials, consulting expenses, travel and facilities overhead. We also incur significant expenses to operate clinical trials, including trial design, third-party fees, clinical site reimbursement, data management and travel expenses. All research and development expenses are expensed as incurred.

Interest Income. Interest income is attributed to both interest earned on deposits in investments that consist of money market funds and auction rate securities and the initial fair value and changes in fair value of the auction rate securities put option discussed below.

Interest Expense. Interest expense results from outstanding debt balances, the issuance of convertible promissory notes, and debt discount amortization.

Decretion (Accretion) of Redeemable Convertible Preferred Stock Warrants. Decretion (accretion) of redeemable convertible preferred stock warrants reflects the change in the current estimated fair market value of the preferred stock warrants on a quarterly basis, as determined by management and the board of directors. Decretion (accretion) is recorded as a decrease (increase) to redeemable convertible preferred stock warrants in the consolidated balance sheet and a decrease (increase) to net loss in the consolidated statement of operations. Concurrent with the merger, all preferred stock warrants were converted into warrants to purchase common stock and, accordingly, we stopped recording decretion (accretion) as of the merger date.

Gain (Impairment) on Investments. Gain (impairment) on investments reflects the change in the fair value of investments as determined with the assistance of ValueKnowledge LLC, an independent third party valuation firm.

Decretion (Accretion) of Redeemable Convertible Preferred Stock. Decretion (accretion) of redeemable convertible preferred stock reflects the change in the current estimated fair market value of the preferred stock on a quarterly basis, as determined by management and the board of directors. Decretion (accretion) is recorded as a decrease (increase) to redeemable convertible preferred stock in the consolidated balance sheet and a decrease (increase) to the loss attributable to common stockholders in the consolidated statement of operations. The redeemable convertible preferred stock was converted into common stock immediately prior to the effective time of the merger with Replidyne. As such, the preferred stockholders forfeited their liquidation preferences and we stopped recording decretion (accretion) as of the merger date.

Net Operating Loss Carryforwards. We have established valuation allowances to fully offset our deferred tax assets due to the uncertainty about our ability to generate the future taxable income necessary to realize these deferred assets, particularly in light of our historical losses. The future use of net operating loss carryforwards is dependent on us attaining profitable operations and will be limited in any one year under Internal Revenue Code Section 382 due to significant ownership changes (as defined in Section 382) resulting from our equity financings.

At June 30, 2009, we had net operating loss carryforwards for federal and state income tax reporting purposes of approximately $110.2 million, which will expire at various dates through fiscal 2029.

CRITICAL ACCOUNTING POLICIES AND SIGNIFICANT JUDGMENTS AND ESTIMATES

Our management's discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of our consolidated financial statements requires us to make estimates, assumptions and judgments that affect amounts reported in those statements. Our estimates, assumptions and judgments, including those related to revenue recognition, allowance for doubtful accounts, excess and obsolete inventory, investments, stock-based compensation, preferred stock and preferred stock warrants are updated as appropriate at least quarterly. We use authoritative pronouncements, our technical accounting knowledge, cumulative business experience, judgment and other factors in the selection and application of our accounting policies. While we believe that the estimates, assumptions and judgments that we use in preparing our consolidated financial statements are appropriate, these estimates, assumptions and judgments are subject to factors and uncertainties regarding their outcome. Therefore, actual results may materially differ from these estimates.

Some of our significant accounting policies require us to make subjective or complex judgments or estimates. An accounting estimate is considered to be critical if it meets both of the following criteria: (1) the estimate requires assumptions about matters that are highly uncertain at the time the accounting estimate is made, and (2) different estimates that reasonably could have been used, or changes in the estimate that are reasonably likely to occur from period to period, would have a material impact on the presentation of our financial condition, results of operations, or cash flows. We believe that the following are our critical accounting policies and estimates:

Revenue Recognition. We sell the majority of our products via direct shipment to hospitals or clinics. We recognize revenue when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred; the sales price is fixed or determinable; and collectability is reasonably assured. These criteria are met at the time of delivery when the risk of loss and title passes to the customer. We record estimated sales returns, discounts and rebates as a reduction of net sales in the same period revenue is recognized.

We also consider Emerging Issues Task Force Bulletin (EITF) No. 00-21, *Revenue Arrangements with Multiple Deliverables,* in revenue recognition. This standard addresses the timing and method of revenue recognition for revenue arrangements that include the delivery of more than one product or service. In these cases, we recognize revenue from each element of the arrangement as long as separate values for each element can be determined, we have completed our obligation to deliver or perform on that element, and collection of the resulting receivable is reasonably assured.

Costs related to products delivered are recognized in the period revenue is recognized. Cost of goods sold consists primarily of raw materials, direct labor, and manufacturing overhead.

Allowance for Doubtful Accounts. We maintain allowances for doubtful accounts. This allowance is an estimate and is regularly evaluated for adequacy by taking into consideration factors such as past experience, credit quality of the customer base, age of the receivable balances, both individually and in the aggregate, and current economic conditions that may affect a customer's ability to pay. Provisions for the allowance for doubtful accounts attributed to bad debt are recorded in general and administrative expenses.

Excess and Obsolete Inventory. We have inventories that are principally comprised of capitalized direct labor and manufacturing overhead, raw materials and components, and finished goods. Due to the technological nature of our products, there is a risk of obsolescence to changes in our technology and the market, which is impacted by technological developments and events. Accordingly, we write down our inventories as we become aware of any situation where the carrying amount exceeds the estimated realizable value based on assumptions about future demands and market conditions. The evaluation includes analyses of inventory levels, expected product lives, product at risk of expiration, sales levels by product and projections of future sales demand.

Investments. Our investments include AAA rated auction rate securities (ARS) issued primarily by state agencies and backed by student loans substantially guaranteed by the Federal Family Education Loan Program

(FFELP). In February 2008, we were informed that there was insufficient demand for auction rate securities, resulting in failed auctions for $23.0 million of our auction rate securities held at June 30, 2009 and 2008. Currently, these affected securities are not liquid and will not become liquid until a future auction for these investments are successful, they are redeemed by the issuer, or they mature. As a result, at June 30, 2009 and 2008, we have classified the fair value of the auction rate securities as a long-term asset. We have collected all interest due on our auction rate securities and have no reason to believe that we will not collect all interest due in the future.

On November 7, 2008, we accepted an offer from UBS AG ("UBS"), providing rights related to our ARS (the "Rights"). The Rights permit us to require UBS to purchase our ARS at par value, which is defined for this purpose as the liquidation preference of the ARS plus accrued but unpaid dividends or interest, at any time during the period of June 30, 2010 through July 2, 2012. Conversely, UBS has the right, in its discretion, to purchase or sell our ARS at any time until July 2, 2012, so long as we receive payment at par value upon any sale or disposition. We expect to sell our ARS under the Rights. However, if the Rights are not exercised before July 2, 2012 they will expire and UBS will have no further rights or obligation to buy our ARS. So long as we hold ARS, they will continue to accrue interest as determined by the auction process or the terms of the ARS if the auction process fails. Prior to accepting the UBS offer, we recorded ARS as investments available-for-sale. We recorded unrealized gains and losses on available-for-sale securities in accumulated other comprehensive income in the stockholders' equity (deficiency) section of the balance sheet. Realized gains and losses were accounted for on the specific identification method. After accepting the UBS offer, we recorded the ARS as trading investments and realized gains and losses are included in earnings.

The Rights represent a firm agreement in accordance with SFAS 133, which defines a firm agreement as an agreement with an unrelated party, binding on both parties and usually legally enforceable, with the following characteristics: a) the agreement specifies all significant terms, including the quantity to be exchanged, the fixed price, and the timing of the transaction, and b) the agreement includes a disincentive for nonperformance that is sufficiently large to make performance probable. The enforceability of the Rights results in a put option and should be recognized as a free standing asset separate from the ARS. At June 30, 2009, we recorded $2.8 million as the fair value of the put option asset with a corresponding credit to interest income. We considered the expected time until the Rights are exercised, carrying costs of the Rights, and the expected credit risk attributes of the Rights and UBS in their valuation of the put option. The put option does not meet the definition of a derivative instrument under SFAS 133. Therefore, we have elected to measure the put option at fair value under SFAS 159, which permits an entity to elect the fair value option for recognized financial assets, in order to match the changes in the fair value of the ARS. As a result, unrealized gains and losses will be included in earnings in future periods.

We determined the fair value of our auction rate securities and quantified the other-than-temporary impairment loss and the unrealized loss with the assistance of ValueKnowledge LLC, an independent third party valuation firm, which utilized various valuation methods and considered, among other factors, estimates of present value of the auction rate securities based upon expected cash flows, the likelihood and potential timing of issuers of the auction rate securities exercising their redemption rights at par value, the likelihood of a return of liquidity to the market for these securities and the potential to sell the securities in secondary markets. Based on these factors, we recorded impairment of investments for the years ended June 30, 2009 and 2008 of $1.7 million and $1.3 million, respectively.

Stock-Based Compensation. We account for stock-based compensation expense in accordance with SFAS No. 123(R), *Share-Based Payment,* as interpreted by SAB No. 107 to account for stock-based compensation expense associated with the issuance or amendment of stock options and restricted stock awards. SFAS No. 123(R) requires us to recognize stock-based compensation expense in an amount equal to the fair value of share-based payments computed at the date of grant. The fair value of all stock option and restricted awards are expensed in the consolidated statements of operations over the related vesting period. We calculate the fair value on the date of grant using a Black-Scholes model.

To determine the inputs for the Black-Scholes option pricing model, we are required to develop several assumptions, which are highly subjective. These assumptions include:

- our common stock's volatility;

- the length of our options' lives, which is based on future exercises and cancellations;
- the number of shares of common stock pursuant to which options which will ultimately be forfeited;
- the risk-free rate of return; and
- future dividends.

Prior to the consummation of the merger, we used comparable public company data to determine volatility for option grants. Since we have a limited history of stock purchase and sale activity, expected volatility is based on historical data from several public companies similar to us in size and nature of operations. We will continue to use comparable public company data to determine expected volatility for option grants until our historical volatility is relevant to measure. We use a weighted average calculation to estimate the time our options will be outstanding. We estimated the number of options that are expected to be forfeited based on our historical experience. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant for the estimated life of the option. We use our judgment and expectations in setting future dividend rates, which is currently expected to be zero.

All options we have granted become exercisable over periods established at the date of grant. The option exercise price is generally not less than the estimated fair market value of our common stock at the date of grant, as determined by management and board of directors.

The absence of an active market for our common stock prior to the merger required our management and board of directors to estimate the fair value of our common stock for purposes of granting options and for determining stock-based compensation expense. In response to these requirements, prior to the merger our management and board of directors estimated the fair market value of common stock at each date at which options are granted based upon stock valuations and other qualitative factors. Our management and board of directors conducted stock valuations using two different valuation methods: the option pricing method and the probability weighted expected return method. Both of these valuation methods took into consideration the following factors: financing activity, rights and preferences of our preferred stock, growth of the executive management team, clinical trial activity, the FDA process, the status of our commercial launch, our mergers and acquisitions and public offering processes, revenues, the valuations of comparable public companies, our cash and working capital amounts, and additional objective and subjective factors relating to our business. Our management and board of directors set the exercise prices for option grants based upon their best estimate of the fair market value of the common stock at the time they made such grants, taking into account all information available at those times. In some cases, management and the board of directors made retrospective assessments of the valuation of the common stock at later dates and determined that the fair market value of the common stock at the times the grants were made was different than the exercise prices established for those grants. In cases in which the fair market was higher than the exercise price, we recognized stock-based compensation expense for the excess of the fair market value of the common stock over the exercise price.

Following the merger, our stock valuations are based upon the market price for our common stock.

Preferred Stock. We record the current estimated fair value of our convertible preferred stock on a quarterly basis based on the fair market value of that stock as determined by our management and board of directors. The determination of fair market value included factors such as recent financing activity, preferred stock rights and preferences, clinical trials, revenues, and regulatory approval process. In accordance with Accounting Series Release No. 268, *Presentation in Financial Statements of "Redeemable Preferred Stocks"* and EITF Abstracts, Topic D-98, *Classification and Measurement of Redeemable Securities*, we record changes in the current fair value of our redeemable convertible preferred stock in the consolidated statements of changes in stockholders' equity (deficiency) and comprehensive (loss) income and consolidated statements of operations as accretion of redeemable convertible preferred stock. Concurrent with the merger, all preferred stock was converted to common stock and, accordingly, was reclassified to stockholders' equity (deficiency).

Preferred Stock Warrants. Freestanding warrants and other similar instruments related to shares that are redeemable are accounted for in accordance with SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*, and its related interpretations. Under SFAS No. 150, the freestanding warrant that is related to our redeemable convertible preferred stock was classified as a liability on the balance sheet

as of June 30, 2008. The warrant was subject to remeasurement at each balance sheet date and any change in fair value was recognized as a component of other income (expense). Fair value was measured using the Black-Scholes option pricing model. Concurrent with the merger, all preferred stock warrants were converted into warrants to purchase common stock and, accordingly, the liability was reclassified to stockholders' equity (deficiency).

RESULTS OF OPERATIONS

The following table sets forth, for the periods indicated, our results of operations expressed as dollar amounts (in thousands), and, for certain line items, the changes between the specified periods expressed as percent increases or decreases:

	Year Ended June 30,			Year Ended June 30,		
	2009	2008	Percent Change	2008	2007	Percent Change
Revenues	$ 56,461	$ 22,177	154.6%	$ 22,177	$ —	
Cost of goods sold	16,194	8,927	81.4	8,927	—	
Gross profit	40,267	13,250	203.9	13,250	—	
Expenses:						
Selling, general and administrative	59,822	35,326	69.3	35,326	6,691	428.0
Research and development	14,678	16,068	(8.7)	16,068	8,446	90.2
Total expenses	74,500	51,394	45.0	51,394	15,137	239.6
Loss from operations	(34,233)	(38,144)	(10.3)	(38,144)	(15,137)	152.0
Other income (expense):						
Interest expense	(2,350)	(7)	33,471.4	(7)	(13)	(46.2)
Interest income	3,380	1,167	189.6	1,167	881	32.5
Decretion (accretion) of redeemable convertible preferred stock warrants	2,991	(916)	426.5	(916)	(1,327)	(31.0)
Impairment on investments	(1,683)	(1,267)	32.8	(1,267)	—	
Total other income (expense)	2,338	(1,023)	328.5	(1,023)	(459)	122.9
Net loss	(31,895)	(39,167)	(18.6)	(39,167)	(15,596)	151.1
Decretion (accretion) of redeemable convertible preferred stock	22,781	(19,422)	217.3	(19,422)	(16,835)	15.4
Net loss available to common stockholders	$ (9,114)	$(58,589)	(84.4)%	$(58,589)	$(32,431)	80.7%

Comparison of Fiscal Year Ended June 30, 2009 with Fiscal Year Ended June 30, 2008

Revenues. Revenues increased by $34.3 million, or 154.6%, from $22.2 million for the year ended June 30, 2008 to $56.5 million for the year ended June 30, 2009. This increase was primarily attributable to increased sales of the Diamondback 360° during the year ended June 30, 2009 compared to three quarters in the year ended June 30, 2008. As of June 30, 2009, we had a 124-person direct sales organization that was selling the Diamondback 360° in 556 accounts. As of June 30, 2008, we had an 87-person direct sales organization that was selling the Diamondback 360° in 186 accounts. We expect our revenue to continue increasing as we continue to increase the number of physicians using the devices and the usage rate per physician in the U.S. PAD market and also introduce new and improved products.

Cost of Goods Sold. Cost of goods sold increased by $7.3 million, or 81.4%, from $8.9 million for the year ended June 30, 2008 to $16.2 million for the year ended June 30, 2009. These amounts represent the cost of materials, labor and overhead for single-use catheters, guidewires, control units, and other ancillary products. The increase in gross margin from the year ended June 30, 2008 to June 30, 2009 is primarily due to increased volume,

manufacturing efficiencies, and product cost reductions. Cost of goods sold for the years ended June 30, 2009 and 2008 includes $475,000 and $232,000, respectively, for stock-based compensation. We expect that cost of goods sold as a percentage of revenues will decline in the future as sales volumes increase, although quarterly fluctuations could occur based on timing of new product introductions, sales mix, unanticipated warranty claims, or other unanticipated circumstances.

Selling, General and Administrative Expenses. Our selling, general and administrative expenses increased by $24.5 million, from $35.3 million for the year ended June 30, 2008 to $59.8 million for the year ended June 30, 2009. The primary reasons for the increase included the building of our sales and marketing team, contributing $22.2 million; increased consulting and professional services, including $1.7 million in previously capitalized initial public offering costs, contributing $2.4 million; and payroll related expenses related to building our administrative team, contributing $1.0 million. Selling, general, and administrative expenses for the years ended June 30, 2009 and 2008 includes $5.7 million and $6.9 million, respectively, for stock-based compensation. We expect our selling, general and administrative expenses to increase in the future due primarily to the costs associated with expanding our sales and marketing organization to further commercialize our products.

Research and Development Expenses. Research and development expenses decreased by $1.4 million, or 8.7%, from $16.1 million for the year ended June 30, 2008 to $14.7 million for the year ended June 30, 2009. Research and development expenses relate to specific projects to improve our product or expand into new markets, such as the development of a new control unit, shaft designs, crown designs, and PAD and coronary clinical trials. The reduction in expense related to costs of a coronary clinical trial occurring during the year ended June 30, 2008, along with fewer PAD development projects in 2009. Research and development for the years ended June 30, 2009 and 2008 includes $612,000 and $297,000, respectively, for stock-based compensation. As we continue to expand our product portfolio within the market for the treatment of peripheral arteries and leverage our core technology into the coronary market, we expect to incur research and development expenses at a similar rate as for the year ended June 30, 2009, although fluctuations could occur based on the number of projects and studies and the timing of expenditures.

Interest Expense. Interest expense increased by $2.3 million, from $7,000 for the year ended June 30, 2008 to $2.4 million for the year ended June 30, 2009. Interest expense for the year ended June 30, 2009 consisted of the amortization of debt discount of $1.2 million and interest on outstanding debt facilities of $1.1 million.

Interest Income. Interest income increased by $2.2 million, from $1.2 million for the year ended June 30, 2008 to $3.4 million for the year ended June 30, 2009. The increase was primarily due to the impact of recording the put option asset of $2.8 million related to our auction rate securities. This was offset by lower average cash and cash equivalent balances along with reduced yields. Average cash and cash equivalent balances were $16.5 million and $20.4 million for the years ended June 30, 2009 and 2008, respectively.

Decretion (Accretion) of Redeemable Convertible Preferred Stock Warrants. Decretion of redeemable convertible preferred stock warrants for the year ended June 30, 2009 was $3.0 million. Accretion of redeemable convertible preferred stock warrants for the year ended June 30, 2008 was $916,000. Decretion (accretion) of redeemable convertible preferred stock warrants reflects the change in estimated fair value of preferred stock warrants at the balance sheet dates. Due to the merger, decretion recognized during the year ended June 30, 2009 reflects a change in the estimated fair value of preferred stock warrants between July 1, 2008, and February 25, 2009 (date of merger) at which time the preferred stock warrants converted to common stock warrants. Due to the conversion there will be no further decretion (accretion) recorded for these warrants in the future.

Impairment on Investments. Impairment on investments was $1.7 million and $1.3 million for the years ended June 30, 2009 and 2008, respectively. Impairment on investments was due to a decrease in the fair value of investments in both periods.

Decretion (Accretion) of Redeemable Convertible Preferred Stock. Decretion of redeemable convertible preferred stock for the year ended June 30, 2009 was $22.8 million. Accretion of redeemable convertible preferred stock for the year ended June 30, 2008 was $19.4 million. Decretion (accretion) of redeemable convertible preferred stock reflects the change in estimated fair value of preferred stock at the balance sheet dates. Due to the merger, decretion recognized during the year ended June 30, 2009 reflects a change in the estimated fair value of preferred

stock between July 1, 2008, and February 25, 2009 (date of merger) at which time the preferred stock converted to common stock. Due to the conversion there will be no further decretion (accretion) recorded for these shares in the future.

Comparison of Fiscal Year Ended June 30, 2008 with Fiscal Year Ended June 30, 2007

Revenues. We generated revenues of $22.2 million during the year ended June 30, 2008 attributable to sales of the Diamondback 360° to customers following FDA clearance in August 2007. We commenced a limited commercial introduction of the Diamondback 360° in the United States in September 2007, followed by a full commercial launch in the quarter ended March 31, 2008. Since September 2007, we expanded our sales and marketing efforts and shipped more than 6,800 single-use catheters through June 30, 2008.

We applied EITF No. 00-21, *Revenue Arrangements with Multiple Deliverables*, the primary impact of which was to treat the Diamondback 360° as a single unit of accounting for initial customer orders. As such, revenues were deferred until the title and risk of loss of each Diamondback 360° component, consisting of catheters, guidewires, and a control unit, were transferred to the customer based on the shipping terms. Many initial shipments to customers also included a loaner control unit, which we provided, until the new control unit received clearance from the FDA and was subsequently available for sale.

Cost of Goods Sold. For the year ended June 30, 2008, cost of goods sold was $8.9 million. This amount represents the cost of materials, labor and overhead for single-use catheters, guidewires and control units shipped subsequent to obtaining FDA clearance for the Diamondback 360° in August 2007. Cost of goods sold for the year ended June 30, 2008 includes $232,000 for stock-based compensation. For the year ended June 30, 2007, there was no cost of goods sold due to revenues not occurring until the year ended June 30, 2008.

Selling, General and Administrative Expenses. Our selling, general and administrative expenses increased by $28.6 million, from $6.7 million for the year ended June 30, 2007 to $35.3 million for the year ended June 30, 2008. The primary reasons for the increase included the building of our sales and marketing team, contributing $18.6 million, and increased consulting and professional services, contributing $2.1 million. Selling, general and administrative for the years ended June 30, 2008 and 2007 includes $6.9 million and $327,000, respectively, for stock-based compensation.

Research and Development Expenses. Our research and development expenses increased by $7.7 million, from $8.4 million for the year ended June 30, 2007 to $16.1 million for the year ended June 30, 2008. Research and development spending increased as we initiated projects to improve our product, such as the development of a new control unit, shaft designs, crown designs, and began human feasibility trials in the coronary market. Research and development for the years ended June 30, 2008 and 2007 includes $297,000 and $63,000, respectively, for stock-based compensation.

Interest Expense. Interest expense decreased by $6,000, from $13,000 for the year ended June 30, 2007 to $7,000 for the year ended June 30, 2008. The decrease was due to the redemption of convertible promissory notes in the year ended June 30, 2007.

Interest Income. Interest income increased by $286,000, from $881,000 for the year ended June 30, 2007 to $1.2 million for the year ended June 30, 2008. The increase was primarily due to higher average cash and cash equivalent balances. Average cash and cash equivalent balances were $20.4 million and $18.5 million for the years ended June 30, 2008 and 2007, respectively.

Decretion (Accretion) of Redeemable Convertible Preferred Stock Warrants. Accretion of redeemable convertible preferred stock warrants for the years ended June 30, 2008 and 2007 was $916,000 and $1.3 million, respectively. Decretion (accretion) of redeemable convertible preferred stock warrants reflects the change in estimated fair value of preferred stock warrants at the balance sheet dates.

Impairment on Investments. Impairment on investments was $1.3 million for the year ended June 30, 2008. This impairment was due to a decrease in the fair value of investments.

Accretion of Redeemable Convertible Preferred Stock. Accretion of redeemable convertible preferred stock was $19.4 million and $16.8 million for the years ended June 30, 2008 and 2007, respectively. Accretion of

redeemable convertible preferred stock reflects the change in estimated fair value of preferred stock at the balance sheet dates.

LIQUIDITY AND CAPITAL RESOURCES

We had cash and cash equivalents of $33.4 million and $7.6 million at June 30, 2009 and 2008, respectively. During the year ended June 30, 2009, net cash used in operations amounted to $29.3 million. As of June 30, 2009, we had an accumulated deficit of $127.4 million. We have historically funded our operating losses primarily from the issuance of common and preferred stock, convertible promissory notes, and debt. We have incurred negative cash flows and net losses since inception.

On February 25, 2009, we completed the merger, in accordance with the terms of the Merger Agreement. At closing, Replidyne's net assets, as calculated pursuant to the terms of the Merger Agreement, were approximately $36.6 million.

In February 2008, we were notified that recent conditions in the global credit markets have caused insufficient demand for auction rate securities, resulting in failed auctions for $23.0 million of our auction rate securities held at June 30, 2009 and 2008. These securities are currently not liquid, as we have an inability to sell the securities due to continued failed auctions. On March 28, 2008, we obtained a margin loan from UBS Financial Services, Inc., the entity through which we originally purchased our auction rate securities, for up to $12.0 million, which was secured by the $23.0 million par value of our auction rate securities. The outstanding balance on this loan at June 30, 2008 was $11.9 million. On August 21, 2008, we replaced this loan with a margin loan from UBS Bank USA, which increased maximum borrowings available to $23.0 million, which may be adjusted from time to time by UBS Bank in its sole discretion. The margin loan bears interest at variable rates that equal the lesser of (i) 30 day LIBOR plus 1.25% or (ii) the applicable reset rate, maximum auction rate or similar rate as specified in the prospectus or other documentation governing the pledged taxable student loan auction rate securities; however, interest expense charged on the loan will not exceed interest income earned on the auction rate securities. The loan is due on demand and UBS Bank will require us to repay it in full from the proceeds received from a public equity offering where net proceeds exceed $50.0 million. In addition, if at any time any of our auction rate securities may be sold, exchanged, redeemed, transferred or otherwise conveyed for no less than their par value by UBS, then we must immediately effect such a transfer and the proceeds must be used to pay down outstanding borrowings under this loan. The margin requirements are determined by UBS Bank and are subject to change. From August 21, 2008, the date this loan was initially funded, through June 30, 2009, the margin requirements included maximum borrowings, including interest, of $23.0 million. If these margin requirements are not maintained, UBS Bank may require us to make a loan payment in an amount necessary to comply with the applicable margin requirements or demand repayment of the entire outstanding balance. We have maintained the margin requirements under the loans from both UBS entities. The outstanding balance on this loan at June 30, 2009 was $22.9 million.

On September 12, 2008, we entered into a loan and security agreement with Silicon Valley Bank with maximum available borrowings of $13.5 million, which agreement was amended on February 25, 2009 and April 30, 2009. The agreement includes a $3.0 million term loan, a $10.0 million accounts receivable line of credit, and a $5.5 million term loan that reduces availability of borrowings on the accounts receivable line of credit. The terms of each of these loans are as follows:

- The $3.0 million term loan has a fixed interest rate of 10.5% and a final payment amount equal to 3.0% of the loan amount due at maturity. This term loan has a 36 month maturity, with repayment terms that include interest only payments during the first six months followed by 30 equal principal and interest payments. This term loan also includes an acceleration provision that requires us to pay the entire outstanding balance, plus a penalty ranging from 1.0% to 6.0% of the principal amount, upon prepayment or the occurrence and continuance of an event of default. As part of the term loan agreement, we granted Silicon Valley Bank a warrant to purchase 8,493 shares of Series B redeemable convertible preferred stock at an exercise price of $14.16 per share. This warrant was assigned a value of $75,000 for accounting purposes, is immediately exercisable, and expires ten years after issuance. The balance outstanding on the term loan at June 30, 2009 was $2.6 million.

- The accounts receivable line of credit has a two year maturity and a floating interest rate equal to the prime rate, plus 2.0%, with an interest rate floor of 7.0%. Interest on borrowings is due monthly and the principal balance is due at maturity. Borrowings on the line of credit are based on 80% of eligible domestic receivables, which is defined as receivables aged less than 90 days from the invoice date along with specific exclusions for contra-accounts, concentrations, and government receivables. Accounts receivable receipts are deposited into a lockbox account in the name of Silicon Valley Bank. The accounts receivable line of credit is subject to non-use fees, annual fees, cancellation fees, and maintaining a minimum liquidity ratio. There was no balance outstanding on the line of credit at June 30, 2009. On April 30, 2009, the accounts receivable line of credit was amended to allow for an increase in borrowings from $5.0 million to $10.0 million. All other terms and conditions of the original line of credit agreement remain in place. The $5.5 million term loan reduces available borrowings under the line of credit agreement.

- The $5.5 million term loan was originally two guaranteed term loans each with a one year maturity. Each of the guaranteed term loans had a floating interest rate equal to the prime rate, plus 2.25%, with an interest rate floor of 7.0%. Interest on borrowings were due monthly and the principal balance was due at maturity. One of our directors and stockholders and two entities who held preferred shares and were also affiliated with two of our directors agreed to act as guarantors of these term loans. In consideration for guarantees, we issued the guarantors warrants to purchase an aggregate of 296,539 shares of our common stock at an exercise price of $9.28 per share.

  On April 30, 2009, the guaranteed term loans were refinanced into a $5.5 million term loan that has a fixed interest rate of 9.0% and a final payment amount equal to 1.0% of the loan amount due at maturity. As a result of the refinancing, the guarantees on the original term loans have been released. This term loan has a 30 month maturity, with repayment terms that include equal monthly payments of principal and interest beginning June 1, 2009. This term loan also includes an acceleration provision that requires us to pay the entire outstanding balance, plus a penalty ranging from 1.0% to 3.0% of the principal amount, upon prepayment or the occurrence and continuance of an event of default. The term loan reduces available borrowings under the amended accounts receivable line of credit agreement. The balance outstanding on the guaranteed term loans at June 30, 2009 was $5.3 million (excluding debt discount of $0.7 million).

The guaranteed term loans and common stock warrants were allocated using the relative fair value method. Under this method, we estimated the fair value of the term loans without the guarantees and calculated the fair value of the common stock warrants using the Black-Scholes method. The relative fair value of the loans and warrants were applied to the loan proceeds of $5.5 million resulting in an assigned value of $3.7 million for the loans and $1.8 million for the warrants. The assigned value of the warrants of $1.8 million is treated as a debt discount. The balance of the debt discount at June 30, 2009 is $0.7 million and is being amortized over the remaining term of the $5.5 million term loan.

Borrowings from Silicon Valley Bank are secured by all of our assets, other than our auction rate securities and intellectual property, and, until April 30, 2009, the investor guarantees. The borrowings are subject to prepayment penalties and financial covenants, and our achievement of minimum monthly net revenue goals. The agreement also includes subjective acceleration clauses which permit Silicon Valley Bank to accelerate the due date under certain circumstances, including, but not limited to, material adverse effects on our financial status or otherwise. Any non-compliance by us under the terms of our debt arrangements could result in an event of default under the Silicon Valley Bank loan, which, if not cured, could result in the acceleration of this debt. We were in compliance with all financial covenants at June 30, 2009.

The reported changes in cash and cash equivalents and investments for the year ended June 30, 2009 and 2008 are summarized below.

Cash and Cash Equivalents. Cash and cash equivalents was $33.4 million and $7.6 million at June 30, 2009 and 2008, respectively. This increase is primarily attributable to net assets acquired in the merger with Replidyne.

Investments. Investments were $20.0 million and $21.7 million at June 30, 2009 and 2008, respectively.

Our investments include AAA rated auction rate securities issued primarily by state agencies and backed by student loans substantially guaranteed by the Federal Family Education Loan Program, or FFELP. The federal

government insures loans in the FFELP so that lenders are reimbursed at least 97% of the loan's outstanding principal and accrued interest if a borrower defaults. Approximately 99.2% of the par value of our auction rate securities is supported by student loan assets that are guaranteed by the federal government under the FFELP.

In February 2008, we were informed that there was insufficient demand for auction rate securities, resulting in failed auctions for $23.0 million of our auction rate securities held at June 30, 2009 and 2008. Currently, these affected securities are not liquid and will not become liquid until a future auction for these investments is successful, they are redeemed by the issuer, they mature, or they are repurchased by UBS. As a result, we have determined the fair value of our auction rate securities at June 30, 2009 to be $20.0 million and have classified them as a long-term asset. We determined the fair value of our auction rate securities with the assistance of ValueKnowledge LLC, an independent third party valuation firm, which utilized various valuation methods and considered, among other factors, estimates of present value of the auction rate securities based upon expected cash flows, the likelihood and potential timing of issuers of the auction rate securities exercising their redemption rights at par value, the likelihood of a return of liquidity to the market for these securities and the potential to sell the securities in secondary markets.

On November 7, 2008, we accepted an offer from UBS AG ("UBS"), providing rights related to our auction rate securities (the "Rights"). The Rights permit us to require UBS to purchase our auction rate securities at par value, which is defined for this purpose as the liquidation preference of the auction rate securities plus accrued but unpaid dividends or interest, at any time during the period of June 30, 2010 through July 2, 2012. Conversely, UBS has the right, in its discretion, to purchase or sell our auction rate securities at any time until July 2, 2012, so long as we receive payment at par value upon any sale or disposition. We expect to sell our auction rates securities under the Rights. However, if the Rights are not exercised before July 2, 2012 they will expire and UBS will have no further rights or obligation to buy our auction rate securities. At June 30, 2009, we have determined the fair value of our auction rate security rights to be $2.8 million and have classified them as a long-term asset. So long as we hold auction rate securities, they will continue to accrue interest as determined by the auction process or the terms of the auction rate securities if the auction process fails.

Operating Activities. Net cash used in operating activities was $29.7 million and $31.9 million for the years ended June 30, 2009 and 2008, respectively. For the years ended June 30, 2009 and 2008, we had a net loss of $31.9 million and $39.2 million, respectively. Changes in working capital accounts also contributed to the net cash used in the years ended June 30, 2009 and 2008. Significant changes in working capital during these periods included:

- cash used in accounts receivable of $3.7 million and $5.1 million during the years ended June 30, 2009 and 2008, respectively;
- cash used in (provided by) inventory of $(407,000) and $2.7 million during the years ended June 30, 2009 and 2008, respectively;
- cash used in (provided by) prepaid expenses and other current assets of $(2.4) million and $1.3 million during the years ended June 30, 2009 and 2008, respectively;
- cash used in (provided by) accounts payable of $1.1 million and $(3.6) million during the years ended June 30, 2009 and 2008, respectively; and
- cash used in accrued expenses and other liabilities of $267,000 and $2.8 million during the years ended June 30, 2009 and 2008, respectively.

Investing Activities. Net cash provided by (used in) investing activities was $36.0 million and $(12.4) million for the years ended June 30, 2009 and 2008, respectively. For the year ended June 30, 2009, cash acquired in the merger with Replidyne, net of transaction costs paid, was $37.0 million. For the year ended June 30, 2008, we purchased investments in the amount of $31.3 million. For the years ended June 30, 2009 and 2008, we sold investments in the amount of $50,000 and $20.0 million, respectively. The balance of cash provided by (used in) investing activities primarily related to the purchase of property and equipment. Purchases of property and equipment used cash of $957,000 and $721,000 for the years ended June 30, 2009 and 2008, respectively.

Financing Activities. Net cash provided by financing activities was $19.5 million and $44.0 million in the years ended June 30, 2009 and 2008, respectively. Cash provided by financing activities during these periods included:

- proceeds from long-term debt of $19.8 million and $16.4 million during the years ended June 30, 2009 and 2008, respectively;
- exercise of stock options and warrants of $525,000 and $1.9 million during the years ended June 30, 2009 and 2008, respectively; and
- net proceeds from the issuance of convertible preferred stock of $30.3 million in the year ended June 30, 2008.

Cash used in financing activities in these periods included:

- payment of long-term debt of $945,000 and $4.5 million during the years ended June 30, 2009 and 2008, respectively.

Our future liquidity and capital requirements will be influenced by numerous factors, including the extent and duration of future operating losses, the level and timing of future sales and expenditures, the results and scope of ongoing research and product development programs, working capital required to support our sales growth, the receipt of and time required to obtain regulatory clearances and approvals, our sales and marketing programs, the continuing acceptance of our products in the marketplace, competing technologies and market and regulatory developments. As of June 30, 2009, we believe our current cash and cash equivalents and available debt will be sufficient to fund working capital requirements, capital expenditures and operations for the foreseeable future. We intend to retain any future earnings to support operations and to finance the growth and development of our business, and we do not anticipate paying any dividends in the foreseeable future.

Contractual Cash Obligations. Our contractual obligations and commercial commitments as of June 30, 2009 are summarized below:

	Payments Due by Period				
Contractual Obligations	**Total**	**Less Than 1 Year**	**1-3 Years**	**3-5 Years**	**More Than 5 Years**
			(In thousands)		
Operating leases(1)	$ 1,642	$ 478	$ 962	$202	$—
Purchase commitments(2)	5,424	5,424	—	—	—
Debt maturities(3)	30,202	25,823	4,379	—	—
Total	$37,234	$31,707	$5,325	$202	$—

(1) The amounts reflected in the table above for operating leases represent future minimum payments under a non-cancellable operating lease for our office and production facility along with equipment.

(2) This amount reflects open purchase orders.

(3) The amounts reflected in the table above represents debt maturities under various debt agreements.

INFLATION

We do not believe that inflation has had a material impact on our business and operating results during the periods presented.

OFF-BALANCE SHEET ARRANGEMENTS

Since inception, we have not engaged in any off-balance sheet activities as defined in Item 303(a)(4) of Regulation S-K.

RECENT ACCOUNTING PRONOUNCEMENTS

In June 2009, the FASB issued SFAS No. 168, *The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles — A Replacement of FASB Statement No. 162.* SFAS No. 168 establishes the *FASB Accounting Standards Codification™* (Codification) as the single source of authoritative U.S. generally accepted accounting principles (U.S. GAAP) recognized by the FASB to be applied by nongovernmental entities. Rules and interpretive releases of the SEC under authority of federal securities laws are also sources of authoritative U.S. GAAP for SEC registrants. SFAS 168 and the Codification are effective for financial statements issued for interim and annual periods ending after September 15, 2009. When effective, the Codification will supersede all existing non-SEC accounting and reporting standards. All other nongrandfathered non-SEC accounting literature not included in the Codification will become nonauthoritative. Following SFAS 168, the FASB will not issue new standards in the form of Statements, FASB Staff Positions, or Emerging Issues Task Force Abstracts. Instead, the FASB will issue Accounting Standards Updates, which will serve only to: (*a*) update the Codification; (*b*) provide background information about the guidance; and (*c*) provide the bases for conclusions on the change(s) in the Codification. We do not expect the adoption of this standard will have a material impact on our consolidated financial position or results of operations.

In April 2009, the FASB issued FSP SFAS, No. 107-1 and APB No. 28-1, *Interim Disclosures about Fair Value of Financial Instruments.* This FSP amends SFAS Statement No. 107, *Disclosures about Fair Values of Financial Instruments*, to require disclosures about fair value of financial instruments for interim reporting periods of publicly traded companies as well as in annual financial statements. This FSP also amends APB Opinion No. 28, *Interim Financial Reporting*, to require those disclosures in all interim financial statements. This FSP is effective for interim periods ending after June 15, 2009. We do not expect the adoption of this standard will have a material impact on our consolidated financial position or results of operations.

In June 2008, the FASB issued EITF 07-05, *Determining Whether an Instrument (or Embedded Feature) Is Indexed to an Entity's Own Stock.* EITF 07-05 provides guidance in assessing whether an equity-linked financial instrument (or embedded feature) is indexed to an entity's own stock for purposes of determining whether the appropriate accounting treatment falls under the scope of SFAS 133, "Accounting For Derivative Instruments and Hedging Activities" and/or EITF 00-19, "Accounting For Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock." EITF 07-05 is effective for year-ends beginning after December 15, 2008. We are currently evaluating the impact that the adoption of this standard will have on our financial position and consolidated results of operations.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements.* This standard clarifies the principle that fair value should be based on the assumptions that market participants would use when pricing an asset or liability. Additionally, it establishes a fair value hierarchy that prioritizes the information used to develop these assumptions. On February 12, 2008, the FASB issued FASB Staff Position, or FSP, FAS 157-2, *Effective Date of FASB Statement No. 157,* or FSP FAS 157-2. FSP FAS 157-2 defers the implementation of SFAS No. 157 for certain nonfinancial assets and nonfinancial liabilities. The portion of SFAS No. 157 that has been deferred by FSP FAS 157-2 will be effective beginning in the first quarter of fiscal year 2010. We are currently evaluating the impact of this statement. SFAS No. 157 was adopted for financial assets and liabilities on July 1, 2008 and did not have a material impact on our financial position or consolidated results of operations during the year ended June 30, 2009.

In October 2008, the FASB issued FASB Staff Position ("FSP") SFAS No. 157-3, *Determining the Fair Value of a Financial Asset When the Market for That Asset is Not Active.* FSP SFAS No. 157-3 clarifies the application of SFAS No. 157, which we adopted for financial assets and liabilities on July 1, 2008, in situations where the market is not active. We have considered the guidance provided by FSP SFAS No. 157-3 in our determination of estimated fair values as of June 30, 2009.

In June 2008, the FASB issued Staff Position EITF 03-06-1, "Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities" ("FSP EITF 03-06-1"). FSP EITF 03-06-1 provides that unvested share-based payment awards that contain nonforfeitable rights to dividends or dividend equivalents (whether paid or unpaid) are participating securities and shall be included in the computation of earnings per share pursuant to the two-class method in SFAS No. 128, "Earnings per Share". FSP EITF 03-06-1 is effective on July 1, 2009 and requires all prior-period earnings per share data to be adjusted retrospectively. We do

not expect the adoption of this standard will have a material impact on our consolidated financial position or results of operations.

In December 2007, the FASB issued SFAS No. 141 (revised 2007), *Business Combinations*, and SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements, an amendment of ARB No. 51*. The revised standards continue the movement toward the greater use of fair values in financial reporting. SFAS 141(R) will significantly change how business acquisitions are accounted for and will impact financial statements both on the acquisition date and in subsequent periods including the accounting for contingent consideration. SFAS 160 will change the accounting and reporting for minority interests, which will be recharacterized as noncontrolling interests and classified as a component of equity. SFAS 141(R) and SFAS 160 are effective for fiscal years beginning on or after December 15, 2008 with SFAS 141(R) to be applied prospectively while SFAS 160 requires retroactive adoption of the presentation and disclosure requirements for existing minority interests. All other requirements of SFAS 160 shall be applied prospectively. Early adoption is prohibited for both standards. We are currently evaluating the impact of these statements, but expect that the adoption of SFAS No. 141(R) will have a material impact on how we will identify, negotiate, and value any future acquisitions and a material impact on how an acquisition will affect our consolidated financial statements, and that SFAS No. 160 will not have a material impact on our financial position or consolidated results of operations.

In April 2009, the FASB issued FSP SFAS No. 141(R)-1, *Accounting for Assets Acquired and Liabilities Assumed in a Business Combination That Arise from Contingencies*. FSP SFAS No. 141(R)-1 amends and clarifies the initial recognition and measurement, subsequent measurement and accounting and disclosure of assets and liabilities arising from contingencies in a business combination under SFAS No. 141(R). FSP SFAS No. 141(R)-1 is effective beginning fiscal year 2010 and must be applied to assets and liabilities arising from contingencies in business combinations for which the acquisition date is on or after April 25, 2009. The adoption of FSP SFAS No. 141(R)-1 will not be material to the consolidated financial statements.

PRIVATE SECURITIES LITIGATION REFORM ACT

The Private Securities Litigation Reform Act of 1995 provides a "safe harbor" for forward-looking statements. Such "forward-looking" information is included in this Form 10-K and in other materials filed or to be filed by the Company with the Securities and Exchange Commission (as well as information included in oral statements or other written statements made or to be made by the Company). Forward-looking statements include all statements based on future expectations. This Form 10-K contains forward-looking statements that involve risks and uncertainties, including our expectation that our losses will continue; our plans to continue to expand our sales and marketing efforts, conduct research and development and increase our manufacturing capacity to support anticipated future growth; the expected benefits of the Rights from UBS and our expectation that we will sell our auction rate securities under the Rights; our expectation of increased revenue, selling, general and administrative expenses and research and development expenses; our expectation that cost of goods sold as a percentage of revenues will decline in the future; the sufficiency of our current and anticipated financial resources; and our belief that our current cash and cash equivalents and available debt will be sufficient to fund working capital requirements, capital expenditures and operations for the foreseeable future. In some cases, you can identify forward-looking statements by the following words: "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "ongoing," "plan," "potential," "predict," "project," "should," "will," "would," or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. Forward-looking statements are only predictions and are not guarantees of performance. These statements are based on our management's beliefs and assumptions, which in turn are based on their interpretation of currently available information.

These statements involve known and unknown risks, uncertainties and other factors that may cause our results or our industry's actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. These factors include regulatory developments in the U.S. and foreign countries; the experience of physicians regarding the effectiveness and reliability of the Diamondback 360°; competition from other devices; unanticipated developments affecting our estimates regarding expenses, future revenues and capital requirements; fluctuations in results and expenses based on new product introductions, sales mix, unanticipated warranty claims, and the timing of project expenditures; our

inability to expand our sales and marketing organization and research and development efforts; the sufficiency of UBS's financial resources to purchase our auction rate securities; the market for auction rate securities; our ability to obtain and maintain intellectual property protection for product candidates; our actual financial resources; general economic conditions; and those matters identified and discussed in Item 1A of this Form 10-K under "Risk Factors."

You should read these risk factors and the other cautionary statements made in this Form 10-K as being applicable to all related forward-looking statements wherever they appear in this Form 10-K. We cannot assure you that the forward-looking statements in this Form 10-K will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. You should read this Form 10-K completely. Other than as required by law, we undertake no obligation to update these forward-looking statements, even though our situation may change in the future.

Item 7A. ***Quantitative and Qualitative Disclosures About Market Risk.***

The primary objective of our investment activities is to preserve our capital for the purpose of funding operations while at the same time maximizing the income we receive from our investments without significantly increasing risk or availability. To achieve these objectives, our investment policy allows us to maintain a portfolio of cash equivalents and investments in a variety of marketable securities, including money market funds, U.S. government securities, and certain bank obligations. Our cash and cash equivalents as of June 30, 2009 include liquid money market accounts. Due to the short-term nature of these investments, we believe that there is no material exposure to interest rate risk.

In February 2008, we were informed that there was insufficient demand for auction rate securities (ARS), resulting in failed auctions for $23.0 million of our ARS held at June 30, 2009 and June 30, 2008. Currently, these affected securities are not liquid and will not become liquid until a future auction for these investments is successful, they are redeemed by the issuer, or they mature. For discussion of the related risks, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources."

Item 8. ***Financial Statements and Supplementary Data.***

Index to Financial Statements

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
Cardiovascular Systems, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, changes in stockholders' equity (deficiency) and comprehensive (loss) income and cash flows present fairly, in all material respects, the financial position of Cardiovascular Systems, Inc. (the "Company") at June 30, 2009 and 2008, and the results of its operations and its cash flows for each of the three years in the period ended June 30, 2009, in conformity with accounting principles generally accepted in the United States of America. 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 of these statements 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. An audit 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, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Minneapolis, Minnesota
September 28, 2009

Cardiovascular Systems, Inc.

Consolidated Balance Sheets

	June 30, 2009	June 30, 2008
	(Dollars in thousands, except per share and share amounts)	
ASSETS		
Current assets		
Cash and cash equivalents	$ 33,411	$ 7,595
Accounts receivable, net	8,474	4,897
Inventories	3,369	3,776
Prepaid expenses and other current assets	798	1,936
Total current assets	46,052	18,204
Auction rate securities put option	2,800	—
Investments, trading	20,000	—
Investments, available-for-sale	—	21,733
Property and equipment, net	1,719	1,041
Patents, net	1,363	980
Other assets	436	—
Total assets	$ 72,370	$ 41,958
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIENCY)		
Current liabilities		
Current maturities of long-term debt	$ 25,823	$ 11,888
Accounts payable	4,751	5,851
Accrued expenses	5,600	3,583
Total current liabilities	36,174	21,322
Long-term liabilities		
Long-term debt, net of current maturities	4,379	—
Redeemable convertible preferred stock warrants	—	3,986
Lease obligation and other liabilities	1,485	100
Total long-term liabilities	5,864	4,086
Total liabilities	42,038	25,408
Commitments and contingencies		
Series A redeemable convertible preferred stock, no par value; authorized 3,511,269 shares, issued and outstanding 3,081,375 at June 30, 2008; aggregate liquidation value $31,230 at June 30, 2008	—	51,213
Series A-1 redeemable convertible preferred stock, no par value; authorized 1,461,220 shares at June 30, 2008; issued and outstanding 1,461,220 at June 30, 2008; aggregate liquidation value $19,862 at June 30, 2008	—	23,657
Series B redeemable convertible preferred stock, no par value; authorized 1,412,908 shares, issued and outstanding 1,412,591 at June 30, 2008; aggregate liquidation value $20,871 at June 30, 2008	—	23,372
Stockholders' equity (deficiency)		
Common stock, $0.001 par value at June 30, 2009 and no par value at June 30, 2008; authorized 100,000,000 common shares at June 30, 2009 and 45,290,000 common shares and 3,235,000 undesignated shares at June 30, 2008, respectively; issued and outstanding 14,113,904 at June 30, 2009 and 4,900,984 at June 30, 2008, respectively	14	35,933
Additional paid in capital	146,455	—
Common stock warrants	11,282	680
Accumulated deficit	(127,419)	(118,305)
Total stockholders' equity (deficiency)	30,332	(81,692)
Total liabilities and stockholders' equity (deficiency)	$ 72,370	$ 41,958

The accompanying notes are an integral part of these consolidated financial statements.

Cardiovascular Systems, Inc.

Consolidated Statements of Operations

	Year Ended June 30,		
	2009	2008	2007
	(Dollars in thousands, except per share and share amounts)		
Revenues	$ 56,461	$ 22,177	$ —
Cost of goods sold	16,194	8,927	—
Gross profit	40,267	13,250	—
Expenses			
Selling, general and administrative	59,822	35,326	6,691
Research and development	14,678	16,068	8,446
Total expenses	74,500	51,394	15,137
Loss from operations	(34,233)	(38,144)	(15,137)
Other income (expense)			
Interest expense	(2,350)	(7)	(13)
Interest income	3,380	1,167	881
Decretion (accretion) of redeemable convertible preferred stock warrants	2,991	(916)	(1,327)
Impairment on investments	(1,683)	(1,267)	—
Total other income (expense)	2,338	(1,023)	(459)
Net loss	(31,895)	(39,167)	(15,596)
Decretion (accretion) of redeemable convertible preferred stock	22,781	(19,422)	(16,835)
Net loss available to common stockholders	$ (9,114)	$ (58,589)	$ (32,431)
Loss per common share			
Basic and diluted	$ (1.13)	$ (13.25)	$ (8.06)
Weighted average common shares used in computation			
Basic and diluted	8,068,689	4,422,326	4,020,989

The accompanying notes are an integral part of these consolidated financial statements.

Cardiovascular Systems, Inc.

Consolidated Statements of Changes in Stockholders' Equity (Deficiency) and Comprehensive (Loss) Income

	Common Stock Shares	Common Stock Amount	Additional Paid In Capital	Warrants	Accumulated Deficit	Accumulated Other Comprehensive (Loss) Income	Total	Comprehensive (Loss) Income
			(Dollars in thousands, except per share and share amounts)					
Balances at June 30, 2006	4,010,799	$ 25,578	$ —	$ 1,280	$ (27,285)	$—	$ (427)	$ (4,895)
Exercise of stock options and warrants at $1.55 per share	44,158	86		(17)			69	
Value assigned to warrants issued in connection with Series A redeemable convertible preferred stock				103			103	
Accretion of redeemable convertible preferred stock					(16,835)		(16,835)	
Stock-based compensation related to stock options		390					390	
Unrealized loss on investments						(7)	(7)	$ (7)
Net Loss					(15,596)		(15,596)	(15,596)
Balances at June 30, 2007	4,054,957	$ 26,054	$ —	$ 1,366	$ (59,716)	$(7)	$(32,303)	$(15,603)
Issuance/forfeiture of restricted stock awards, net	525,473	1,152					1,152	
Stock-based compensation related to stock options		6,229					6,229	
Exercise of stock options and warrants at $1.55 - $12.37 per share	320,554	2,382		(570)			1,812	
Expiration of warrants		116		(116)			—	
Accretion of redeemable convertible preferred stock					(19,422)		(19,422)	
Unrealized gain on investments						7	7	$ 7
Net loss					(39,167)		(39,167)	(39,167)
Balances at June 30, 2008	4,900,984	$ 35,933	$ —	$ 680	$(118,305)	$—	$(81,692)	$(39,160)
Issuance/forfeiture of restricted stock awards, net	425,359	2,464	2,003				4,467	
Stock-based compensation related to stock options		756	1,548				2,304	
Exercise of stock options and warrants at $1.55-$8.83 per share	100,333	640	307	(422)			525	
Issuance of common stock warrants			(8,217)	10,031			1,814	
Conversion of preferred warrants to common warrants				1,069			1,069	
Expiration of warrants		76		(76)			—	
Decretion of redeemable convertible preferred stock					22,781		22,781	
Conversion of preferred stock to common stock	5,954,389	6	75,456				75,462	
Merger with Replidyne, net of merger costs	2,732,839	3	35,494				35,497	
To adjust common stock to par value		(39,864)	39,864				—	
Net loss					(31,895)		(31,895)	(31,895)
Balances at June 30, 2009	14,113,904	$ 14	$146,455	$11,282	$(127,419)	$—	$ 30,332	$(31,895)

The accompanying notes are an integral part of these consolidated financial statements.

Cardiovascular Systems, Inc.

Consolidated Statements of Cash Flows

	Year Ended June 30,		
	2009	2008	2007
	(Dollars in thousands, except per share and share amounts)		
Cash flows from operating activities			
Net loss	$(31,895)	$(39,167)	$(15,596)
Adjustments to reconcile net loss to net cash used in operations			
Depreciation and amortization of property and equipment	417	264	153
Provision for doubtful accounts	95	164	—
Amortization of patents	53	29	45
(Decretion) accretion of redeemable convertible preferred stock warrants	(2,991)	916	1,327
Amortization of debt discount	1,228	—	—
Stock-based compensation	6,771	7,381	390
Amortization of discount on investments	—	(52)	(293)
Impairment on investments	1,683	1,267	—
Gain on auction rate securities put option	(2,800)	—	—
Changes in assets and liabilities, net of merger			
Accounts receivable	(3,672)	(5,061)	—
Inventories	407	(2,726)	(322)
Prepaid expenses and other assets	2,362	(1,323)	(113)
Accounts payable	(1,100)	3,631	1,709
Accrued expenses and other liabilities	(268)	2,809	424
Net cash used in operations	(29,710)	(31,868)	(12,276)
Cash flows from investing activities			
Expenditures for property and equipment	(957)	(720)	(465)
Purchases of investments	—	(31,314)	(23,169)
Sales of investments	50	19,988	11,840
Costs incurred in connection with patents	(436)	(397)	(58)
Cash acquired in Replidyne merger, net of transaction costs paid	37,369	—	—
Net cash provided by (used in) investing activities	36,026	(12,443)	(11,852)
Cash flows from financing activities			
Proceeds from sale of redeemable convertible preferred stock	—	30,296	30,294
Payment of offering costs	—	(51)	(1,776)
Issuance of common stock warrants	—	—	103
Issuance of convertible preferred stock warrants	75	—	1,767
Exercise of stock options and warrants	525	1,865	94
Proceeds from long-term debt	19,845	16,398	—
Payments on long-term debt	(945)	(4,510)	—
Net cash provided by financing activities	19,500	43,998	30,482
Net change in cash and cash equivalents	25,816	(313)	6,354
Cash and cash equivalents			
Beginning of period	7,595	7,908	1,554
End of period	$ 33,411	$ 7,595	$ 7,908
Noncash investing and financing activities			
Decretion (accretion) of redeemable convertible preferred stock	$(22,781)	$ 19,422	$ 16,835
Conversion of Series A warrants to common warrants	1,069	—	—
Issuance of common stock warrants	1,814	—	—
Issuance of common stock warrants in connection with merger	8,217	—	—
Conversion of redeemable convertible preferred stock to common stock	75,456	—	—
Expiration of common warrants	76	—	—
Adjustment of common stock to par value	39,864	—	—
Capitalized financing costs included in accounts payable	—	311	—
Capitalized financing costs included in accrued expenses	—	47	—
Net unrealized gain (loss) on investments	—	7	(7)
Conversion of convertible promissory notes and accrued interest into Series A redeemable convertible preferred stock	—	—	(3,145)
Supplemental cash flow information			
Interest paid	$ 1,051	$ 7	$ 13

The accompanying notes are an integral part of these consolidated financial statements.

1. Summary of Significant Accounting Policies

Company Description

Cardiovascular Systems, Inc. was incorporated as Replidyne, Inc. in Delaware in 2000. On February 25, 2009, Replidyne, Inc. completed its reverse merger with Cardiovascular Systems, Inc., a Minnesota corporation ("CSI-MN") incorporated in 1989, in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated as of November 3, 2008. Pursuant to the Merger Agreement, CSI-MN continued after the merger as the surviving corporation and a wholly owned subsidiary of Replidyne. Replidyne changed its name to Cardiovascular Systems, Inc. ("CSI") and CSI-MN merged with and into CSI, with CSI continuing after the merger as the surviving corporation. These transactions are referred to herein as the "merger."

Unless the context otherwise requires, all references herein to the "Company," "CSI," "we," "us" and "our" refer to CSI-MN prior to the completion of the merger and to CSI following the completion of the merger and the name change, and all references to "Replidyne" refer to Replidyne prior to the completion of the merger and the name change. CSI is considered the accounting acquirer in the merger and financial results presented for all periods reflect historical CSI results.

The Company develops, manufactures and markets devices for the treatment of vascular diseases. The Company has completed a pivotal clinical trial in the United States to demonstrate the safety and efficacy of the Company's Diamondback 360° PAS System in treating peripheral arterial disease. On August 30, 2007, the U.S. Food and Drug Administration, or FDA, granted the Company 510(k) clearance to market the Diamondback 360° for the treatment of peripheral arterial disease. The Company commenced a limited commercial introduction of the Diamondback 360° in the United States in September 2007. During the quarter ended March 31, 2008, the Company began its full commercial launch of the Diamondback 360°. Prior to the merger, Replidyne was a biopharmaceutical company focused on discovering, developing, in-licensing and commercializing anti-infective products.

For the fiscal year ended June 30, 2007, the Company was considered a "development stage enterprise" as prescribed in Statement of Financial Accounting Standards ("SFAS") No. 7, *Accounting and Reporting by Development Stage Enterprises*. During that time, the Company's major emphasis was on planning, research and development, recruitment and development of a management and technical staff, and raising capital. The Company no longer considers itself a development stage enterprise as these development stage activities were completed prior to the first quarter of fiscal 2008. The Company's management team, organizational structure and distribution channel are in place. The Company's primary focus is on the sale and commercialization of its current product to end user customers.

Principles of Consolidation

The consolidated balance sheets, statements of operations, changes in stockholders' equity (deficiency) and comprehensive (loss) income, and cash flows include the accounts of the Company and its wholly owned inactive Netherlands subsidiary, SCS B.V., after elimination of all significant intercompany transactions and accounts. SCS B.V. was formed for the purpose of conducting human trials and the development of production facilities. Operations of the subsidiary ceased in fiscal 2002; accordingly, there are no assets or liabilities included in the consolidated financial statements related to SCS B.V.

Cash and Cash Equivalents

The Company considers all money market funds and other investments purchased with an original maturity of three months or less to be cash and cash equivalents.

Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. Customer credit terms are established prior to shipment with the general standard being net 30 days. Collateral or any other security to support payment of these receivables generally is not required. The Company maintains allowances for doubtful accounts. This allowance is an estimate and is regularly evaluated by the Company for adequacy by taking into consideration factors such as past experience, credit quality of the customer base, age of the receivable balances, both individually and in the aggregate, and current economic conditions that may affect a customer's ability to pay. Provisions for the allowance for doubtful accounts attributed to bad debt are recorded in general and administrative expenses. The following table shows allowance for doubtful accounts activity for the fiscal years ended June 30, 2009 and 2008:

	Amount
Balance at June 30, 2007	$ —
Provision for doubtful accounts	164
Balance at June 30, 2008	164
Provision for doubtful accounts	95
Write-offs	(6)
Balance at June 30, 2009	$253

Inventories

Inventories are stated at the lower of cost or market with cost determined on a first-in, first-out ("FIFO") method of valuation. The establishment of inventory allowances for excess and obsolete inventories is based on estimated exposure on specific inventory items.

Investments

The Company's investments include AAA rated auction rate securities (ARS) issued primarily by state agencies and backed by student loans substantially guaranteed by the Federal Family Education Loan Program (FFELP). In February 2008, the Company was informed that there was insufficient demand for auction rate securities, resulting in failed auctions for $23,000 of the Company's auction rate securities held at June 30, 2009 and 2008. Currently, these affected securities are not liquid and will not become liquid until a future auction for these investments are successful, they are redeemed by the issuer, or they mature. As a result, at June 30, 2009 and 2008, the Company has classified the fair value of the auction rate securities as a long-term asset. The Company has collected all interest due on its auction rate securities and has no reason to believe that it will not collect all interest due in the future.

On November 7, 2008, the Company accepted an offer from UBS AG ("UBS"), providing rights related to the Company's ARS (the "Rights"). The Rights permit the Company to require UBS to purchase the Company's ARS at par value, which is defined for this purpose as the liquidation preference of the ARS plus accrued but unpaid dividends or interest, at any time during the period of June 30, 2010 through July 2, 2012. Conversely, UBS has the right, in its discretion, to purchase or sell the Company's ARS at any time until July 2, 2012, so long as the Company receives payment at par value upon any sale or disposition. The Company expects to sell its ARS under the Rights. However, if the Rights are not exercised before July 2, 2012 they will expire and UBS will have no further rights or obligation to buy the Company's ARS. So long as the Company holds ARS, they will continue to accrue interest as determined by the auction process or the terms of the ARS if the auction process fails. Prior to accepting the UBS offer, the Company recorded ARS as investments available-for-sale. The Company recorded unrealized gains and losses on available-for-sale securities in accumulated other comprehensive income in the stockholders' equity (deficiency) section of the balance sheet. Realized gains and losses were accounted for on the specific identification

method. After accepting the UBS offer, the Company recorded ARS as trading investments and unrealized gains and losses are included in earnings.

The Rights represent a firm agreement in accordance with SFAS 133, which defines a firm agreement as an agreement with an unrelated party, binding on both parties and usually legally enforceable, with the following characteristics: a) the agreement specifies all significant terms, including the quantity to be exchanged, the fixed price, and the timing of the transaction, and b) the agreement includes a disincentive for nonperformance that is sufficiently large to make performance probable. The enforceability of the Rights results in a put option and should be recognized as a free standing asset separate from the ARS. At June 30, 2009, the Company recorded $2,800 as the fair value of the put option asset with a corresponding credit to interest income. The Company considered the expected time until the Rights are exercised, carrying costs of the Rights, and the expected credit risk attributes of the Rights and UBS in their valuation of the put option. The put option does not meet the definition of a derivative instrument under SFAS 133. Therefore, the Company has elected to measure the put option at fair value under SFAS 159, which permits an entity to elect the fair value option for recognized financial assets, in order to match the changes in the fair value of the ARS. As a result, unrealized gains and losses will be included in earnings in future periods.

The Company determined the fair value of its auction rate securities and quantified the other-than-temporary impairment loss and the unrealized loss with the assistance of ValueKnowledge LLC, an independent third party valuation firm, which utilized various valuation methods and considered, among other factors, estimates of present value of the auction rate securities based upon expected cash flows, the likelihood and potential timing of issuers of the auction rate securities exercising their redemption rights at par value, the likelihood of a return of liquidity to the market for these securities and the potential to sell the securities in secondary markets. Based on these factors, the Company recorded impairment of investments for the years ended June 30, 2009 and 2008 of $1,683 and $1,267, respectively.

The amortized cost and fair value of available-for-sale investments as of June 30, 2008 was $21,733. All ARS at June 30, 2008 had original maturities greater than ten years.

Property and Equipment

Property and equipment is carried at cost, less accumulated depreciation and amortization. Depreciation is computed using the straight-line method over estimated useful lives of five years for production equipment and furniture and fixtures; three years for computer equipment and software; and the shorter of their estimated useful lives or the lease term for leasehold improvements. Expenditures for maintenance and repairs and minor renewals and betterments which do not extend or improve the life of the respective assets are expensed as incurred. All other expenditures for renewals and betterments are capitalized. The assets and related depreciation accounts are adjusted for property retirements and disposals with the resulting gains or losses included in the consolidated statement of operations.

Patents

The capitalized costs incurred to obtain patents are amortized using the straight-line method over their remaining estimated lives, not exceeding 20 years. The recoverability of capitalized patent costs is dependent upon the Company's ability to derive revenue-producing products from such patents or the ultimate sale or licensing of such patent rights. Patents that are abandoned are written off at the time of abandonment.

Operating Lease

The Company leases office space under an operating lease. The lease arrangement contains a rent escalation clause for which the lease expense is recognized on a straight-line basis over the terms of the lease. Rent expense

that is recognized but not yet paid is included in lease obligation and other liabilities on the consolidated balance sheets.

Long-Lived Assets

The Company regularly evaluates the carrying value of long-lived assets for events or changes in circumstances that indicate that the carrying amount may not be recoverable or that the remaining estimated useful life should be changed. An impairment loss is recognized when the carrying amount of an asset exceeds the anticipated future undiscounted cash flows expected to result from the use of the asset and its eventual disposition. The amount of the impairment loss to be recorded, if any, is calculated by the excess of the asset's carrying value over its fair value.

Revenue Recognition

The Company sells the majority of its products via direct shipment to hospitals or clinics. The Company recognizes revenue when all of the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred; the sales price is fixed or determinable; and collectability is reasonably assured. These criteria are met at the time of delivery when the risk of loss and title passes to the customer. The Company records estimated sales returns, discounts and rebates as a reduction of net sales in the same period revenue is recognized.

The Company also considers Emerging Issues Task Force Bulletin (EITF) No. 00-21, *Revenue Arrangements with Multiple Deliverables,* in revenue recognition. This standard addresses the timing and method of revenue recognition for revenue arrangements that include the delivery of more than one product or service. In these cases, the Company recognizes revenue from each element of the arrangement as long as separate values for each element can be determined, the Company has completed its obligation to deliver or perform on that element, and collection of the resulting receivable is reasonably assured.

Costs related to products delivered are recognized in the period revenue is recognized. Cost of goods sold consists primarily of raw materials, direct labor, and manufacturing overhead.

Warranty Costs

The Company provides its customers with the right to receive a replacement if a product is determined to be defective at the time of shipment. Warranty reserve provisions are estimated based on Company experience, volume, and expected warranty claims. Warranty reserve, provisions and claims for the fiscal years ended June 30, 2009 and 2008 were as follows:

	Amount
Balance at June 30, 2007	$ —
Provision	137
Claims	(125)
Balance at June 30, 2008	12
Provision	559
Claims	(506)
Balance at June 30, 2009	$ 65

Income Taxes

Deferred income taxes are recorded to reflect the tax consequences in future years of differences between the tax bases of assets and liabilities and their financial reporting amounts based on enacted tax rates applicable to the

periods in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

Developing a provision for income taxes, including the effective tax rate and the analysis of potential tax exposure items, if any, requires significant judgment and expertise in federal and state income tax laws, regulations and strategies, including the determination of deferred tax assets. The Company's judgment and tax strategies are subject to audit by various taxing authorities.

Research and Development Expenses

Research and development expenses include costs associated with the design, development, testing, enhancement and regulatory approval of the Company's products. Research and development expenses include employee compensation, including stock-based compensation, supplies and materials, consulting expenses, travel and facilities overhead. The Company also incurs significant expenses to operate clinical trials, including trial design, third-party fees, clinical site reimbursement, data management and travel expenses. Research and development expenses are expensed as incurred.

Concentration of Credit Risk

Financial instruments that potentially expose the Company to concentration of credit risk consist primarily of cash and cash equivalents, investments and accounts receivable. The Company maintains its cash and investment balances primarily with two financial institutions. At times, these balances exceed federally insured limits. The Company has not experienced any losses in such accounts and believes it is not exposed to any significant credit risk in cash and cash equivalents.

Fair Value of Financial Instruments

Effective July 1, 2008, the Company adopted SFAS No. 157, *Fair Value Measurements* ("SFAS No. 157"), which provides a framework for measuring fair value and expands disclosures about fair value measurements. In February 2008, the Financial Accounting Standards Board ("FASB") issued FASB Staff Position No. 157-2, *Effective Date of FASB Statement No. 157,* which provides a one-year deferral on the effective date of SFAS No. 157 for non-financial assets and non-financial liabilities, except those that are recognized or disclosed in the financial statements at least annually. Therefore, the Company has adopted the provisions of SFAS No. 157 with respect to financial assets and financial liabilities only.

SFAS 157 classifies these inputs into the following hierarchy:

Level 1 Inputs — quoted prices in active markets for identical assets and liabilities

Level 2 Inputs — observable inputs other than quoted prices in active markets for identical assets and liabilities

Level 3 Inputs — unobservable inputs

The following table sets forth the fair value of the Company's auction rate securities that were measured on a recurring basis as of June 30, 2009. Assets are measured on a recurring basis if they are remeasured at least annually:

	Level 3		
	Available-for-Sale Securities	Trading Securities	Auction Rate Securities Put Option
Balance at June 30, 2008	$ 21,733	$ —	$ —
Transfer to trading securities	(21,733)	21,733	—
Gain on auction rate securities put option	—	—	2,800
Sales of investments	—	(50)	—
Impairment on investments	—	(1,683)	—
Balance at June 30, 2009	$ —	$20,000	$2,800

As of June 30, 2009, the Company believes that the carrying amounts of its other financial instruments, including accounts receivable, accounts payable and accrued liabilities approximate their fair value due to the short-term maturities of these instruments. The carrying amount of long-term debt approximates fair value based on interest rates currently available for debt with similar terms and maturities.

Use of Estimates

The preparation of the Company's consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Stock-Based Compensation

Effective July 1, 2006, the Company adopted Financial Accounting Standards Board ("FASB") SFAS No. 123(R), *Share-Based Payment,* as interpreted by SAB No. 107 to account for stock-based compensation expense associated with the issuance or amendment of stock options and restricted stock awards. SFAS No. 123(R) requires the Company to recognize stock-based compensation expense in an amount equal to the fair value of share-based payments computed at the date of grant. The fair value of all stock option and restricted stock awards are expensed in the consolidated statements of operations over the related vesting period. The Company calculates the fair value on the date of grant using a Black-Scholes model.

Preferred Stock

The Company recorded the estimated fair value of its redeemable convertible preferred stock based on the fair market value of that stock as determined by management and the Board of Directors. In accordance with Accounting Series Release No. 268, *Presentation in Financial Statements of "Redeemable Preferred Stocks,"* and EITF Abstracts, Topic D-98, *Classification and Measurement of Redeemable Securities,* the Company recorded changes in the fair value of its redeemable convertible preferred stock in the consolidated statements of changes in stockholders' equity (deficiency) and comprehensive (loss) income and consolidated statements of operations as decretion (accretion) of redeemable convertible preferred stock. The Company adjusted redeemable convertible preferred stock for changes in fair value until the date of merger at which time all redeemable convertible preferred stock was converted into common stock and, accordingly, was reclassified to stockholders' equity (deficiency).

Preferred Stock Warrants

Freestanding warrants and other similar instruments related to shares that are redeemable are accounted for in accordance with SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity,* and its related interpretations. Under SFAS No. 150, the freestanding warrant that is related to the Company's redeemable convertible preferred stock is classified as a liability on the consolidated balance sheets as of June 30, 2008. The warrant was subject to remeasurement at each balance sheet date and any change in fair value was recognized as a component of interest (expense) income. Fair value on the grant date was measured using the Black-Scholes option pricing model and similar underlying assumptions consistent with the issuance of stock option awards. The Company adjusted the liability for changes in fair value until the date of merger at which time all preferred stock warrants were converted into warrants to purchase common stock and, accordingly, the liability was reclassified to equity.

Recent Accounting Pronouncements

In June 2009, the FASB issued SFAS No. 168, *The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles — A Replacement of FASB Statement No. 162.* SFAS No. 168 establishes the *FASB Accounting Standards Codification™* (Codification) as the single source of authoritative U.S. generally accepted accounting principles (U.S. GAAP) recognized by the FASB to be applied by nongovernmental entities. Rules and interpretive releases of the SEC under authority of federal securities laws are also sources of authoritative U.S. GAAP for SEC registrants. SFAS 168 and the Codification are effective for financial statements issued for interim and annual periods ending after September 15, 2009. When effective, the Codification will supersede all existing non-SEC accounting and reporting standards. All other nongrandfathered non-SEC accounting literature not included in the Codification will become nonauthoritative. Following SFAS 168, the FASB will not issue new standards in the form of Statements, FASB Staff Positions, or Emerging Issues Task Force Abstracts. Instead, the FASB will issue Accounting Standards Updates, which will serve only to: (*a*) update the Codification; (*b*) provide background information about the guidance; and (*c*) provide the bases for conclusions on the change(s) in the Codification. The Company does not expect the adoption of this standard will have a material impact on its consolidated financial position or results of operations.

In April 2009, the FASB issued FSP SFAS, No. 107-1 and APB No. 28-1, *Interim Disclosures about Fair Value of Financial Instruments.* This FSP amends SFAS Statement No. 107, *Disclosures about Fair Values of Financial Instruments,* to require disclosures about fair value of financial instruments for interim reporting periods of publicly traded companies as well as in annual financial statements. This FSP also amends APB Opinion No. 28, *Interim Financial Reporting,* to require those disclosures in all interim financial statements. This FSP is effective for interim periods ending after June 15, 2009. The Company does not expect the adoption of this standard will have a material impact on its consolidated financial position or results of operations.

In June 2008, the FASB issued EITF 07-05, *Determining Whether an Instrument (or Embedded Feature) Is Indexed to an Entity's Own Stock.* EITF 07-05 provides guidance in assessing whether an equity-linked financial instrument (or embedded feature) is indexed to an entity's own stock for purposes of determining whether the appropriate accounting treatment falls under the scope of SFAS 133, "Accounting For Derivative Instruments and Hedging Activities" and/or EITF 00-19, "Accounting For Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock." EITF 07-05 is effective for year-ends beginning after December 15, 2008. The Company is currently evaluating the impact that the adoption of this standard will have on its financial condition and consolidated results of operations.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements.* This standard clarifies the principle that fair value should be based on the assumptions that market participants would use when pricing an asset or liability. Additionally, it establishes a fair value hierarchy that prioritizes the information used to develop these assumptions. On February 12, 2008, the FASB issued FASB Staff Position, or FSP, FAS 157-2, *Effective Date of FASB Statement No. 157,* or FSP FAS 157-2. FSP FAS 157-2 defers the implementation of SFAS No. 157 for

certain nonfinancial assets and nonfinancial liabilities. The portion of SFAS No. 157 that has been deferred by FSP FAS 157-2 will be effective for the Company beginning in the first quarter of fiscal year 2010. The Company is currently evaluating the impact of this statement. SFAS No. 157 was adopted for financial assets and liabilities on July 1, 2008 and did not have a material impact on the Company's financial position or consolidated results of operations during the year ended June 30, 2009.

In October 2008, the FASB issued FASB Staff Position ("FSP") SFAS No. 157-3, *Determining the Fair Value of a Financial Asset When the Market for That Asset is Not Active.* FSP SFAS No. 157-3 clarifies the application of SFAS No. 157, which the Company adopted for financial assets and liabilities on July 1, 2008, in situations where the market is not active. The Company has considered the guidance provided by FSP SFAS No. 157-3 in its determination of estimated fair values as of June 30, 2009.

In June 2008, the FASB issued Staff Position EITF 03-06-1, "Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities" ("FSP EITF 03-06-1"). FSP EITF 03-06-1 provides that unvested share-based payment awards that contain nonforfeitable rights to dividends or dividend equivalents (whether paid or unpaid) are participating securities and shall be included in the computation of earnings per share pursuant to the two-class method in SFAS No. 128, "Earnings per Share". FSP EITF 03-06-1 is effective for the Company on July 1, 2009 and requires all prior-period earnings per share data to be adjusted retrospectively. The Company does not expect the adoption of this standard will have a material impact on its consolidated financial position or results of operations.

In December 2007, the FASB issued SFAS No. 141 (revised 2007), *Business Combinations*, and SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements, an amendment of ARB No. 51.* The revised standards continue the movement toward the greater use of fair values in financial reporting. SFAS 141(R) will significantly change how business acquisitions are accounted for and will impact financial statements both on the acquisition date and in subsequent periods including the accounting for contingent consideration. SFAS 160 will change the accounting and reporting for minority interests, which will be recharacterized as noncontrolling interests and classified as a component of equity. SFAS 141(R) and SFAS 160 are effective for fiscal years beginning on or after December 15, 2008 with SFAS 141(R) to be applied prospectively while SFAS 160 requires retroactive adoption of the presentation and disclosure requirements for existing minority interests. All other requirements of SFAS 160 shall be applied prospectively. Early adoption is prohibited for both standards. The Company is currently evaluating the impact of these statements, but expects that the adoption of SFAS No. 141(R) will have a material impact on how the Company will identify, negotiate, and value any future acquisitions and a material impact on how an acquisition will affect its consolidated financial statements, and that SFAS No. 160 will not have a material impact on its financial position or consolidated results of operations.

In April 2009, the FASB issued FSP SFAS No. 141(R)-1, *Accounting for Assets Acquired and Liabilities Assumed in a Business Combination That Arise from Contingencies*. FSP SFAS No. 141(R)-1 amends and clarifies the initial recognition and measurement, subsequent measurement and accounting and disclosure of assets and liabilities arising from contingencies in a business combination under SFAS No. 141(R). FSP SFAS No. 141(R)-1 is effective for the Company beginning fiscal year 2010 and must be applied to assets and liabilities arising from contingencies in business combinations for which the acquisition date is on or after April 25, 2009. The adoption of FSP SFAS No. 141(R)-1 will not be material to the consolidated financial statements.

2. Merger with Replidyne

On February 25, 2009, the Company completed its reverse merger with Replidyne, Inc. Immediately prior to the merger each share of CSI-MN's Series A, A-1, and B convertible preferred stock automatically converted into approximately one share of CSI-MN's common stock.

At closing, Replidyne's net assets, as calculated pursuant to the terms of the Merger Agreement, were $36,607. Based on the amount of net assets, each outstanding share of CSI-MN's common stock, including each share

issuable upon conversion of CSI-MN Series A, Series A-1 and Series B convertible preferred stock as described above, was converted at the effective time of the merger into the right to receive 0.647 shares of Company common stock, taking into account a 1-for-10 reverse stock split approved by Replidyne's stockholders and board of directors on February 24, 2009. All share and per share amounts reflect the effect of the conversion factor for all periods presented. Immediately following the effective time of the merger, former CSI-MN stockholders owned approximately 80.2% of the outstanding common stock of the Company, and Replidyne stockholders owned approximately 19.8% of the outstanding common stock of the Company. Options exercisable for a total of 5,681,974 shares of CSI-MN common stock (equivalent to a total of 3,676,208 shares of Company common stock) and warrants exercisable for a total of 4,836,051 shares of CSI-MN common stock (equivalent to a total of 3,128,740 shares of Company common stock) were assumed by the Company in connection with the merger.

Immediately prior to the merger, warrants to purchase shares of CSI-MN Series A and Series B convertible preferred stock were converted into warrants to purchase shares of CSI-MN common stock at the same ratios as the preferred stock converted into common stock. Each option and warrant to purchase CSI-MN common stock outstanding at the effective time of the merger was assumed by the Company at the effective time of the merger. Each such option or warrant became an option or warrant, as applicable, to acquire that number of shares of Company common stock equal to the product obtained by multiplying the number of shares of CSI-MN common stock subject to such option or warrant by 0.647, rounded down to the nearest whole share of Company common stock. Following the merger, each such option or warrant has a purchase price per share of Company common stock equal to the quotient obtained by dividing the per share purchase price of CSI-MN common stock subject to such option or warrant by 0.647, rounded up to the nearest whole cent.

The Company's common stock was accepted for listing on the Nasdaq Global Market under the symbol "CSII" and trading commenced on February 26, 2009.

The Company believes that Replidyne did not meet the definition of a business in accordance with the Statements of Financial Accounting Standards No. 141, Business Combinations, and Emerging Issues Task Force (EITF) No. 98-3, Determining Whether a Nonmonetary Transaction Involves Receipt of Productive Assets or of a Business, because as of the date of merger Replidyne had reduced its employee headcount to three employees that were not engaged in development or commercialization efforts and did not transition to the combined company, and had discontinued and engaged in a process to sell or otherwise dispose of its research and development programs. As such, at the time the transaction was consummated, Replidyne's sole business activity was liquidation through the merger. Under EITF No. 98-3, the total estimated purchase price is allocated to the assets acquired and liabilities assumed in connection with the transaction, based on their estimated fair values. As a result, the cost of the merger has been measured at the estimated fair value of the net assets acquired, and no goodwill has been recognized. While the accounting treatment of the transaction is an acquisition of assets and assumption of certain liabilities by the Company, the manner in which such transaction was consummated is a merger whereby former CSI-MN stockholders control the combined entity. Accordingly, consistent with guidance relating to such transactions, CSI-MN (the legal acquiree, but the accounting acquirer) is considered to be the continuing reporting entity that acquires the registrant, Replidyne (the legal acquirer, but the accounting acquiree), and therefore the transaction is considered to be a reverse merger. The merger qualified as a tax-free reorganization under provisions of Section 368(a) of the Internal Revenue Code. CSI-MN directors constitute a majority of the combined company's board of directors and CSI-MN executive officers constitute all members of executive management of the combined company.

The financial statements of the combined entity reflect the historical results of CSI-MN before the merger and do not include the historical financial results of Replidyne before the completion of the merger. The combined entity has changed its year-end to June 30 to correspond to the historical results of CSI-MN. Stockholders' equity and earnings per share of the combined entity and, except as noted, all other share references have been retroactively restated to reflect the number of shares of common stock received by CSI-MN security holders in the merger, after

giving effect to the difference between the par values of the capital stock of CSI-MN and Replidyne, with the offset to additional paid-in capital.

A summary of the estimated fair value of the net assets acquired and merger costs incurred in the merger are as follows:

Description	Amount
Cash and cash equivalents	$38,479
Prepaid expenses and other current assets	1,135
Property and equipment	138
Other assets	525
Liabilities	(3,670)
Net assets acquired	$36,607

The Company incurred merger related costs of $1,110 that were recorded in additional paid in capital as part of the transaction.

The Company has recorded a current and long-term asset totaling $651 at June 30, 2009 related to a deposit for a portion of the vacated Replidyne office and production facility that has been subleased to two tenants. The tenants have prepaid the entire sublease amount and this prepayment has been netted against the lease liability that is included in accrued expenses and lease obligation and other liabilities on the balance sheet. The deposit is being held at an escrow agent and returned in monthly payments until lease expiration in September 2011. The Company has recorded the unreturned portion of the deposit at June 30, 2009, resulting in $281 in prepaid expenses and other current assets and $370 in other assets on the balance sheet.

The Company has recorded a current and long-term liability totaling $2,389 at June 30, 2009 related to Replidyne's lease on the vacated office and production facility. The lease currently requires monthly base rent payments of $50 plus common area maintenance and operating expenses. Monthly base rent escalates over the remaining lease term to a maximum of $59 at lease expiration in September 2011. The Company has recorded the estimated net present value of the base rent, common area maintenance and operating expenses offset by estimated rental income at June 30, 2009, resulting in $998 in accrued expenses and $1,391 in lease obligation and other liabilities on the balance sheet.

3. Selected Consolidated Financial Statement Information

	June 30, 2009	June 30, 2008
Accounts Receivable		
Accounts receivable	$8,727	$5,061
Less: Allowance for doubtful accounts	(253)	(164)
	$8,474	$4,897
Inventories		
Raw materials	$1,536	$2,338
Work in process	348	117
Finished goods	1,485	1,321
	$3,369	$3,776
Property and equipment		
Equipment	$2,313	$1,360
Furniture	168	169
Leasehold improvements	109	90
	2,590	1,619
Less: Accumulated depreciation and amortization	(871)	(578)
	$1,719	$1,041
Patents		
Patents	$1,715	$1,279
Less: Accumulated amortization	(352)	(299)
	$1,363	$ 980

As of June 30, 2009, future estimated amortization of patents and patent licenses will be:

2010	$ 46
2011	45
2012	45
2013	45
2014	45
Thereafter	1,137
	$1,363

This future amortization expense is an estimate. Actual amounts may vary from these estimated amounts due to additional intangible asset acquisitions, potential impairment, accelerated amortization or other events.

	June 30, 2009	June 30, 2008
Accrued expenses		
Salaries and bonus	$1,453	$1,229
Commissions	1,441	1,493
Accrued vacation	1,198	554
Merger related lease obligation	998	—
Other	510	307
	$5,600	$3,583

4. Debt

Loan and Security Agreement with Silicon Valley Bank

On September 12, 2008, the Company entered into a loan and security agreement with Silicon Valley Bank with maximum available borrowings of $13,500, which agreement was amended on February 25, 2009 and April 30, 2009. The agreement includes a $3,000 term loan, a $10,000 accounts receivable line of credit, and a $5,500 term loan that reduces the availability of funds on the accounts receivable line of credit. The terms of each of these loans are as follows:

- The $3,000 term loan has a fixed interest rate of 10.5% and a final payment amount equal to 3.0% of the loan amount due at maturity. This term loan has a 36 month maturity, with repayment terms that include interest only payments during the first six months followed by 30 equal principal and interest payments. This term loan also includes an acceleration provision that requires the Company to pay the entire outstanding balance, plus a penalty ranging from 1.0% to 6.0% of the principal amount, upon prepayment or the occurrence and continuance of an event of default. As part of the term loan agreement, the Company granted Silicon Valley Bank a warrant to purchase 8,493 shares of Series B redeemable convertible preferred stock at an exercise price of $14.16 per share. This warrant was assigned a value of $75 for accounting purposes, is immediately exercisable, and expires ten years after issuance. The balance outstanding on the term loan at June 30, 2009 was $2,642.

- The accounts receivable line of credit as amended has a two year maturity and a floating interest rate equal to the prime rate, plus 2.0%, with an interest rate floor of 7.0%. Interest on borrowings is due monthly and the principal balance is due at maturity. Borrowings on the line of credit are based on 80% of eligible domestic receivables, which is defined as receivables aged less than 90 days from the invoice date along with specific exclusions for contra-accounts, concentrations, and government receivables. The Company's accounts receivable receipts are deposited into a lockbox account in the name of Silicon Valley Bank. The accounts receivable line of credit is subject to non-use fees, annual fees, cancellation fees, and maintaining a minimum liquidity ratio. There was no balance outstanding on the line of credit at June 30, 2009. On April 30, 2009, the accounts receivable line of credit was amended to allow for an increase in borrowings from $5,000 to $10,000. All other terms and conditions of the original line of credit agreement remain in place. The $5,500 term loan reduces available borrowings under the line of credit agreement.

- The term loan was originally two guaranteed term loans each with a one year maturity. Each of the guaranteed term loans had a floating interest rate equal to the prime rate, plus 2.25%, with an interest rate floor of 7.0%. Interest on borrowings was due monthly and the principal balance was due at maturity. One of the Company's directors and stockholders and two entities who held the Company's preferred shares and were also affiliated with two of the Company's directors agreed to act as guarantors of these term loans. In

consideration for guarantees, the Company issued the guarantors warrants to purchase an aggregate of 296,539 shares of the Company's common stock at an exercise price of $9.28 per share.

On April 30, 2009, the guaranteed term loans were refinanced into a $5,500 term loan that has a fixed interest rate of 9.0% and a final payment amount equal to 1.0% of the loan amount due at maturity. As a result of the refinancing, the guarantees on the original term loans have been released. This term loan has a 30 month maturity, with repayment terms that include equal monthly payments of principal and interest beginning June 1, 2009. This term loan also includes an acceleration provision that requires the Company to pay the entire outstanding balance, plus a penalty ranging from 1.0% to 3.0% of the principal amount, upon prepayment or the occurrence and continuance of an event of default. The term loan reduces available borrowings under the amended accounts receivable line of credit agreement. The balance outstanding on the term loan at June 30, 2009 was $5,328.

The guaranteed term loans and common stock warrants were allocated using the relative fair value method. Under this method, the Company estimated the fair value of the term loans without the guarantees and calculated the fair value of the common stock warrants using the Black-Scholes method. The relative fair value of the loans and warrants were applied to the loan proceeds of $5,500, resulting in an assigned value of $3,686 for the loans and $1,814 for the warrants. The assigned value of the warrants of $1,814 is treated as a debt discount. The balance of the debt discount at June 30, 2009 is $661 and is being amortized over the remaining term of the $5,500 term loan.

Borrowings from Silicon Valley Bank are collateralized by all of the Company's assets, other than the Company's ARS and intellectual property, and, until April 30, 2009, the investor guarantees. The borrowings are subject to prepayment penalties and financial covenants, including the Company's achievement of minimum monthly net revenue goals. The agreement also includes subjective acceleration clauses which permit Silicon Valley Bank to accelerate the due date under certain circumstances, including, but not limited to, material adverse effects on a Company's financial status or otherwise. Any non-compliance by the Company under the terms of the Company's debt arrangements could result in an event of default under the Silicon Valley Bank loan, which, if not cured, could result in the acceleration of this debt. The Company was in compliance with all monthly financial covenants through August 31, 2009.

Loan Payable

On March 28, 2008, the Company obtained a margin loan from UBS Financial Services, Inc. for up to $12,000, with a floating interest rate equal to 30-day LIBOR, plus 0.25%. The loan was collateralized by the $23,000 par value of the Company's auction rate securities. The maximum borrowing amount may have been adjusted from time to time by UBS Financial Services in its sole discretion. The loan was due on demand and UBS Financial Services may have required the Company to repay it in full from any loan or financing arrangement or a public equity offering. The margin requirements were determined by UBS Financial Services and were subject to change. As of June 30, 2008, the margin requirements provided that UBS Financial Services would require a margin call on this loan if at any time the outstanding borrowings, including interest, exceed $12,000 or 75% of UBS Financial Services' estimate of the fair value of the Company's auction rate securities. If these margin requirements were not maintained, UBS Financial Services may have required the Company to make a loan payment in an amount necessary to comply with the applicable margin requirements or demand repayment of the entire outstanding balance. As of June 30, 2008, the Company maintained these margin requirements.

On August 21, 2008, the Company replaced this loan with a margin loan from UBS Bank USA, which increased maximum borrowings available to $23,000, which may be adjusted from time to time by UBS Bank in its sole discretion. The margin loan bears interest at variable rates that equal the lesser of (i) 30 day LIBOR plus 1.25% or (ii) the applicable reset rate, maximum auction rate or similar rate as specified in the prospectus or other documentation governing the pledged taxable student loan auction rate securities; however, interest expense charged on the loan will not exceed interest income earned on the auction rate securities. The loan is due on demand and UBS Bank will require the Company to repay it in full from the proceeds received from a public equity offering

where net proceeds exceed $50,000. In addition, if at any time any of the Company's auction rate securities may be sold, exchanged, redeemed, transferred or otherwise conveyed for no less than their par value by UBS, then the Company must immediately effect such a transfer and the proceeds must be used to pay down outstanding borrowings under this loan. The margin requirements are determined by UBS Bank and are subject to change. As of June 30, 2009, the margin requirements include maximum borrowings, including interest, of $22,950. If these margin requirements are not maintained, UBS Bank may require the Company to make a loan payment in an amount necessary to comply with the applicable margin requirements or demand repayment of the entire outstanding balance. The Company has maintained the margin requirements under the loans from both UBS entities. The outstanding balance on this loan at June 30, 2009 was $22,893 and is included in maturities during the year ending June 30, 2010.

As of June 30, 2009, debt maturities (including debt discount) were as follows:

2010	$ 25,823
2011	3,252
2012	1,127
Total	$ 30,202
Less: Current Maturities	(25,823)
Long-term debt	$ 4,379

5. Common Stock Warrants

Immediately prior to consummation of the merger, the Company issued warrants to preferred stockholders to purchase an aggregate of 2,264,264 shares of Company common stock at an exercise price at $8.83 per share. The warrants were assigned a value of $8,217 for accounting purposes and were recorded as additional paid in capital as part of the merger. The warrants are immediately exercisable and expire five years after issuance.

In connection with the merger, 439,317 fully exercisable preferred stock warrants were converted into common stock warrants. The exercise prices on these warrants range from $8.83 - $14.16 and expire at various dates through September 2018.

During the year ended June 30, 2009, the Company issued the former guarantors of the Silicon Valley Bank guaranteed term loans warrants to purchase an aggregate of 296,539 shares of the Company's common stock at an exercise price of $9.28 per share. The warrants were assigned a value of $1,810 for accounting purposes, are immediately exercisable, and expire five years after issuance.

The following summarizes common stock warrant activity:

	Warrants Outstanding	Price Range per Share
Warrants outstanding at June 30, 2006	169,978	$1.55-12.37
Warrants issued	88,864	$8.83
Warrants exercised	(2,102)	$1.55
Warrants outstanding at June 30, 2007	256,740	$1.55-12.37
Warrants exercised	(76,312)	$1.55-12.37
Warrants expired	(22,387)	$7.73
Warrants outstanding at June 30, 2008	158,041	$1.55-12.37
Warrants issued	2,560,803	$8.83-9.28
Warrants converted	439,317	$8.83-14.16
Warrants exercised	(33,431)	$1.55-7.73
Warrants expired	(8,605)	$7.73
Warrants outstanding at June 30, 2009	3,116,125	$1.55-$14.16

The following assumptions were utilized in determining the fair value of warrants issued under the Black-Scholes model:

	Year Ended June 30, 2009
Weighted average fair value of warrants granted	$4.06
Risk-free interest rates	2.5%-3.0%
Expected life	5 years
Expected volatility	46.7%-55.5%
Expected dividends	None

6. Stock Options and Restricted Stock Awards

The Company has a 2007 Equity Incentive Plan (the "2007 Plan"), which was assumed from CSI-MN, under which options to purchase common stock and restricted stock awards have been granted to employees, directors and consultants at exercise prices determined by the board of directors; and also in connection with the merger the Company assumed options and restricted stock awards granted by CSI-MN under its 1991 Stock Option Plan (the "1991 Plan") and 2003 Stock Option Plan (the "2003 Plan") (the 2007 Plan, the 1991 Plan and the 2003 Plan collectively, the "Plans"). The 1991 Plan and 2003 Plan permitted the granting of incentive stock options and nonqualified options. A total of 485,250 shares of common stock were originally reserved for issuance under the 1991 Plan, but with the execution of the 2003 Plan no additional options were granted under it. A total of 2,458,600 shares of common stock were originally reserved for issuance under the 2003 Plan but with the approval of the 2007 Plan no additional options will be granted under it. The 2007 Plan originally allowed for the granting of up to 1,941,000 shares of common stock as approved by the board of directors in the form of nonqualified or incentive stock options, restricted stock awards, restricted stock unit awards, performance share awards, performance unit awards or stock appreciation rights to officers, directors, consultants and employees of the Company. The Plan was amended in February 2009 to increase the number of authorized shares to 2,509,969. The amended 2007 Plan also includes a renewal provision whereby the number of shares shall automatically be increased on the first day of each fiscal year beginning July 1, 2008, and ending July 1, 2017, by the lesser of (i) 970,500 shares, (ii) 5% of the outstanding common shares on such date, or (iii) a lesser amount determined by the board of directors.

On July 1, 2009 the number of shares available for grant was increased by 705,695 under the 2007 plan's renewal provision.

All options granted under the Plans become exercisable over periods established at the date of grant. The option exercise price is generally not less than the estimated fair market value of the Company's common stock at the date of grant, as determined by the Company's management and board of directors. In addition, the Company has granted nonqualified stock options to employees, directors and consultants outside of the Plans.

In estimating the value of the Company's common stock prior to the merger for purposes of granting options and determining stock-based compensation expense, the Company's management and board of directors conducted stock valuations using two different valuation methods: the option pricing method and the probability weighted expected return method. Both of these valuation methods took into consideration the following factors: financing activity, rights and preferences of the Company's preferred stock, growth of the executive management team, clinical trial activity, the FDA process, the status of the Company's commercial launch, the Company's mergers and acquisitions and public offering processes, revenues, the valuations of comparable public companies, the Company's cash and working capital amounts, and additional objective and subjective factors relating to the Company's business. The Company's management and board of directors set the exercise prices for option grants based upon their best estimate of the fair market value of the common stock at the time they made such grants, taking into account all information available at those times. In some cases, management and the board of directors made retrospective assessments of the valuation of the common stock at later dates and determined that the fair market value of the common stock at the times the grants were made was different than the exercise prices established for those grants. In cases in which the fair market was higher than the exercise price, the Company recognized stock-based compensation expense for the excess of the fair market value of the common stock over the exercise price.

Following the merger, the Company's stock valuations are based upon the market price for the common stock.

Stock option activity is as follows:

	Number of Options(a)	Weighted Average Exercise Price
Options outstanding at June 30, 2006	1,180,004	$ 6.08
Options granted	1,696,984	$ 8.72
Options exercised	(42,055)	$ 1.55
Options forfeited or expired	(61,367)	$ 1.61
Options outstanding at June 30, 2007	2,773,566	$ 7.67
Options granted	1,871,089	$11.14
Options exercised	(244,242)	$ 5.07
Options forfeited or expired	(597,289)	$ 3.56
Options outstanding at June 30, 2008	3,803,124	$10.19
Options granted	99,314	$ 9.13
Options exercised	(59,524)	$ 8.12
Options forfeited or expired	(205,032)	$ 9.32
Options outstanding at June 30, 2009	3,637,882	$10.24

(a) Includes the effect of options granted, exercised, forfeited or expired from the 1991 Plan, 2003 Plan, 2007 Plan, and options granted outside the stock option plans described above.

Options outstanding and exercisable at June 30, 2009 were as follows:

	Options Outstanding			Options Exercisable		
Range of Exercise Prices	Number of Outstanding Shares	Remaining Weighted Average Contractual Life (Years)	Weighted Average Exercise Price	Number of Exercisable Shares	Remaining Weighted Average Contractual Life (Years)	Weighted Average Exercise Price
$7.90	600,885	8.10	$ 7.90	295,971	8.09	$ 7.90
$8.75	92,844	9.68	$ 8.75	—	—	$ 8.75
$8.83	1,276,093	4.00	$ 8.83	946,523	4.00	$ 8.83
$9.28	78,931	0.79	$ 9.28	78,931	0.79	$ 9.28
$11.38	85,143	8.38	$11.38	85,143	8.38	$11.38
$12.15	1,184,807	8.49	$12.15	683,382	8.51	$12.15
$12.37	176,307	1.56	$12.37	176,307	1.56	$12.37
$13.98	111,421	8.63	$13.98	111,421	8.63	$13.98
$18.55	31,451	6.75	$18.55	31,451	6.75	$18.55
	3,637,882	6.36	$10.24	2,409,129	5.90	$10.39

Options issued to employees and directors that are vested or expected to vest at June 30, 2009, were as follows:

	Number of Shares	Remaining Weighted Average Contractual Life (Years)	Weighted Average Exercise Price	Aggregate Intrinsic Value
Options vested or expected to vest	3,295,921	6.36	$10.24	$—

An additional requirement of SFAS No. 123(R) is that estimated pre-vesting forfeitures be considered in determining stock-based compensation expense. As of June 30, 2009, 2008, and 2007, the Company estimated its forfeiture rate at 9.4%, 5.0%, and 5.0%, respectively. As of June 30, 2009, 2008, and 2007, the total compensation cost for non-vested awards not yet recognized in the consolidated statements of operations was $5,820, $6,316, and $2,367, respectively, net of the effect of estimated forfeitures. These amounts are expected to be recognized over a weighted-average period of 1.50, 2.17, and 2.72 years, respectively.

Options typically vest over three years. An employee's unvested options are forfeited when employment is terminated; vested options must be exercised at or within 90 days of termination to avoid forfeiture. The Company determines the fair value of options using the Black-Scholes option pricing model. The estimated fair value of options, including the effect of estimated forfeitures, is recognized as expense on a straight-line basis over the options' vesting periods. The following assumptions were used in determining the fair value of stock options granted under the Black-Scholes model:

	Year Ended June 30,		
	2009	2008	2007
Weighted average fair value of options granted	$4.66	$5.78	$1.66
Risk-free interest rates	2.82%	2.45%-4.63%	4.56%-5.18%
Expected life	6 years	3.5-6 years	3.5-6 years
Expected volatility	55.5%	43.1%-46.4%	43.8%-45.1%
Expected dividends	None	None	None

The risk-free interest rate for periods within the five and ten year contractual life of the options is based on the U.S. Treasury yield curve in effect at the grant date and the expected option life of 3.5 to 6 years. Expected volatility is based on the historical volatility of the stock of companies within the Company's peer group.

The aggregate intrinsic value of a stock award is the amount by which the market value of the underlying stock exceeds the exercise price of the award. The aggregate intrinsic value for outstanding options at June 30, 2009, 2008 and 2007 was $0, $21,441, and $5,181, respectively. The aggregate intrinsic value for exercisable options at June 30, 2009, 2008 and 2007 was $0, $9,692, and $4,417, respectively. The total aggregate intrinsic value of options exercised during the years ended June 30, 2009 and 2008 was $387 and $1,435, respectively. Shares supporting option exercises are sourced from new share issuances.

On December 12, 2007, the Company granted 501,425 performance based incentive stock options to certain executives. The options originally were to become exercisable in full on the third anniversary of the date of grant provided that the Company had completed its initial public offering of common stock or a change of control transaction before December 31, 2008 and would terminate on the tenth anniversary of the date of the grant. For this purpose, "change of control transaction" was defined as an acquisition of the Company through the sale of substantially all of the Company's assets and the consequent discontinuance of its business or through a merger, consolidation, exchange, reorganization or similar transaction. On December 12, 2008, the Company amended the vesting terms of these options to delete the aforementioned vesting terms and to provide instead that the exercisability of the options was to be conditioned upon the closing of the merger and that the options would vest to the extent of 50% of the total shares subject to the first anniversary of the merger and for the remaining 50% on the second anniversary of the merger. The Company has calculated compensation expense of $4,716 related to the stock options that is expected to be recognized over the vesting period. The Company began recording stock-based compensation expense related to the performance based incentive stock options effective at the closing of the merger, the time at which it became probable that the options would vest.

The Company also maintains its 2006 Equity Incentive Plan (the "2006 Plan"), relating to Replidyne activity prior to the merger in February 2009. A total of 794,641 shares were originally reserved under the 2006 Plan but effective with the merger no additional options will be granted under it. Options granted under the 2006 Plan were either incentive or nonqualified stock options. Incentive stock options were only granted to Replidyne employees. Nonqualified stock options were granted by Replidyne to its employees, directors, and nonemployee consultants. Generally, options granted under the 2006 Plan expired ten years from the date of grant and vested over four years. Vested options granted to employees terminate 90 days after termination.

Stock option activity since the date of merger is as follows:

	Number of Options	Weighted Average Exercise Price
Options outstanding at February 25, 2009	239,716	$31.11
Options granted	—	$ —
Options exercised	(7,379)	$ 6.13
Options forfeited or expired	(162,337)	$37.83
Options outstanding at June 30, 2009	70,000	$18.15

	Options Outstanding			Options Exercisable		
Range of Exercise Prices	Number of Outstanding Shares	Remaining Weighted Average Contractual Life (Years)	Weighted Average Exercise Price	Number of Exercisable Shares	Remaining Weighted Average Contractual Life (Years)	Weighted Average Exercise Price
$14.00	4,000	3.51	$14.00	4,000	3.51	$14.00
$16.40	6,000	3.51	$16.40	6,000	3.51	$16.40
$18.60	60,000	2.66	$18.60	60,000	2.66	$18.60
	70,000	2.78	$18.15	70,000	2.78	$18.15

The aggregate intrinsic value of a stock award is the amount by which the market value of the underlying stock exceeds the exercise price of the award. There was no aggregate intrinsic value for outstanding options or exercisable options under the former Replidyne plan at June 30, 2009. The total aggregate intrinsic value of options exercised during the years ended June 30, 2009 was $6.

As of June 30, 2009, the Company had granted 1,075,605 restricted stock awards. The fair value of each restricted stock award was equal to the fair market value of the Company's common stock at the date of grant. Vesting of restricted stock awards range from one to three years. The estimated fair value of restricted stock awards, including the effect of estimated forfeitures, is recognized on a straight-line basis over the restricted stock's vesting period. Restricted stock award activity is as follows:

	Number of Shares	Weighted Average Fair Value
Restricted stock awards outstanding at June 30, 2007	—	$ —
Restricted stock awards granted	543,481	$14.67
Restricted stock awards forfeited	(18,008)	$14.36
Restricted stock awards outstanding at June 30, 2008	525,473	$14.68
Restricted stock awards granted	532,124	$ 9.08
Restricted stock awards forfeited	(106,765)	$14.06
Restricted stock awards vested	(206,455)	$14.52
Restricted stock awards outstanding at June 30, 2009	744,377	$10.81

During the year ended June 30, 2009, the Company granted restricted stock units to members of the Board of Directors. Restricted stock units represent the right to receive payment from the Company equal in value to the market price per share of Company stock on date of payment. Restricted stock unit payments would occur on the six month anniversary after a Director terminates from the Board. A total of 42,238 restricted stock units were granted at the applicable market price of $8.75. The aggregate restricted stock unit liability of $323,086 has been included in accrued expenses in the balance sheet at June 30, 2009.

The following amounts were recognized as stock-based compensation expense in the consolidated statements of operations for the year ended June 30, 2009:

	Stock Options	Restricted Stock Awards	Employee Stock Purchase Plan	Total
Cost of goods sold	$ 199	$ 274	$ 2	$ 475
Selling, general and administrative	1,786	3,862	36	5,684
Research and development	276	331	5	612
Total	$2,261	$4,467	$43	$6,771

The following amounts were recognized as stock-based compensation expense in the consolidated statements of operations for the year ended June 30, 2008:

	Stock Options	Restricted Stock Awards	Total
Cost of goods sold	$ 91	$ 141	$ 232
Selling, general and administrative	5,957	895	6,852
Research and development	181	116	297
Total	$6,229	$1,152	$7,381

The following amounts were recognized as stock-based compensation expense in the consolidated statements of operations for the year ended June 30, 2007:

	Stock Options
Selling, general and administrative	$327
Research and development	63
Total	$390

The following summarizes shares available for grant under the Company's various equity incentive plans:

	Shares Available for Grant(a)
Shares available for grant at June 30, 2006	404,213
Shares reserved	1,617,500
Shares granted	(1,696,984)
Shares forfeited, expired or cancelled	51,663
Shares outstanding at June 30, 2007	376,392
Shares reserved	1,941,000
Shares granted(b)	(2,369,280)
Shares forfeited, expired or cancelled	70,953
Shares available for grant at June 30, 2008	19,065
Shares reserved	575,444
Shares granted	(631,438)
Shares forfeited, expired or cancelled	121,767
Shares available for grant at June 30, 2009	84,838

(a) Excludes the effect of shares granted, exercised, forfeited or expired related to activity from shares granted outside the stock option plans described above. Excludes share forfeitures from grants not under the 2007 plan.

(b) Excludes a grant of 45,290 shares outside of plans

Employee Stock Purchase Plan

The Company maintains an employee stock purchase plan (ESPP). The plan provides eligible employees the opportunity to acquire common stock in accordance with Section 423 of the Internal Revenue Code of 1986. Stock can be purchased each six-month period per year (twice per year), however the initial period is from June 1, 2009 through December 31, 2009. The purchase price is equal to 85% of the lower of the price at the beginning or the end of the respective period. Shares reserved under the plan at June 30, 2009 totaled 192,087. The ESPP allows for an annual increase in reserved shares on July 1 equal to the lesser of (i) one percent of the outstanding common shares outstanding, or (ii) 180,000 shares, provided that the Board of Directors may designate a smaller amount of shares to be reserved. On July 1, 2009, 141,139 shares were added to plan.

7. Income Taxes

The components of the Company's overall deferred tax assets and liabilities are as follows:

	June 30, 2009	June 30, 2008
Deferred tax assets		
Stock-based compensation	$ 3,398	$ 2,053
Accrued expenses	508	154
Inventories	488	358
Debt warrant amortization	466	—
Other	188	575
Research and development credit carryforwards	2,974	2,192
Net operating loss carryforwards	33,124	24,041
Total deferred tax assets	41,146	29,373
Deferred tax liabilities		
Accelerated depreciation and amortization	(29)	(20)
Total deferred tax liabilities	(29)	(20)
Valuation allowance	(41,117)	(29,353)
Net deferred tax assets	$ —	$ —

The Company has established valuation allowances to fully offset its deferred tax assets due to the uncertainty about the Company's ability to generate the future taxable income necessary to realize these deferred assets, particularly in light of the Company's historical losses. The future use of net operating loss carryforwards is dependent on the Company attaining profitable operations, and will be limited in any one year under Internal Revenue Code Section 382 ("IRC Section 382") due to significant ownership changes, as defined under the Code Section, as a result of the Company's equity financings. A summary of the valuation allowances are as follows:

	Amount
Balance at June 30, 2007	$16,889
Additions	12,464
Balance at June 30, 2008	29,353
Additions	11,764
Balance at June 30, 2009	$41,117

At June 30, 2009, the Company had net operating loss carryforwards for federal and state income tax reporting purposes of approximately $108,166 which will expire at various dates through fiscal 2029.

The Company adopted the provisions of FIN 48, *Accounting for Uncertainty in Income Taxes*, on July 1, 2007. Under FIN 48, the Company recognizes the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more-likely-than-not threshold, the amount recognized in the financial statements is the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement with the relevant tax authority. At the adoption date, the Company applied FIN 48 to all tax positions for which the statute of limitations remained open. The Company did not record any adjustment to the liability for unrecognized income tax benefits or accumulated deficit for the cumulative effect of the adoption of FIN 48.

In addition, the amount of unrecognized tax benefits as of June 30, 2009 and 2008 was zero. There have been no material changes in unrecognized tax benefits since July 1, 2007, and the Company does not anticipate a significant change to the total amount of unrecognized tax benefits within the next 12 months. The Company recognizes penalties and interest accrued related to unrecognized tax benefits in income tax expense for all periods presented. The Company did not have an accrual for the payment of interest and penalties related to unrecognized tax benefits as of June 30, 2009 or 2008.

The Company is subject to income taxes in the U.S. federal jurisdiction and various state jurisdictions. Tax regulations within each jurisdiction are subject to the interpretation of the related tax laws and regulations and require significant judgment to apply. The Company is potentially subject to income tax examinations by tax authorities for the tax years ended June 30, 2009, 2008 and 2007. The Company is not currently under examination by any taxing jurisdiction.

8. Commitment and Contingencies

Operating Lease

The Company leases manufacturing and office space and equipment under various lease agreements which expire at various dates through November 2012. Rental expenses were $658, $572 and $341 for the years ended June 30, 2009, 2008 and 2007, respectively.

Future minimum lease payments under the agreements as of June 30, 2009 are as follows:

2010	$ 478
2011	482
2012	480
2013	202
	$1,642

9. Employee Benefits

The Company offers a 401(k) plan to its employees. Eligible employees may authorize up to $16 of their annual compensation as a contribution to the plan, subject to Internal Revenue Service limitations. The plan also allows eligible employees over 50 years old to contribute an additional $6 subject to Internal Revenue Service limitations. All employees must be at least 21 years of age to participate in the plan. The Company did not provide any employer matching contributions for the years ended June 30, 2009, 2008 and 2007.

10. Redeemable Convertible Preferred Stock and Convertible Preferred Stock Warrants

The Company issued 3,081,375 shares of Series A redeemable convertible preferred stock during fiscal 2007, no par value, for total proceeds of $27,000. In addition, Series A convertible preferred stock warrants were issued to purchase 436,710 shares of Series A redeemable convertible preferred stock in connection with the sale of the Series A redeemable convertible preferred stock. The Series A convertible preferred stock warrants have a purchase price of $8.83 per share with a five-year term and were assigned an initial value of $1,767 for accounting purposes using the Black-Scholes model. The change in value of the Series A convertible preferred stock warrants due to decretion (accretion) as a result of remeasurement was $2,991, ($916), and ($1,327) for the years ended June 30, 2009, 2008 and 2007, respectively, and is included in the consolidated statements of operations.

As of June 30, 2007, the Company had sold 652,377 shares of Series A-1 redeemable convertible preferred stock, no par value, for total proceeds of $8,271, net of offering costs of $34. During the period from July 2007 to September 2007, the Company sold an additional 808,843 shares of Series A-1 redeemable convertible preferred stock for total proceeds of $10,282, net of offering costs of $14.

On December 17, 2007, the Company completed the sale of 1,412,591 shares of Series B redeemable convertible preferred stock for total proceeds of $19,963, net of offering costs of $37.

In connection with the closing of the merger at February 25, 2009, and preparation of the Company's financial statements as of June 30, 2008, the Company's management and Board of Directors established what it believed to be a fair market value of the Company's Series A, Series A-1, and Series B redeemable convertible preferred stock. This determination was based on concurrent significant stock transactions with third parties and a variety of factors, including the Company's business milestones achieved and future financial projections, the Company's position in the industry relative to its competitors, external factors impacting the value of the Company in its marketplace, the stock volatility of comparable companies in its industry, general economic trends and the application of various valuation methodologies.

Changes in the current market value of the Series A, Series A-1, and Series B redeemable convertible preferred stock were recorded as decretion (accretion) of redeemable convertible preferred stock and as accumulated deficit in the consolidated statements of changes in stockholders' equity (deficiency) and in the consolidated statements of operations as decretion (accretion) of redeemable convertible preferred stock.

Immediately prior to the merger with Replidyne, each share of CSI-MN's Series A, A-1, and B convertible preferred stock automatically converted into approximately one share of CSI-MN's common stock pursuant to an agreement with the preferred stockholders. In addition, immediately prior to the merger, warrants to purchase shares of CSI-MN Series A and B convertible preferred stock were converted into warrants to purchase CSI-MN common stock outstanding at the effective time of the merger.

Subsequent to the merger with Replidyne, the Company has 5,000,000 preferred shares authorized. There are no preferred shares issued or outstanding at June 30, 2009.

11. Legal Matters

ev3 Legal Proceedings

The Company is party to a legal proceeding with ev3 Inc., ev3 Endovascular, Inc. and FoxHollow Technologies, Inc., together referred to as the Plaintiffs, which filed a complaint on December 28, 2007 in the Ramsey County District Court for the State of Minnesota against the Company and former employees of FoxHollow currently employed by the Company, which complaint was subsequently amended.

The complaint, as amended, alleges the following:

- That certain of the Company's employees (i) violated provisions in their employment agreements with their former employer FoxHollow, barring them from misusing FoxHollow confidential information and from soliciting or encouraging employees of FoxHollow to join the Company, and (ii) breached a duty of loyalty owed to FoxHollow.
- That the Company and certain of its employees misappropriated trade secrets of one or more of the Plaintiffs.
- That all defendants engaged in unfair competition and conspired to gain an unfair competitive and economic advantage for the Company to the detriment of the Plaintiffs.
- That (i) the Company tortiously interfered with the contracts between FoxHollow and certain of the Company's employees by allegedly procuring breaches of the non-solicitation — encouragement provision in those agreements, and (ii) one of the Company's employees tortiously interfered with the contracts between certain of the Company's employees and FoxHollow by allegedly procuring breaches of the confidential information provision in those agreements.

The Plaintiffs seek, among other forms of relief, an award of damages in an amount greater than $50, a variety of forms of injunctive relief, exemplary damages under the Minnesota Trade Secrets Act, and recovery of their

attorney fees and litigation costs. Although the Company has requested the information, the Plaintiffs have not yet disclosed what specific amount of damages they claim.

The Company is defending this litigation vigorously, and believes that the outcome of this litigation will not have a materially adverse effect on the Company's business, operations, cash flows or financial condition. The Company has not recognized any expense related to the settlement of this matter as an adverse outcome of this action is not probable. If the Company is not successful in this litigation, it could be required to pay substantial damages and could be subject to equitable relief that could include a requirement that the Company terminate or otherwise alter the terms or conditions of employment of certain employees, including certain key sales personnel who were formerly employed by FoxHollow. In any event, the defense of this litigation, regardless of the outcome, could result in substantial legal costs and diversion of management's time and efforts from the operation of business.

12. Earnings Per Share

The following table presents a reconciliation of the numerators and denominators used in the basic and diluted earnings per common share computations:

	Year Ended June 30,		
	2009	2008	2007
Numerator			
Net loss available in basic calculation	$ 31,895	$ 39,167	$ 15,596
Accretion (decretion) of redeemable convertible preferred stock(a)	(22,781)	19,422	16,835
Loss available to common stockholders	$ 9,114	$ 58,589	$ 32,431
Denominator			
Weighted average common shares — basic	8,068,689	4,422,326	4,020,988
Effect of dilutive stock options and warrants(b)(c)	—	—	—
Weighted average common shares outstanding — diluted	8,068,689	4,422,326	4,020,988
Loss per common share — basic and diluted	$ (1.13)	$ (13.25)	$ (8.06)

(a) The calculation for accretion of redeemable convertible preferred stock marks the redeemable convertible preferred stock to fair value, which equals or exceeds the amount of any undeclared dividends on the redeemable convertible preferred stock.

(b) At June 30, 2009, 2008 and 2007, 3,116,125, 464,170 and 691,175 warrants, respectively, were outstanding. The effect of the shares that would be issued upon exercise of these warrants has been excluded from the calculation of diluted loss per share because those shares are anti-dilutive.

(c) At June 30, 2009, 2008 and 2007, 3,707,882, 3,803,124 and 2,773,566 stock options, respectively, were outstanding. The effect of the shares that would be issued upon exercise of these options has been excluded from the calculation of diluted loss per share because those shares are anti-dilutive.

13. Initial Public Offering Costs

The Company withdrew the registration statement for its initial public offering in conjunction with the announcement of the execution of the Merger Agreement in November 2008. Therefore, previously capitalized offering costs of approximately $1,700 were included in selling, general and administrative during the year ended June 30, 2009.

14. Subsequent Event

In September 2009, the Company entered into a corporate job creation agreement and lease agreement with the Pearland Economic Development Corporation of Pearland, Texas (PEDC).

The corporate job creation agreement provides the Company various cash incentives for attaining and maintaining specified employment levels in Pearland, Texas. These incentives are provided by the PEDC and Texas Enterprise Fund and total $6,000 if all specified employment levels are attained and maintained. The incentives are subject to partial or full repayment over a five year period if the Company becomes in default of the agreement, which is the reduction in the Company's work force, after the first year of operation, resulting in the Company having fewer than 25 employees at the facility for more than 120 consecutive days.

The agreement includes the Company leasing a production facility from the PEDC. The lease commences on April 1, 2010 and is for a ten year period. The lease requires annual base rent of $416 in years one through five and $460 in years 6-10. The lease also requires the Company to provide for adequate liability insurance and real estate taxes related to the facility.

The Company has performed an evaluation of subsequent events through September 28, 2009, which is the date the financial statements were issued.

Item 9. ***Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.***

None.

Item 9A(T). ***Controls and Procedures.***

Evaluation of Disclosure Controls and Procedures

Our Chief Executive Officer and Chief Financial Officer, referred to collectively herein as the Certifying Officers, are responsible for establishing and maintaining our disclosure controls and procedures. The Certifying Officers have reviewed and evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 240.13a-15(e) and 15d-15(e) promulgated under the Exchange Act) as of June 30, 2009. Based on that review and evaluation, which included inquiries made to certain other employees of the Company, the Certifying Officers have concluded that, as of the end of the period covered by this Annual Report on Form 10-K, the Company's disclosure controls and procedures, as designed and implemented, are effective in ensuring that information relating to the Company required to be disclosed in the reports that the Company files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, including ensuring that such information is accumulated and communicated to the Company's management, including the Chief Executive Officer and the Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, also referred to herein as ICFR, as defined in Rule 13a-15 and 15d-15 under the Exchange Act. Our internal control over financial reporting has been designed to provide reasonable assurance to our management and board of directors regarding the preparation and fair presentation of published financial statements. Internal control over financial reporting is promulgated under the Exchange Act as a process designed by, or under the supervision of, our principal executive and principal financial officers and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect our transactions and dispositions of our assets;
- Provide reasonable assurance that our transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition or disposition of our assets that could have a material effect on the financial statements.

Internal control over financial reporting, no matter how well designed, has inherent limitations and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate. Therefore, even effective internal control over financial reporting can only provide reasonable assurance with respect to financial statement preparation and presentation.

This annual report on Form 10-K does not include a report of management's assessment regarding ICFR, or an attestation report of the Company's independent registered public accounting firm regarding ICFR, based upon guidance from the Securities and Exchange Commission and for the reasons explained below.

On February 25, 2009, Replidyne, Inc. completed its reverse merger with Cardiovascular Systems, Inc., a Minnesota corporation ("CSI-MN"), in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated as of November 3, 2008, by and among Replidyne, Responder Merger Sub, Inc., a wholly-owned subsidiary of Replidyne ("Merger Sub"), and CSI-MN (the "Merger Agreement"). Pursuant to the Merger Agreement, Merger Sub merged with and into CSI-MN, with CSI-MN continuing after the merger as the surviving

corporation and a wholly owned subsidiary of Replidyne. At the effective time of the merger, Replidyne changed its name to Cardiovascular Systems, Inc. ("CSI") and CSI-MN changed its name to CSI Minnesota, Inc. Following the merger of Merger Sub with CSI-MN, CSI-MN merged with and into CSI, with CSI continuing after the merger as the surviving corporation. These transactions are referred to herein as the "merger." The following were certain material effects of the merger:

- Immediately following the merger, our executive management team was composed entirely of CSI-MN's executive management team prior to the merger and did not include any of Replidyne's executive officers or other employees.
- The merger did not affect the operation of CSI-MN's business, other than by providing additional funds, and we do not utilize any aspects of Replidyne's former business.
- We assumed CSI-MN's fiscal year, which ends on June 30 of each year, while Replidyne's fiscal year ended on December 31 of each year.
- The merger has been treated as an acquisition of the net assets of Replidyne by CSI-MN in accordance with U.S. generally accepted accounting principles and the merger was accounted for as a reverse merger and a recapitalization. CSI-MN is considered to have acquired Replidyne in the merger.
- Our financial statements after the merger reflect the historical results of CSI-MN before the merger and do not include the historical financial results of Replidyne before the completion of the merger.
- The merger resulted in a complete change of our ICFR environment from that of Replidyne to that of CSI-MN.

We believe that it was impracticable for our management to complete an assessment of ICFR with respect to CSI-MN's systems and business between the closing date of the merger and the end of our fiscal year on June 30, for the following reasons:

- Prior to consummation of the merger, CSI-MN management has not previously conducted an ICFR assessment under the Securities and Exchange Commission's standards, nor had CSI-MN undergone an ICFR audit in accordance with Section 404 of the Sarbanes-Oxley Act and the Securities and Exchange Commission's rules. In the absence of the merger, CSI-MN would not have been required to include a management's assessment of ICFR until its second annual report. Consistent with Securities and Exchange Commission guidance regarding the transition period granted for newly public companies, it would be an additional burden for our management to perform an assessment of ICFR as part of the process to prepare its first annual report.
- The merger closed on February 25, 2009 and our fiscal year ended June 30, 2009, which would have provided management with approximately four months to perform the ICFR assessment. Management would have been required to divert substantial resources to conduct an ICFR assessment for this Form 10-K, which it had not planned to devote until the fiscal year ending June 30, 2010, and it is doubtful that management would have been able to sufficiently complete the assessment in such period.
- The management of the Company completely changed from the management of Replidyne to the management of CSI-MN.
- CSI had over 230 employees at the time of the merger, in comparison to Replidyne's three employees at the time. As a result, business- and personnel-related activities and processes substantially increased compared to Replidyne's operations given the size of CSI-MN's business and number of employees. Thus, the overall amount of work to perform an ICFR assessment would likely have been substantial and time-consuming, as compared to an ICFR assessment of Replidyne, the sole business activity of which as of the closing of the merger was liquidation through the merger.
- Replidyne's financial accounting systems were phased out and removed from use shortly after the closing of the merger, and we exclusively use CSI-MN's financial accounting systems.
- CSI-MN's business was significant relative to Replidyne's business at the time of the merger. Replidyne had no revenue and its operating expenses were directed primarily to research and development, which efforts

Replidyne ceased entirely by August 2008, while CSI-MN had revenues from the sale of the Diamondback 360° and related costs of good sold and substantially more operating expenses expended for selling and marketing efforts. In addition, Replidyne's assets consisted primarily of cash and cash equivalents and short term investments, while CSI-MN had accounts receivable and inventories, representing its ongoing business.

We also believe that including a management's report on ICFR relating to Replidyne's business and systems in this Form 10-K would not be meaningful and would potentially be misleading. Replidyne did not have any revenue or significant operations for the period beginning July 1, 2008 through the closing of the merger, and there have been no continuing operations of Replidyne after the closing of the merger. Furthermore, on February 24, 2009, Replidyne filed a Form 10-K for the fiscal year ended December 31, 2008, which included Replidyne management's assessment of Replidyne's ICFR for that period. The only operations of Replidyne between January 1, 2009 and the closing of the merger were to take actions necessary to consummate the merger and file its Form 10-K. Accordingly, at the time of filing of its Form 10-K, Replidyne provided an ICFR assessment for its last complete fiscal year, and there were no meaningful operations or financial activity during the approximately two-month period before the closing of the merger that would be relevant to our stockholders. Furthermore, our current management would be required to perform the assessment of Replidyne's ICFR for that period, and those individuals would not be in a position to do so without substantial efforts. Finally, as our financial statements do not include the historical financial results of Replidyne before completion of the merger, an assessment of Replidyne's ICFR by our management in this Form 10-K would not only have little meaning to a stockholder, but it would also be potentially misleading because it would not relate in any way to our business or financial statements for the fiscal year ended June 30, 2009.

We are in the process of preparing to issue a report of management's assessment regarding ICFR in our next Form 10-K. We have taken steps internally toward formalizing and improving our ICFR, and we have engaged an outside consulting firm to assist with formalizing our control documentation and administering test plans relating to our ICFR. We expect that interim testing will occur before the end of calendar 2009, with continued testing late in fiscal 2010, and that we will be in a position to issue the required report in the Form 10-K for the fiscal year ending June 30, 2010.

This Annual Report on Form 10-K does not include an attestation report of the Company's independent registered public accounting firm regarding ICFR pursuant to temporary rules of the Securities and Exchange Commission.

Changes in Internal Control Over Financial Reporting

As noted above, on February 25, 2009, we completed the transactions contemplated by the Merger Agreement. As of the closing of the merger, the Company's accounting and financial personnel, processes and systems were replaced by those of CSI-MN that existed before the merger, and the Company's system of internal controls was replaced by CSI-MN's pre-merger system of internal controls. There were no changes in the internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) of the Company during the three months ended June 30, 2009 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. ***Other Information.***

None.

PART III

Item 10. ***Directors, Executive Officers and Corporate Governance.***

Other than the information included in this Form 10-K under the heading "Executive Officers of the Registrant," which is set forth at the end of Part I, the information required by Item 10 is incorporated by reference to the sections labeled "Election of Directors," "Information Regarding the Board of Directors and Corporate Governance" and "Section 16(a) Beneficial Ownership Reporting Compliance," all of which appear in our definitive proxy statement for our 2009 Annual Meeting.

Item 11. ***Executive Compensation.***

The information required by Item 11 is incorporated herein by reference to the sections entitled "Executive Compensation," "Director Compensation," and "Compensation Committee," all of which appear in our definitive proxy statement for our 2009 Annual Meeting.

Item 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.***

The information required by Item 12 is incorporated herein by reference to the sections entitled "Principal Stockholders" and "Equity Compensation Plan Information," which appear in our definitive proxy statement for our 2009 Annual Meeting.

Item 13. ***Certain Relationships and Related Transactions, and Director Independence.***

The information required by Item 13 is incorporated herein by reference to the sections entitled "Information Regarding the Board of Directors and Corporate Governance — Independence of the Board of Directors" and "Transactions With Related Persons," which appear in our definitive proxy statement for our 2009 Annual Meeting.

Item 14. ***Principal Accounting Fees and Services.***

The information required by Item 14 is incorporated herein by reference to the section entitled "Principal Accountant Fees and Services," which appears in our definitive proxy statement for our 2009 Annual Meeting.

PART IV

Item 15. ***Exhibits, Financial Statement Schedules.***

(a) Documents filed as part of this report.

(1) Financial Statements. The following financial statements are included in Part II, Item 8 of this Annual Report on Form 10-K:

- Report of Independent Public Registered Accounting Firm
- Consolidated Balance Sheets as of June 30, 2009 and 2008
- Consolidated Statements of Operations for the years ended June 30, 2009, 2008 and 2007
- Consolidated Statements of Stockholders' Equity (Deficiency) and Comprehensive (Loss) Income for the years ended June 30, 2009, 2008 and 2007
- Consolidated Statements of Cash Flows for the years ended June 30, 2009, 2008 and 2007
- Notes to Consolidated Financial Statements

(2) Financial Statement Schedules.

- All financial statement schedules have been omitted, because they are not applicable, are not required, or the information is included in the Financial Statements or Notes thereto

(3) Exhibits. See "Exhibit Index to Form 10-K" immediately following the signature page of this Form 10-K

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CARDIOVASCULAR SYSTEMS, INC.

By: /s/ David L. Martin
David L. Martin
President and Chief Executive Officer

Date: September 28, 2009

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Each person whose signature appears below constitutes and appoints David L. Martin and Laurence L. Betterley as the undersigned's true and lawful attorneys-in fact and agents, each acting alone, with full power of substitution and resubstitution, for the undersigned and in the undersigned's name, place and stead, in any and all amendments to this Annual Report on Form 10-K and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granted unto said attorneys-in-fact and agents, each acting alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as the undersigned might or could do in person, hereby ratifying and confirming all said attorneys-in-fact and agents, each acting alone, or his substitute or substitutes, may lawfully do or cause to be done by virtue thereof.

Signature	Title	Date
/s/ David L. Martin David L. Martin	President, Chief Executive Officer and Director (principal executive officer)	September 28, 2009
/s/ Laurence L. Betterley Laurence L. Betterley	Chief Financial Officer (principal financial and accounting officer)	September 28, 2009
/s/ Edward Brown Edward Brown	Director	September 28, 2009
/s/ Brent G. Blackey Brent G. Blackey	Director	September 28, 2009
_____ John H. Friedman	Director	
/s/ Geoffrey O. Hartzler Geoffrey O. Hartzler	Director	September 28, 2009
_____ Roger J. Howe	Director	

Signature	Title	Date
_____ Augustine Lawlor	Director	
/s/ Glen D. Nelson Glen D. Nelson	Director	September 28, 2009
/s/ Gary M. Petrucci Gary M. Petrucci	Director	September 28, 2009

EXHIBIT INDEX

CARDIOVASCULAR SYSTEMS, INC.
FORM 10-K

Exhibit No.	Description
3.1	Restated Certificate of Incorporation, as amended.(7)
3.2	Amended and Restated Bylaws.(2)
4.1	Specimen Common Stock Certificate.(2)
4.2	Form of Cardiovascular Systems, Inc. common stock warrant issued to former preferred stockholders.(2)
4.3	Registration Rights Agreement by and among Cardiovascular Systems, Inc. and certain of its stockholders, dated as of March 16, 2009.(1)
4.4	Termination of Fourth Amended and Restated Stockholders Agreement by and among Cardiovascular Systems, Inc. and certain of its stockholders, dated as of March 16, 2009.(1)
10.1	Client's Agreement, dated March 24, 2008, by and between Cardiovascular Systems, Inc., a Minnesota corporation, and UBS Financial Services Inc.(3)
10.2	Borrower Agreement and Credit Line Agreement, dated July 24, 2008, by and between Cardiovascular Systems, Inc., a Minnesota corporation, and UBS Bank USA.(3)
10.3	Loan and Security Agreement, dated September 12, 2008, by and between Cardiovascular Systems, Inc., a Minnesota corporation, and Silicon Valley Bank.(4)
10.4	Assumption Agreement and First Amendment to Loan and Security Agreement, dated as of February 25, 2009, by and between Silicon Valley Bank, Cardiovascular Systems, Inc. and CSI Minnesota, Inc.(7)
10.5	Second Amendment to Loan and Security Agreement between Silicon Valley Bank and Cardiovascular Systems, Inc., dated April 30, 2009.(9)
10.6	Amended and Restated Warrant to Purchase Stock, dated February 25, 2009, issued by Cardiovascular Systems, Inc. to Silicon Valley Bank.(7)
10.7	Form of Warrant to Guarantors, dated September 12, 2008.(4)
10.8	Lease, dated September 26, 2005, by and between Cardiovascular Systems, Inc., a Minnesota corporation, and Industrial Equities Group LLC.(3)
10.9	First Amendment to the Lease, dated February 20, 2007, by and between Cardiovascular Systems, Inc., a Minnesota corporation, and Industrial Equities Group LLC.(3)
10.10	Second Amendment to the Lease, dated March 9, 2007, by and between Cardiovascular Systems, Inc., a Minnesota corporation, and Industrial Equities Group LLC.(3)
10.11	Third Amendment to the Lease, dated September 26, 2007, by and between Cardiovascular Systems, Inc., a Minnesota corporation, and Industrial Equities Group LLC.(3)
10.12	Lease Agreement, dated October 25, 2005, by and between the Registrant and Triumph 1450 LLC.(8)
10.13	Assumption of Lease, dated March 23, 2009 by Cardiovascular Systems, Inc.(7)
10.14†	Employment Agreement, dated December 19, 2006, by and between Cardiovascular Systems, Inc., a Minnesota corporation, and David L. Martin.(3)
10.15†	Employment Agreement, dated April 14, 2008, by and between Cardiovascular Systems, Inc., a Minnesota corporation, and Laurence L. Betterley.(3)
10.16†	Form of Standard Employment Agreement.(3)
10.17†	Summary of Fiscal Year 2009 Executive Officer Base Salaries.(7)
10.18†	Summary of Fiscal Year 2009 Executive Officer Annual Cash Incentive Compensation.(7)
10.19†	Form of Director and Officer Indemnification Agreement.(7)
10.20†	Cardiovascular Systems, Inc. Amended and Restated 2007 Equity Incentive Plan.(5)
10.21†	Form of Incentive Stock Option Agreement under the Amended and Restated 2007 Equity Incentive Plan.(7)

Exhibit No.	Description
10.22†	Form of Non-Qualified Stock Option Agreement under the Amended and Restated 2007 Equity Incentive Plan.(7)
10.23†	Form of Restricted Stock Agreement under the Amended and Restated 2007 Equity Incentive Plan.(7)
10.24†	Form of Restricted Stock Unit Agreement under the Amended and Restated 2007 Equity Incentive Plan.(7)
10.25†	Form of Performance Share Award under the Amended and Restated 2007 Equity Incentive Plan.(7)
10.26†	Form of Performance Unit Award under the Amended and Restated 2007 Equity Incentive Plan.(7)
10.27†	Form of Stock Appreciation Rights Agreement under the Amended and Restated 2007 Equity Incentive Plan.(7)
10.28†	2003 Stock Option Plan of Cardiovascular Systems, Inc., a Minnesota corporation.(3)
10.29†	Form of Incentive Stock Option Agreement under the 2003 Stock Option Plan of Cardiovascular Systems, Inc., a Minnesota corporation.(3)
10.30†	Form of Nonqualified Stock Option Agreement under the 2003 Stock Option Plan of Cardiovascular Systems, Inc., a Minnesota corporation.(3)
10.31†	1991 Stock Option Plan of Cardiovascular Systems, Inc., a Minnesota corporation.(3)
10.32†	Form of Non-Qualified Stock Option Agreement outside the 1991 Stock Option Plan of Cardiovascular Systems, Inc., a Minnesota corporation.(3)
10.33†	Cardiovascular Systems, Inc. Amended and Restated 2006 Employee Stock Purchase Plan.(6)
10.34†*	Director Compensation Arrangements.
10.35*	Corporate Job Creation Agreement between Pearland Economic Development Corporation and Cardiovascular Systems, Inc., dated June 17, 2009.
10.36*	Build-To-Suit Lease Agreement between Pearland Economic Development Corporation and Cardiovascular Systems, Inc., dated September 9, 2009.
10.37*	Letter Agreement between Silicon Valley Bank and Cardiovascular Systems, Inc., dated September 9, 2009.
14.1*	Code of Ethics.
23.1*	Consent of PricewaterhouseCoopers LLP.
23.2*	Consent of ValueKnowledge LLC.
24.1*	Power of Attorney (included on the signature page).
31.1*	Certification of principal executive officer required by Rule 13a-14(a).
31.2*	Certification of principal financial officer required by Rule 13a-14(a).
32.1*	Section 1350 Certification.

* Filed herewith.

† Compensatory plan or agreement.

(1) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from the Company's Current Report on Form 8-K filed on March 18, 2009.

(2) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from the Company's Current Report on Form 8-K filed on March 3, 2009.

(3) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from CSI Minnesota, Inc.'s Registration Statement on Form S-1, File No. 333-148798.

(4) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from CSI Minnesota, Inc.'s Registration Statement on Form 10, File No. 000-53478.

(5) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from the Company's Registration Statement on Form S-8, File No. 333-158755.

(6) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from the Company's Registration Statement on Form S-8, File No. 333-158987.

(7) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2009.

(8) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from the Company's Registration Statement on Form S-1, File No. 333-133021.

(9) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from the Company's Current Report on Form 8-K filed on May 4, 2009.

EXHIBIT 31.1

CERTIFICATION
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT

I, David L. Martin, certify that:

1. I have reviewed this report on Form 10-K of Cardiovascular Systems, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or person performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: September 28, 2009

/s/ David L. Martin
David L. Martin
President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT

I, Laurence L. Betterley, certify that:

1. I have reviewed this report on Form 10-K of Cardiovascular Systems, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or person performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: September 28, 2009

/s/ Laurence L. Betterley
Laurence L. Betterley
Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the filing of the Annual Report on Form 10-K for the year ended June 30, 2009 (the "Report)m by Cardiovascular Systems, Inc. (the "Company"), I, David L. Martin, President and Chief Executive Officer of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: September 28, 2009

/s/ David L. Martin
David L. Martin
President and Chief Executive Officer

EXHIBIT 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the filing of the Annual Report on Form 10-K for the year ended June 30, 2009 (the "Report) by Cardiovascular Systems, Inc. (the "Company"), I, Laurence L. Betterley, Chief Financial Officer of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that to the best of my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: September 28, 2009

/s/ Laurence L. Betterley
Laurence L. Betterley
Chief Financial Officer

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CSI®

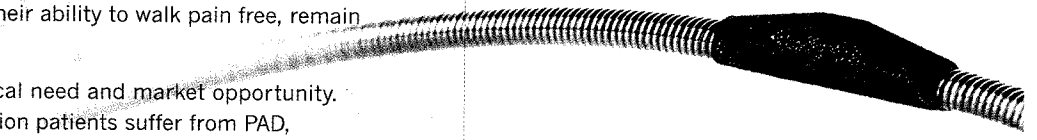
CARDIOVASCULAR SYSTEMS INC.

David L. Martin
President and
Chief Executive Officer

Glen D. Nelson, MD
Chairman of the Board

To Our Shareholders:

The opportunity for Cardiovascular Systems is clear: saving legs saves lives. By restoring blood flow in the leg, we can significantly improve outcomes for patients and their families. CSI offers a system with a demonstrated safety profile for treating peripheral arterial disease, or PAD — blockages in leg arteries that lead to pain, immobility, non-healing wounds and eventually loss of limbs and increased mortality. In a few minutes of treatment time, our Diamondback 360® PAD System helps physicians treat patients to bring back their ability to walk pain free, remain productive and live independently.



We are addressing a large, underserved medical need and market opportunity. In the United States alone, as many as 12 million patients suffer from PAD, and up to 180,000 PAD-related amputations are performed annually. Remarkably, approximately half occur without a complete diagnostic vascular evaluation.

We launched the Diamondback 360° in September 2007. Our mission is to introduce this device to more doctors and establish this product as a first-line interventional treatment for effectively treating PAD. As of the fiscal 2009 year-end, nearly 600 hospitals had adopted our system, with more than 15,000 procedures performed.

CSI's Diamondback 360° PAD System offers:

- **Patients and their families** a new option for recapturing quality of life and returning to independent living and favored activities;
- **Physicians** an easy-to-use treatment solution resulting in improved, durable long-term patient outcomes; and
- **Healthcare providers** a cost-effective procedure that can reduce amputations and the related costly extended recovery and long-term care.

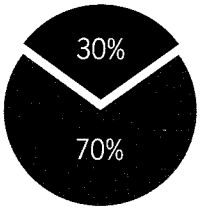
Fiscal 2009 was a milestone year for CSI in many respects:

- Revenue increased sequentially every quarter and operating profitability improved throughout the year.
- We expanded our product portfolio with new products, as well as distribution partnerships.
- We initiated clinical trials evaluating our Diamondback 360°.
- We became a publicly traded company.

Financial Highlights: Solid Revenue Growth, Gross Margin

On February 25, 2009, we closed a reverse merger allowing CSI to gain a listing on the Nasdaq Global Market® under the symbol "CSII." Through this transaction, we received $37 million in net assets (primarily cash), which we are using to expand our commercial organization, develop new products and support clinical trials — key initiatives to grow our business. We anticipate that these funds from the reverse merger and available debt financing can carry CSI to profitability and positive cash flow. With the reverse merger, our capital structure changed substantially, by conversion of all our preferred stock to common stock. As of June 30, 2009, we had 14.1 million common shares outstanding, as well as many new shareholders whom we'd like to formally welcome to CSI.

30% of procedures performed above the knee are in heavily calcified arteries.



70% of procedures performed below the knee are in heavily calcified arteries.

"With the Diamondback 360°, our team has achieved clinical success in the most complex lesions, including highly calcified vessels below the knee — a territory often ignored due to high complication rates."

Tony S. Das, MD, FACC, *Director, Peripheral Vascular Interventions, Presbyterian Hospital of Dallas, Dallas, Texas*

"CSI is conducting the rigorous clinical trials needed to support the use of a new therapy. I have used various tools to treat PAD, and the Diamondback 360° offers both safety and positive outcomes."

Raymond Dattilo, MD, *Director, Peripheral Interventions, St. Francis Hospital, Topeka, Kansas*

"I have used the Diamondback 360° to treat many patients thought to be untreatable. This therapy has the potential to prevent amputations and gives patients another chance to live an active life."

Jihad Mustapha, MD, FACC, FSCAI
Metro Health Hospital, Grand Rapids, Michigan

Fiscal 2009 was our first full year with a product on the market. Revenue grew sequentially each quarter, while we limited operating expense increases. As a result, the bottom line improved dramatically, and we achieved significant progress toward our goal of profitability.

Full-year revenue grew over 150 percent to $56.5 million. Gross margin improved to 71 percent from 60 percent in fiscal 2008, a result of higher product volumes, manufacturing efficiencies and product cost reductions. In fiscal 2009, the net loss was $(31.9) million, lower than last fiscal year, due to higher revenue, partially offset by important investments in sales and marketing, infrastructure to support growth and product development.

Next-Generation Diamondback 360° Launched

In December 2008, we introduced the next generation of the Diamondback 360°, which reflects CSI's commitment to continuous performance gains in efficacy, speed, safety and ease of use. We continuously work with physicians to understand their needs and respond with improved and innovative solutions. These interactions led to major enhancements, including a new handle for treating longer lesions without repositioning the device; improved fluid management; advanced shafts and crowns; a one-click-connect feature to attach tubing and cables; and a convenient saline infusion port. Our engineering team is focused on iterating our devices to advance ergonomics and performance.

Providing Comprehensive Endovascular Tools

We are committed to providing physicians with a comprehensive and synergistic set of tools to treat PAD. Our product offerings were enhanced significantly in fiscal 2009.

We added several products to our Viper line — products to supplement or enhance Diamondback 360° performance. Current offerings include:

- ViperSlide™ Lubricant for smooth operation of the Diamondback 360°;
- ViperTrack™ Radiopaque Tape to assist in measuring the treatment parameters;
- ViperWire™ Guide Wire with flexible and firm stiffness profiles for exclusive use with the Diamondback 360°; and
- ViperCaddy™ Guide Wire Management, a system designed to make interventional procedures more efficient.

We also expanded our product portfolio by signing a U.S. distribution agreement in early fiscal 2010, with Asahi-Intecc Co., Ltd., to market its peripheral guide wire line. These guide wires are especially well suited for addressing chronic occlusions and long, complex lesions above or below the knee, and facilitate lesion access with the Diamondback 360°.

A Focused Sales and Marketing Organization

Currently, we have a clinically oriented sales team of over 100 domestic sales professionals, up from 55 at the end of fiscal 2008. They are becoming increasingly productive as they gain product and procedure experience and increase customers within their territories. With our marketing professionals and national direct sales force in place, we have an efficient avenue to bring our existing and new products to the marketplace.

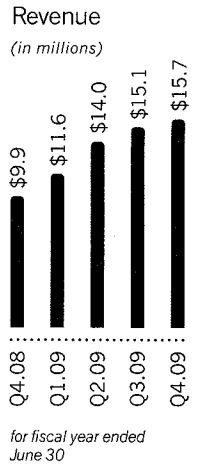
Sound Scientific Research Supports Innovation

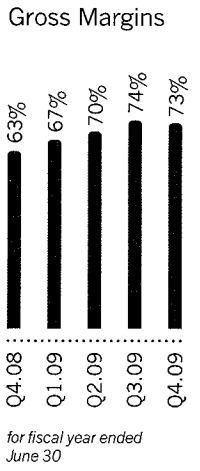
Physicians need scientifically sound data to support using a certain technology and make therapeutic decisions. We are committed to providing that data for the Diamondback 360°, including specific application techniques, to make it the benchmark device for PAD treatment.

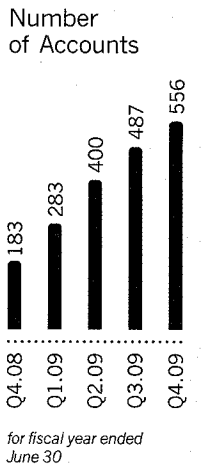
In April 2009, we named Dr. Nabil Dib, MSc, FACC, a renowned interventional cardiologist and researcher, a medical advisor to CSI. He has assembled a world-class science task force to guide CSI in how best to provide scientifically sound and clinically useful data to the physician community. This task force also provides input for the continuous improvement of our devices and usage techniques.

We initiated two prospective, randomized, post-market clinical trials during 2009:

- The COMPLIANCE 360° study will compare the benefits of first modifying calcified plaque with the Diamondback 360° plus low-pressure balloon inflation, if desired, versus the use of traditional balloon angioplasty alone in non-compliant vessels above the knee. Initial treatment with the Diamondback 360° could reduce the level of balloon pressure required to open the







vessel. We believe that balloon angioplasty alone can injure large vessels above the knee resulting in restenosis. This study calls for enrolling 50 patients at five U.S. medical centers and following them for 12 months.

- The CALCIUM 360° clinical trial will compare the effectiveness of the Diamondback 360° to balloon dilation angioplasty in non-compliant lesions in vessels behind and below the knee, which are especially difficult to treat with stents, balloons or other devices. Calcified lesions occur in up to 70 percent of lesions below the knee. At the end of fiscal 2009, hospital internal review board (IRB) submissions were in progress for this trial.

These studies build on our pivotal OASIS clinical trial — the first-ever prospective multi-center study evaluating a plaque removal system. In this 20-center trial:

- 94.5 percent of lesions treated were located below the knee, where lesions have traditionally gone untreated until they require bypass surgery or amputation;
- 55 percent of lesions consisted of calcified plaque — a challenge for balloons and stents; and
- 48 percent of lesions were greater than 3 cm in length, which typically require multiple balloon expansions or stent placements.

Outcomes for the 124 patients enrolled exceeded the safety and efficacy endpoint targets, that is:

- 59.4 percent plaque reduction versus a 55 percent target;
- 4.8 percent device-related serious adverse events compared to a target of less than 16 percent; and
- 2.4 percent target lesion revascularization (TLR) rate through six months versus a target of less than or equal to 20 percent.

In addition, long-term follow up of about half of the OASIS patients showed a TLR rate at a mean of 29 months of 13.6 percent — better than data available for any other endovascular treatment method.

Study for Coronary Indication Planned

Treating blocked coronary arteries with our Diamondback 360° would provide additional applications for our technology and significantly expand our market potential. We have received conditional FDA approval of an IDE application for a U.S. pivotal trial to begin in calendar 2010. The small diameter of our device, its abilities to both navigate small vessels and treat calcium, as well as its unique safety characteristics, are all factors that could make the Diamondback 360° an effective treatment option for coronary arteries. The results from our 2008 ORBIT 1 trial in India showed positive outcomes with regard to the safety and efficacy of the device in the coronary arteries, and we have confidence this outcome will be supported in the U.S. trial.

Raising the Standard of Care for PAD Patients

People in their 60s, 70s and older are more active than ever — often working and engaged with their families, friends and communities. At CSI, we are dedicated to raising the standard of care for PAD patients by providing physicians with the tools to treat PAD, enabling them to save limbs, lives and restore patients' quality of life. We are redefining the treatment of vascular disease by focusing on:

- Continually improving the Diamondback 360° and expanding our product portfolio to provide a comprehensive PAD solution to physicians, while leveraging our U.S. sales force; and
- Bringing the Diamondback 360° to more hospitals and training physicians in the optimal use of the technology;
- Conducting clinical studies to provide physicians with sound, useful data;
- Managing our growth toward profitability and positive cash flow.

The CSI team's accomplishments in fiscal 2009 have laid the groundwork for the coming fiscal year and for our future. We look forward to updating you on our progress. Thank you for your support.

Sincerely,

David L. Martin
President and Chief Executive Officer

G.D. Nelson, MD
Chairman of the Board

January 6, 2010

Executive Officers and Advisors

David L. Martin
President and Chief Executive Officer

Laurence L. Betterley
Chief Financial Officer

James E. Flaherty
Chief Administrative Officer

Robert J. Thatcher
Executive Vice President

Brian Doughty
Vice President,
Commercial Operations

Paul Koehn
Vice President,
Manufacturing

Scott Kraus
Vice President,
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Paul Tyska
Vice President,
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Nabil Dib, MD, MSc, FACC
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Michael J. Kallok, PhD
Scientific Advisor

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President and
Chief Executive Officer
Cardiovascular Systems, Inc.

Gary Petrucci
Senior Vice President –
Financial Consultant
RBC Wealth Management

Headquarters

Cardiovascular Systems, Inc.
651 Campus Drive
St. Paul, Minnesota 55112

Transfer Agent and Registrar

For change of name, address, or to replace lost stock certificates, contact:

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PricewaterhouseCoopers LLP
Minneapolis, Minnesota

Corporate Counsel

Fredrikson & Byron, P.A.
Minneapolis, Minnesota

Investor Relations

Padilla Speer Beardsley Inc.
Minneapolis, Minnesota

Annual Meeting

The annual meeting of the shareholders of Cardiovascular Systems, Inc., will be held on March 5, 2010 at noon at:
Cardiovascular Systems, Inc.
651 Campus Drive
St. Paul, Minnesota 55112

Forward-Looking Statement: Certain statements in this annual report are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and are provided under the protection of the safe harbor for forward-looking statements provided by that Act. For example, statements in this document regarding (i) sufficiency of existing funds and available debt to carry CSI to profitability and positive cash flow; (ii) CSI's expectations for its two clinical trials initiated in calendar 2009; and (iii) CSI's IDE submission for a U.S. pivotal trial treating coronary arteries in calendar 2010 and anticipated expansion into the interventional coronary market, are forward-looking statements. These statements involve risks and uncertainties which could cause results to differ materially from those projected, including but not limited to the potential for unanticipated delays in enrolling medical centers and patients for clinical trials; dependence on market growth; the difficulty in accurately predicting product, customer and geographic sales mix; product development delays; the reluctance of physicians to accept new products; the impact of competitive products and pricing; dependence on major customers and distribution partners; the difficulty to successfully manage operating costs; fluctuations in quarterly results; approval of products for reimbursement and the level of reimbursement; general economic conditions and other factors detailed from time to time in CSI's SEC reports, including its most recent annual report on Form 10-K and subsequent quarterly reports on Form 10-Q. CSI encourages you to consider all of these risks, uncertainties and other factors carefully in evaluating the forward-looking statements contained in this annual report. As a result of these matters, changes in facts, assumptions not being realized or other circumstances, CSI's actual results may differ materially from the expected results discussed in the forward-looking statements contained in this annual report. The forward-looking statements made in this annual report are made only as of the date of this report and CSI undertakes no obligation to update them to reflect subsequent events or circumstances.

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The Diamondback 360® PAD System is a percutaneous orbital atherectomy system indicated for use as therapy in patients with occlusive atherosclerotic disease in peripheral arteries and stenotic material from artificial arteriovenous dialysis fistulae. The System is contraindicated for use in coronary arteries, bypass grafts, stents, or where thrombus or dissections are present. Although the incidence of adverse events is rare, potential events that can occur with atherectomy include: pain, hypotension, CVA/TIA, death, dissection, perforation, distal embolization, thrombus formation, hematuria, abrupt or acute vessel closure, or arterial spasm.

CSI®