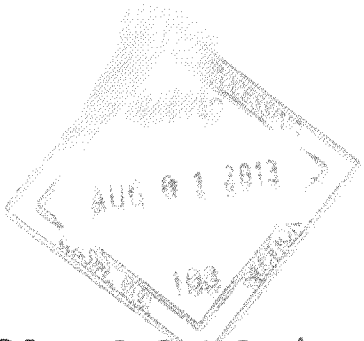

cytori *2012 Annual Report*

10-K

10-K

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2012

OR

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

For the transition period from to

Commission file number 001-34375

CYTORI THERAPEUTICS, INC.

(Exact name of Registrant as Specified in Its Charter)

DELAWARE	**33-0827593**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
3020 CALLAN ROAD, SAN DIEGO, CALIFORNIA	**92121**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(858) 458-0900**

Securities registered pursuant to Section 12(b) of the Act:
Common stock, par value $0.001
Warrants, exercisable for common stock, par value $0.001

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 (§232.405 of this chapter) 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 (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the 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 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 ☐ (Do not check if a smaller reporting company)	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 ☒

The aggregate market value of the common stock of the registrant held by non-affiliates of the registrant on June 29, 2012, the last business day of the registrant's most recently completed second fiscal quarter, was $144,555,416 based on the closing sales price of the registrant's common stock on June 29, 2012 as reported on the Nasdaq Global Market, of $2.70 per share.

As of February 28, 2013, there were 67,173,050 shares of the registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement to be filed with the Securities and Exchange Commission pursuant to Regulation 14A in connection with the registrant's 2013 Annual Meeting of Stockholders, within 120 days after the registrant's fiscal year end of December 31, 2012, are incorporated by reference in Part III, Items 10, 11, 12, 13 and 14 of this Form 10-K.

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PART I

Item 1. Business

References to "Cytori," "we," "us" and "our" refer to Cytori Therapeutics, Inc. and its consolidated subsidiaries. References to "Notes" refer to the Notes to Consolidated Financial Statements included herein (refer to Item 8).

General

Cytori (NASDAQ: CYTX) is developing cell therapies for the treatment of cardiovascular disease, burns and other soft tissue injuries. Cytori's cell therapy utilizes a patient's own adipose derived stem and regenerative cells, uniquely optimized and formulated for specific therapeutic applications.

In the U.S., we are conducting a clinical trial of Cytori cell therapy in patients who suffer from a severe form of refractory (untreatable) heart failure due to chronic myocardial ischemia. Additionally, we are developing a treatment for thermal burns combined with radiation injury as part of a contract from the U.S. Department of Health and Human Services' Biomedical Advanced Research and Development Authority (BARDA).

To encourage further research into the potential of Cytori's cell therapy platform, we sell our products, including a patented and proprietary point-of-care device, consumables, and specialized reagents, to academic researchers and partners around the world. In parallel, we are seeking to expand market access of our products in Europe, Asia and other emerging markets for a variety of conditions, including heart attacks, other vascular applications, and soft tissue applications.

Cardiovascular Disease

Cardiovascular disease is the most advanced therapeutic application of Cytori's cell therapy in clinical development with a focus on refractory heart failure due to chronic myocardial ischemia.

We are currently enrolling patients in the ATHENA trial. ATHENA is a FDA approved, multi-center, randomized, double blind, placebo controlled, safety and feasibility trial utilizing the Cytori cell therapy in refractory heart failure patients. The trial is expected to enroll up to 45 patients at six sites in the United States. Enrollment in the ATHENA trial is ongoing and we expect to report initial results from the study in 2014.

In 2012, we amended the ADVANCE trial, and enrolled patients across a small number of European trial centers. 15 patients have been enrolled in ADVANCE to date. In order to align our current corporate priorities with our existing capital resources, we have reduced our planned level of investment in ADVANCE for 2013, until such time as additional resources are available. The revised goal for 2013 is to bring the total ADVANCE enrollment to 25 patients, with an interim analysis to be performed after the first 72 patients. This trial is designed to enroll up to a total of 216 patients.

The Company has established clinical proof-of-concept for the treatment of damaged heart muscle using Cytori's cell therapy based on the outcomes from two European pilot studies. In the PRECISE trial, in patients with refractory heart failure, primary six-month outcomes and longer-term 18-month data demonstrated safety and sustained improvement in cardiac functional capacity as measured by VO_2 Max. In the APOLLO trial, in patients suffering from acute heart attacks, 18-month data demonstrated safety and sustained improvement in infarct size and perfusion.

On February 25, 2013 we received CE Mark approval in Europe for Intravase®, a reagent designed to be used with Cytori's Celution® System for preparing safe and optimized adipose-derived stem and regenerative cells (ADRCs) for intravascular delivery into the same patient. Intravase® is a sterile, GMP-grade secondary reagent and is currently being used in both our U.S. ATHENA trial in patients with refractory heart failure due to chronic myocardial ischemia and the European ADVANCE trial for acute heart attack patients. While this approval is for a general use claim and not indicated for any specific therapy, we expect that the approval would enable physicians to utilize Cytori's cell therapy for a wide range of applications such as acute heart attack, refractory heart disease including chronic myocardial ischemia, peripheral vascular disease, stroke, liver and kidney applications among others to the extent such applications may require cells to be delivered into the bloodstream. In the future we intend to pursue specific vascular disease therapeutic indications such as refractory heart failure, no option chronic myocardial ischemia, and acute heart attack, among other indications.

Thermal Burns Combined with Radiation Injury

Cytori is developing the Cytori cell therapy for thermal burns combined with radiation injury as part of contract with the Biomedical Advanced Research and Development Authority (BARDA), a segment of the U.S. Department of Health & Human Services. Cytori was awarded the contract with BARDA in September 2012 with the aim to develop a new countermeasure for a combined injury involving thermal burn and radiation exposure which would be useful following a mass-casualty event.

The cost-plus-fixed-fee contract is valued at up to $106 million, with a guaranteed base period of approximately $4.7 million which includes preclinical research and the acceleration of Cytori's ongoing development of the Celution® cell processing System (the Celution® System). Upon satisfactory proof of concept, BARDA may elect to exercise up to three contract options which will extend the contract term to up to five years if all options are exercised. The options cover: (i) research and development, regulatory, clinical, and other tasks required for completion of a pilot clinical trial of the Celution® System; (ii) research and development, regulatory, and clinical activities necessary to achieve regulatory clearances to optimize a treatment for combined injury involving thermal burn and radiation exposure and (iii) a pivotal clinical trial for FDA approval of the use of the Celution® System for thermal burn injury. The total award is intended to support all clinical, preclinical, regulatory, and technology development activities needed to complete the FDA approval process for use in thermal burn injury under a device-based PMA regulatory pathway.

Sales & Marketing

Japan

A significant contributor to Cytori's product revenue historically and throughout 2012 has been sales in Japan. In September 2012, we obtained a full commercial operational license for Cytori Therapeutics, K.K. (our wholly owned subsidiary in Japan) and a Class I Medical Device Clearance for our Celution® and Puregraft® based technologies in Japan. These achievements are expected to facilitate our sales growth in Japan on a forward looking basis. We have also newly partnered with several key distributors in Japan, which we expect to expand our reach and penetration into this critical medical market.

In addition to the new clearances and distribution partnerships in Japan, we expect to continue to have substantial demand from researchers at academic hospitals seeking to perform investigator-initiated and funded studies using Cytori's cell therapy. These studies continue to drive strategic value for Cytori through the investigator relationships that are built, clinical data that is compiled and the global visibility generated. Our academic research customers are investigating a broad array of applications including stress urinary incontinence, wound healing, fistula repair, burn, facial wasting, liver insufficiency, radiation injury, bone regeneration, kidney disease, spinal disc injury, periodontal disease, vocal cord paralysis and peripheral vascular disease. Collectively, they contribute to maintaining Cytori's position as one of the world's leaders in cell therapy.

Other Sales

Cytori offers its Celution® System in Europe for multiple indications. In Europe, the Celution® 800 System has CE Mark approval for certain soft tissue procedures, such as breast reconstruction, tissue ischemia, deficiency or injury of skin, fat, muscle and fascia, and soft tissue wounds or fistulae associated with trauma, diabetes, ischemia or radiation injury. With the addition of the new Intravase®, a reagent approval, customers may now use the Cytori's Celution® System for preparing safe and optimized adipose derived regenerative cells ("ADRC") for intravascular delivery into the same patient. Our European customers include hospitals and clinics as well as researchers performing investigator-initiated and funded studies.

We currently sell our StemSource® Cell & Tissue Banking line to hospitals, plastic surgery clinics, tissue banks, and stem cell banking companies worldwide. The line encompasses three product configurations that are available on a regionally specific basis: ADRC banking, ADRC and adipose tissue banking, or tissue banking alone. We market StemSource® Banks worldwide through a combination of distributors and direct sales. We remain responsible for manufacturing and sourcing all necessary equipment, including but not limited to cryopreservation chambers, cooling and thawing devices, cell banking protocols and the proprietary software and database application.

Cytori is also commercializing products to meet the demand for best-in-class autologous fat grafting in the U.S. and EU. Our Puregraft® System is designed to streamline the fat graft preparation process by selectively washing and filtering the tissue to remove contaminants in a closed, sterile field. Additionally, we offer a range of ancillary products designed to optimize tissue harvest and graft delivery.

Refer to Note 2 for a discussion of geographical concentration of sales.

Manufacturing and Raw Materials

With the exception of some of our Puregraft® System products and ancillary supplies, our products are currently manufactured at the Company's headquarters in San Diego, CA. Our internal manufacturing capabilities are expected to enable us to meet anticipated demand in 2013. The manufacture of our products is, and the manufacture of any future therapeutic products would be, subject to periodic inspection by regulatory authorities and distribution partners. The manufacture of devices and products for human use is subject to regulation and inspection from time to time by the FDA for compliance with the FDA's Quality System Regulation, or QSR, requirements, as well as equivalent requirements and inspections by state and non-U.S. regulatory authorities.

Most of the raw materials required to manufacture the Celution® System and Puregraft® System families of products are commonly available from multiple sources, and we have identified and executed supply agreements with our preferred vendors. Some specialty components are custom made for us, and we are dependent on the ability of these suppliers to deliver functioning parts or materials in a timely manner to meet the ongoing demand for our products. There can be no assurance that we will be able to obtain adequate quantities of the necessary raw materials supplies within a reasonable time or at commercially reasonable prices. Interruptions in supplies due to price, timing, or availability or other issues with our suppliers could have a negative impact on our ability to manufacture products.

Competition

The field of regenerative medicine is expanding rapidly, in large part through the development of cell-based therapies and/or devices designed to isolate cells from human tissues. As the field grows, we face, and will continue to face, increased competition from pharmaceutical, biopharmaceutical, medical device and biotechnology companies, as well as academic and research institutions and governmental agencies in the United States and abroad. Most regenerative medicine efforts involve sourcing adult stem and regenerative cells from tissues such as bone marrow, placental tissue, umbilical cord and peripheral blood, and skeletal muscle. However, a growing number of companies are using adipose tissue as a cell source. We exclusively use adipose tissue as a source of adult stem and regenerative cells.

With the growing number of companies working in the cell therapy field, we are forced to compete across several areas, including equity and capital, clinical trial sites, enrollment of patients in clinical trials, corporate partnerships, and commercial market share. Some of our competitors and potential competitors have substantially greater financial, technological, research and development, marketing, and personnel resources than we do. We cannot with any accuracy forecast when or if these companies are likely to bring cell therapies to market for indications such as refractory heart failure, acute myocardial infarction, and thermal burns which we are also pursuing.

Companies researching and developing cell-based therapies for our lead indication, cardiovascular disease, include, among others Aastrom Biosciences, Arteriocyte, Athersys, Baxter, Capricor, Cardio3, Cytomedix, Juventas, Medistem, Mesoblast, NeoStem (Amorcyte), Osiris, Shire, Tissue Genesis and Tigenix NV. These companies are in various stages of clinical development in the U.S. and Europe, investigating their respective cell therapies for acute myocardial infarction (heart attack), chronic myocardial ischemia or other forms of coronary artery disease, as well as certain vascular conditions. In addition, we are aware of several surgeons who are performing autologous fat transfers using manual methods, some of whom enrich the fat with autologous adipose-derived cells.

We expect to compete based on, among other things, the efficacy of our products, our intellectual property, and our continued ability to attract and retain skilled and experienced scientific, clinical development and executive personnel that can bring adipose derived stem and regenerative based cell therapies to market.

Research and Development

Research and development expenses were $13,628,000, $10,904,000 and $9,687,000 for the years ended December 31, 2012, 2011 and 2010, respectively. These expenses have supported the basic research, product development and clinical activities necessary to bring our products to market.

Our research and development efforts in 2012 focused predominantly on the following areas:

- Support 2012 approval from the FDA and initiated enrollment in the ATHENA trial;
- Support for regulatory application for CE Mark for the Intravase® reagent for vascular delivery;
- Support for ongoing work towards BARDA base contract milestones;
- Support clinical and regulatory submissions necessary to update the ADVANCE trial and resume patient enrollment;
- Continued patient follow-up from the APOLLO heart attack and PRECISE no-option chronic myocardial ischemia trials;
- Prepared and submitted multiple regulatory filings in the United States, Europe, and Japan related to various cell and tissue processing systems under development;
- Continued to develop product line extensions for our Puregraft® family of products for autologous fat transfer;
- Developed new configurations of our Celution® platform to address the Japan Class I market;
- Conducted, presented, and published research efforts related to ADRC characterization and potency to further establish scientific leadership in the field; and
- Continued to optimize and develop the Celution® System family of products and next-generation devices, single-use consumables and related instrumentation.

Customers

In Japan, we are establishing a network of distributors to leverage our new clearances in that country. Our current customers in Japan consist primarily of researchers at academic hospitals and clinics. We also have a network of distributors who offer our Celution® Systems, instrumentation and consumables and Puregraft® System to surgeons and hospitals throughout Europe. These distributors purchase the products from Cytori at a contractually agreed-upon transfer price. We also market our Celution® System directly available to customers in select countries within Europe. In addition, we offer the StemSource® 900/MB as research laboratory equipment or as part of the StemSource® Cell Bank (a comprehensive suite of products to allow hospitals or tissue banks to cryopreserve adipose-derived stem and regenerative cells) directly to customers. In Asia, Australia and India, we sell the Celution® System directly to customers, many of whom are academic hospitals, who are sponsoring and funding their own independent, investigator-led clinical studies using the product. Puregraft® and the StemSource® adipose-only tissue banks are sold directly to customers in the United States.

Intellectual Property

Our success depends in large part on our ability to protect our proprietary technology, including the Celution® System product platform, and to operate without infringing on the proprietary rights of third parties. We rely on a combination of patent, trade secret, copyright and trademark laws, as well as confidentiality agreements, licensing agreements and other agreements, to establish and protect our proprietary rights. Our success also depends, in part, on our ability to avoid infringing patents issued to others. If we were judicially determined to be infringing on any third party patent, we could be required to pay damages, alter our products or processes, obtain licenses or cease certain activities.

To protect our proprietary medical technologies, including the Celution® System platform and other scientific discoveries, Cytori has 57 issued patents worldwide. We have 17 issued U.S. patents and 40 issued international patents. Of the 17 issued U.S. patents, 2 were issued in 2011 and 5 were issued in 2012. Of the 40 issued international patents, 11 were issued in 2011 and 10 in 2012. In addition, we have over 75 patent applications pending worldwide related to our technology. We are seeking additional patents on methods and systems for processing adipose-derived stem and regenerative cells, on the use of adipose-derived stem and regenerative cells for a variety of therapeutic indications, including their mechanisms of actions, on compositions of matter that include adipose-derived stem and regenerative cells, and on other scientific discoveries. We are also the exclusive, worldwide licensee of the Regents of the University of California's rights to a portfolio related to isolated adipose derived stem cells.

We cannot assure that any of our pending patent applications will be issued, that we will develop additional proprietary products that are patentable, that any patents issued to us will provide us with competitive advantages or will not be challenged by any third parties or that the patents of others will not prevent the commercialization of products incorporating our technology. Furthermore, we cannot assure that others will not independently develop similar products, duplicate any of

our products or design around our patents. U.S. patent applications are not immediately made public, so we might be surprised by the grant to someone else of a patent on a technology we are actively using.

There is a risk that any patent applications that we file and any patents that we hold or later obtain could be challenged by third parties and declared invalid or infringing of third party claims. A patent interference proceeding may be instituted with the U.S. Patent and Trademark Office (the "USPTO") when more than one person files a patent application covering the same technology, or if someone wishes to challenge the validity of an issued patent. At the completion of the interference proceeding, the USPTO will determine which competing applicant is entitled to the patent, or whether an issued patent is valid. Patent interference proceedings are complex, highly contested legal proceedings, and the USPTO's decision is subject to appeal. This means that if an interference proceeding arises with respect to any of our patent applications, we may experience significant expenses and delay in obtaining a patent, and if the outcome of the proceeding is unfavorable to us, the patent could be issued to a competitor rather than to us. In addition to interference proceedings, the USPTO can reexamine issued patents at the request of a third party seeking to have the patent invalidated. All patents are subject to requests for reexamination by third parties. This means that patents owned or licensed by us may be subject to reexamination and may be lost, or some or all claims may require amendment or cancellation, if the outcome of the reexamination is unfavorable to us. Patent reexamination proceedings are long and complex proceedings and could result in a reduction or loss of patent rights.

Patent law outside the United States is uncertain and in many countries is currently undergoing review and revisions. The laws of some countries may not protect our proprietary rights to the same extent as the laws of the United States. Third parties may attempt to oppose the issuance of patents to us in foreign countries by initiating opposition proceedings. One of our granted European Patents is under opposition. We do not yet know what effects, if any, the opposition will have on this granted patent. Opposition proceedings against any of our patent filings in a foreign country could have an adverse effect on our corresponding patents that are issued or pending in the U.S. It may be necessary or useful for us to participate in proceedings to determine the validity of our patents or our competitors' patents that have been issued in countries other than the United States. This could result in substantial costs, divert our efforts and attention from other aspects of our business, and could have a material adverse effect on our results of operations and financial condition. We currently have pending patent applications and issued patents in Europe, Brazil, Mexico, India, Russia, Australia, Japan, Canada, China, Korea, and Singapore, among others.

In addition to patent protection, we rely on unpatented trade secrets and proprietary technological expertise. We cannot assure you that others will not independently develop or otherwise acquire substantially equivalent techniques, somehow gain access to our trade secrets and proprietary technological expertise or disclose such trade secrets, or that we can ultimately protect our rights to such unpatented trade secrets and proprietary technological expertise. We rely, in part, on confidentiality agreements with our marketing partners, employees, advisors, vendors and consultants to protect our trade secrets and proprietary technological expertise. We cannot assure you that these agreements will not be breached, that we will have adequate remedies for any breach or that our unpatented trade secrets and proprietary technological expertise will not otherwise become known or be independently discovered by competitors.

Government Regulation

As medical devices that yield cells with therapeutic potential, our products must receive regulatory clearances or approvals from the European Union, the FDA and, from other applicable governments prior to their sale. Our current and future Celution® Systems are or will be subject to stringent government regulation in the United States by the FDA under the Federal Food, Drug and Cosmetic Act. The FDA regulates the design/development process, clinical testing, manufacture, safety, labeling, sale, distribution, and promotion of medical devices and drugs. Included among these regulations are pre-market clearance and pre-market approval requirements, design control requirements, and the Quality System Regulations/Good Manufacturing Practices. Other statutory and regulatory requirements govern, among other things, registration and inspection, medical device listing, prohibitions against misbranding and adulteration, labeling and post-market reporting.

The Celution® System family of products must also comply with the government regulations of each individual country in which the products are to be distributed and sold. These regulations vary in complexity and can be as stringent, and on occasion even more stringent, than FDA regulations in the United States. International government regulations vary from country to country and region to region. For example, regulations in some parts of the world only require product registration while other regions/countries require a complex product approval process. Due to the fact that there are new and emerging cell therapy and cell banking regulations that have recently been drafted and/or implemented in various countries around the world, the application and subsequent implementation of these new and emerging regulations have little to no precedence. Therefore, the level of complexity and stringency is not always precisely understood today for each country, creating greater uncertainty for the international regulatory process. Furthermore, government regulations can change with little to no notice

and may result in up-regulation of our product(s), thereby, creating a greater regulatory burden for our cell processing and cell banking technology products.

Worldwide, the regulatory process can be lengthy, expensive, and uncertain with no guarantee of approval. Before any new medical device may be introduced to the U.S. market, the manufacturer generally must obtain FDA clearance or approval through either the 510(k) pre-market notification process or the lengthier pre-market approval application (PMA) process, which requires clinical trials to generate clinical data supportive of safety and efficacy. Approval of a PMA could take four or more years from the time the process is initiated. Our core Celution® System processing device products under development are generally subject to the lengthier PMA process for many specific applications. Failure to comply with applicable requirements can result in application integrity proceedings, fines, recalls or seizures of products, injunctions, civil penalties, total or partial suspensions of production, withdrawals of existing product approvals or clearances, refusals to approve or clear new applications or notifications, and criminal prosecution.

Specifically, regulation of the Celution® System in Europe and the U.S. for use in cardiovascular disease requires that we conduct clinical trials to collect safety and efficacy data to support marketing approvals. We have completed a pilot study in Europe for acute myocardial infarction and have since commenced a larger study intended to seek approval. We completed a pilot study for chronic myocardial ischemia in Europe and based on the data are seeking a limited approval in Europe. In the U.S., we are currently enrolling our ATHENA trial for refractory heart failure under the device regulations via the PMA pathway. The ATHENA trial will enroll up to 45 patients at six U.S. trial sites.

Summary of Celution® System Family Regulatory Status

Region	Clinical Applications	Regulatory Status
Japan	Cell Banking	Approved
	Celution® Centrifuge, Celbrush, Puregraft Bag and select components.	Class I Notification
Europe	Celution® 800 and Celution One: Cell Processing for re-implantation or re-infusion into same patient (General Processing)	CE Mark
	Celution® 800 and Celution One: Breast reconstruction, healing of Crohn's wounds and other cosmetic procedures	CE Mark
	Celution® 800: Cryptoglandular fistula, tissue ischemia and other soft tissue procedures	CE Mark
	Intravase® for use with Celution® 800	CE Mark (obtained February 2013)
	Acute Heart Attack	In clinical trial
	Multiple specific surgical claims	CE Mark
	Cell Concentration	CE Mark
	Celution® One cosmetic and reconstructive surgery claims	CE Mark
U.S.	Refractory Heart Failure	ATHENA trial underway

Our Puregraft® family of products and the Celbrush® are cleared in the U.S. and CE Mark approved in Europe. In 2012 we obtained Puregraft® approvals in Australia, Singapore, Taiwan and Korea and continue to seek approval in other countries around the world. These product lines are complementary to our core Celution® and cell therapy business, which has received additional market approval for Russia and we continue to seek approval in other countries around the world.

Medical devices are also subject to post-market reporting requirements for deaths or serious injuries when the device may have caused or contributed to the death or serious injury, and for certain device malfunctions that would be likely to cause or contribute to a death or serious injury if the malfunction were to recur. If safety or effectiveness problems occur after the product reaches the market, the FDA may take steps to prevent or limit further marketing of the product. Additionally, the FDA actively enforces regulations prohibiting marketing and promotion of devices for indications or uses that have not been cleared or approved by the FDA. In addition, modifications or enhancements of products that could affect the safety or effectiveness or effect a major change in the intended use of a device that was either cleared through the 510(k) process or approved through the PMA process may require further FDA review through new 510(k) or PMA submissions.

We must comply with extensive regulations from foreign jurisdictions regarding safety, manufacturing processes and quality. These regulations, including the requirements for marketing authorization and may differ from the FDA regulatory scheme in the United States.

Employees

As of December 31, 2012, we had 127 employees, including part-time and full-time employees. These employees are comprised of 17 employees in manufacturing, 44 employees in research and development, 28 employees in sales and marketing and 38 employees in management, finance and administration. From time to time, we also employ independent contractors to support our operations. Our employees are not represented by any collective bargaining agreements and we have never experienced an organized work stoppage.

Corporate Information and Web Site Access to SEC Filings

We were initially formed as a California general partnership in July 1996, and incorporated in the State of Delaware in May 1997. We were formerly known as MacroPore Biosurgery, Inc., and before that as MacroPore, Inc. Our corporate offices are located at 3020 Callan Road, San Diego, CA 92121. Our telephone number is (858) 458-0900. We maintain an Internet website at www.cytori.com. Through this site, we make available free of charge our annual reports 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) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file such material with, or furnish it to, the U.S. Securities and Exchange Commission (SEC). In addition, we publish on our website all reports filed under Section 16(a) of the Securities Exchange Act by our directors, officers and 10% stockholders. These materials are accessible via the Investor Relations section of our website within the "SEC Filings" link. Some of the information is stored directly on our website, while other information can be accessed by selecting the provided link to the section on the SEC website, which contains filings for our company and its insiders.

Item 1A. Risk Factors

This report contains "forward-looking statements" within the meaning of United States (U.S.) federal securities laws. All statements, other than statements of historical fact, that address activities, events or developments that we intend, expect, project, believe or anticipate and similar expressions or future conditional verbs such as will, should, would, could or may occur in the future are forward-looking statements. We undertake no obligation to update any forward-looking statements. Readers are cautioned that forward-looking statements are not guarantees of future performance and our actual results may differ materially from those anticipated, projected or assumed in the forward-looking statements. You should consider carefully the following risk factors together with all of the other information included in this annual report on Form 10-K. Factors that could adversely affect our business, operating results, and financial condition, as well as adversely affect the value of an investment in our common stock, include the following, as well as those discussed below in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere throughout this annual report on Form 10-K:

We are subject to the following significant risks, among others:

<u>We will likely need to raise more cash in the future</u>

We have almost always had negative cash flows from operations. Our business will continue to result in a substantial requirement for research and development expenses for several years, during which we may not be able to bring in sufficient cash and/or revenues to offset these expenses. During 2012, we expanded our commercialization activities while simultaneously pursuing available financing sources to support operations and growth. We have had, and we will likely continue to have, an ongoing need to raise additional cash from outside sources to continue funding our operations to profitability. We do not currently believe that our cash balance and the revenues from our operations will be sufficient to fund the development and marketing efforts required to reach profitability without raising additional capital from accessible sources of financing in the future.

In addition, our Amended and Restated Loan and Security Agreement with General Electric Capital Corporation, Silicon Valley Bank and Oxford Finance Corporation requires us to maintain certain minimum cash requirements, including at least three months of cash on hand, to avoid an event of default thereunder, and if our cash reserves fall below those minimum requirements, then we could be in default under the loan agreement and subject to potential adverse remedies by the lenders, which would have a substantial and material adverse effect on our business, financial condition, results of operations, the value of our common stock and warrants and our ability to raise capital. We believe we have enough cash to fund operations into the third quarter of 2013, which includes minimum liquidity requirements of the Amended and Restated

Loan and Security Agreement, which requires that we make principal payments of $825,000 per month along with accrued interest throughout 2013 and maintain at least three months of cash on hand to avoid an event of default under the loan agreement. In order to continue operations through the next twelve months, we are pursuing additional cash through strategic corporate partnership and future sales of equity, and the restructure of our short-term debt obligations, in addition to our gross profits. While we have an established history of raising capital through these platforms, and we are currently involved in negotiations with multiple parties, there is no guarantee that adequate funds will be available when needed from additional debt or equity financing, development and commercialization partnerships, the refinancing of our short-term debts, increased results of operations, or from other sources, or on terms acceptable to us. Our inability to obtain sufficient additional funds in the future would, at a minimum, require us to delay, scale back, or eliminate some or all of our research or product development, manufacturing operations, administrative operations, including our employee base, and clinical or regulatory activities, which could have a substantial negative effect on our results of operations and financial condition.

Continued turmoil in the economy could harm our business

Negative trends in the general economy, including trends resulting from an actual or perceived recession, tightening credit markets, increased cost of commodities, including oil, actual or threatened military action by the United States and threats of terrorist attacks in the United States and abroad, could cause a reduction of investment in and available funding for companies in certain industries, including ours and our customers. Our ability to raise capital has been and may in the future be adversely affected by downturns in current credit conditions, financial markets and the global economy.

We have never been profitable on an operational basis and expect significant operating losses for the next few years

We have incurred net operating losses in each year since we started business. As our focus on the Celution® System platform and development of therapeutic applications for its cellular output has increased, losses have resulted primarily from expenses associated with research and development activities and general and administrative expenses. While we work continuously to implement cost reduction measures where possible, we nonetheless expect to continue operating in a loss position on a consolidated basis and that recurring operating expenses will be at high levels for the next several years, in order to perform clinical trials, additional pre-clinical research, product development, and marketing. As a result of our historic losses, we have been, and are likely to continue to be, reliant on raising outside capital to fund our operations.

Our business strategy is high-risk

We are focusing our resources and efforts primarily on development of the Celution® System family of products and the therapeutic applications of its cellular output, which requires extensive cash needs for research, development, and commercialization activities. This is a high-risk strategy because there is no assurance that our future products will ever become commercially viable (commercial risk), that we will prevent other companies from depriving us of market share and profit margins by selling products based on our inventions and developments (legal risk), that we will successfully manage a company in a new area of business (regenerative medicine) and on a different scale than we have operated in the past (operational risk), that we will be able to achieve the desired therapeutic results using stem and regenerative cells (scientific risk), or that our cash resources will be adequate to develop our products until we become profitable, if ever (financial risk). We are using our cash in one of the riskiest industries in the economy (strategic risk). This may make our stock an unsuitable investment for many investors.

The development and manufacture of future generation Celution ® System devices is important to us

We have given the Olympus-Cytori, Inc. Joint Venture an exclusive license to manufacture future generation Celution® System devices. If Olympus-Cytori, Inc. does not successfully develop and manufacture these devices, we may experience disruptions and/or delays of our commercialization of these devices into the market. Any significant disruption of our commercialization of Celution® System devices could affect our operations and commercialization efforts (clinical, regulatory and/or commercial sales), and be harmful to our business.

Olympus-Cytori, Inc. is 50% owned by us and 50% owned by Olympus. By contract, each side must consent before any of a wide variety of important business actions can occur. This situation possesses a risk of potentially time-consuming and difficult negotiations which could at some point delay the joint venture from pursuing its business strategies.

In 2011 Olympus experienced serious internal issues which have led to a significant change in the management structure at Olympus. In 2012 these changes have continued to develop, with a total restructuring of the Olympus board of directors, its management team, and aspects of its operations. In light of these events, we have been engaged in ongoing discussions with Olympus relating to the future of the joint venture relationship for some time and it now appears that these discussions may result in a mutual agreement to terminate the Olympus-Cytori, Inc. Joint Venture. Both parties are committed to ensure that any termination of the Joint Venture would occur as seamlessly as possible, and in a mutually

beneficial manner. We do not have any reason to believe at this time that a mutually agreed termination of the Joint Venture as contemplated would have any significant negative effects on our business or operations. Notwithstanding the above, if our relationship with Olympus were to change in a manner that significantly disrupts our operations and commercialization efforts (clinical, regulatory and/or commercial sales), then our business would likely be harmed.

We have a limited operating history; operating results and stock price can be volatile like many life science companies

Our prospects must be evaluated in light of the risks and difficulties frequently encountered by emerging companies and particularly by such companies in rapidly evolving and technologically advanced biotech and medical device fields. From time to time, we have tried to update our investors' expectations as to our operating results by periodically announcing financial guidance. However, we have in the past been forced to revise or withdraw such guidance due to lack of visibility and predictability of product demand. Our stock price has a history of significant volatility, which may harm our ability to raise additional capital and may cause an investment in Cytori to be unsuitable for some investors.

We are vulnerable to competition and technological change, and also to physicians' inertia

We compete with many domestic and foreign companies in developing our technology and products, including biotechnology, medical device, and pharmaceutical companies. Many current and potential competitors have substantially greater financial, technological, research and development, marketing, and personnel resources. There is no assurance that our competitors will not succeed in developing alternative products that are more effective, easier to use, or more economical than those which we have developed or are in the process of developing, or that would render our products obsolete and non-competitive. In general, we may not be able to prevent others from developing and marketing competitive products similar to ours or which perform similar functions.

Competitors may have greater experience in developing therapies or devices, conducting clinical trials, obtaining regulatory clearances or approvals, manufacturing and commercialization. It is possible that competitors may obtain patent protection, approval, or clearance from the FDA or achieve commercialization earlier than we can, any of which could have a substantial negative effect on our business. Finally, Olympus and our other partners might pursue parallel development of other technologies or products, which may result in a partner developing additional products competitive with ours.

We compete against cell-based therapies derived from alternate sources, such as bone marrow, umbilical cord blood and potentially embryos. Doctors historically are slow to adopt new technologies like ours, regardless of the perceived merits, when older technologies continue to be supported by established providers. Overcoming such inertia often requires very significant marketing expenditures or definitive product performance and/or pricing superiority.

We expect physicians' inertia and skepticism to also be a significant barrier as we attempt to gain market penetration with our future products. We believe we will continue to need to finance lengthy time-consuming clinical studies to provide evidence of the medical benefit of our products and resulting therapies in order to overcome this inertia and skepticism particularly in reconstructive surgery, cell preservation, the cardiovascular area and many other indications.

Many potential applications of our technology are pre-commercialization, which subjects us to development and marketing risks

We are in a relatively early stage of the path to commercialization with many of our products. We believe that our long-term viability and growth will depend in large part on our ability to develop commercial quality cell processing devices and useful procedure-specific consumables, and to establish the safety and efficacy of our therapies through clinical trials and studies. With our Celution® System platform, we are pursuing new approaches for reconstructive surgery, preservation of stem and regenerative cells for potential future use, therapies for cardiovascular disease, soft tissue defects, burns and other conditions. There is no assurance that our development programs will be successfully completed or that required regulatory clearances or approvals will be obtained on a timely basis, if at all.

There is no proven path for commercializing the Celution® System platform in a way to earn a durable profit commensurate with the medical benefit. Although we began to commercialize our reconstructive surgery products in Europe and certain Asian markets, and our cell banking products in Japan, Europe, and certain Asian markets in 2008, additional market opportunities for many of our products and/or services may not materialize for a number of years.

Successful development and market acceptance of our products is subject to developmental risks, including failure of inventive imagination, ineffectiveness, lack of safety, unreliability, failure to receive necessary regulatory clearances or approvals, high commercial cost, preclusion or obsolescence resulting from third parties' proprietary rights or superior or equivalent products, competition from copycat products, and general economic conditions affecting purchasing patterns. There is no assurance that we or our partners will successfully develop and commercialize our products, or that our

competitors will not develop competing technologies that are less expensive or superior. Failure to successfully develop and market our products would have a substantial negative effect on our results of operations and financial condition.

Market acceptance of new technology such as ours can be difficult to obtain

New and emerging cell therapy and cell banking technologies, such as those provided by the Celution® System family of products, may have difficulty or encounter significant delays in obtaining market acceptance in some or all countries around the world due to the novelty of our cell therapy and cell banking technologies. Therefore, the market adoption of our cell therapy and cell banking technologies may be slow and lengthy with no assurances that significant market adoption will be successful. The lack of market adoption or reduced or minimal market adoption of our cell therapy and cell banking technologies may have a significant impact on our ability to successfully sell our product(s) into a country or region.

Future clinical trial results may differ significantly from our expectations

While we have proceeded incrementally with our clinical trials in an effort to gauge the risks of proceeding with larger and more expensive trials, we cannot guarantee that we will not experience negative results larger and much more expensive clinical trials than we have conducted to date, such as our ADVANCE acute heart attack trial in Europe, and the ATHENA feasibility trial in refractory heart failure. Poor results in our clinical trials could result in substantial delays in commercialization, substantial negative effects on the perception of our products, and substantial additional costs. These risks are increased by our reliance on third parties in the performance of many of the clinical trial functions, including the clinical investigators, hospitals, and other third party service providers.

Manufacturing issues could substantially increase our costs and limit supply of our products

Although we have significant experience in manufacturing the Celution® System platform and its consumables at a commercial level, and although Olympus is a highly capable and experienced manufacturer of medical devices, there can be no guarantee that we or the Olympus-Cytori Joint Venture will be able to successfully develop and manufacture future generation Celution® Systems in a manner that is cost-effective or commercially viable, or that development and manufacturing capabilities might not take much longer than currently anticipated to be ready for the market.

Although we have been manufacturing the Celution® 800 System and the StemSource® 900-based Cell Bank since 2008, we cannot assure that we will be able to manufacture sufficient numbers of such products to meet the demand, or that we will be able to overcome unforeseen manufacturing difficulties for these sophisticated medical devices.

In the event that the Olympus-Cytori Joint Venture is terminated, Cytori may not have the resources or ability to self-manufacture sufficient numbers of devices and consumables to meet market demand, and this failure may substantially extend the time it would take for us to bring a more advanced commercial device to market.

We may not be able to protect our proprietary rights

Our success depends in part on whether we can maintain our existing patents, obtain additional patents, maintain trade secret protection, and operate without infringing on the proprietary rights of third parties.

There can be no assurance that any of our pending patent applications will be approved or that we will develop additional proprietary products that are patentable. There is also no assurance that any patents issued to us will not become the subject of a re-examination, will provide us with competitive advantages, will not be challenged by any third parties, or that the patents of others will not prevent the commercialization of products incorporating our technology. Furthermore, there can be no guarantee that others will not independently develop similar products, duplicate any of our products, or design around our patents.

Our commercial success will also depend, in part, on our ability to avoid infringing on patents issued by others. If we were judicially determined to be infringing on any third-party patent, we could be required to pay damages, alter our products or processes, obtain licenses, or cease certain activities. If we are required in the future to obtain any licenses from third parties for some of our products, there can be no guarantee that we would be able to do so on commercially favorable terms, if at all. U.S. patent applications are not immediately made public, so we might be surprised by the grant to someone else of a patent on a technology we are actively using.

Litigation, which would result in substantial costs to us and diversion of effort on our part, may be necessary to enforce or confirm the ownership of any patents issued or licensed to us, or to determine the scope and validity of third-party proprietary rights. If our competitors claim technology also claimed by us and prepare and file patent applications in the United States, we may have to participate in interference proceedings declared by the U.S. Patent and Trademark Office or a

foreign patent office to determine priority of invention, which could result in substantial costs to and diversion of effort, even if the eventual outcome is favorable to us. Any such litigation or interference proceeding, regardless of outcome, could be expensive and time-consuming.

Successful challenges to our patents through oppositions, reexamination proceedings or interference proceedings could result in a loss of patent rights in the relevant jurisdiction. If we are unsuccessful in actions we bring against the patents of other parties and it is determined that we infringe the patents of third-parties, we may be subject to litigation, or otherwise prevented from commercializing potential products in the relevant jurisdiction, or may be required to obtain licenses to those patents or develop or obtain alternative technologies, any of which could harm our business. Furthermore, if such challenges to our patent rights are not resolved in our favor, we could be delayed or prevented from entering into new collaborations or from commercializing certain products, which could adversely affect our business and results of operations.

On September 16, 2011, President Obama signed into law major patent law reform known as the Leahy-Smith America Invents Act (AIA). Among other things the AIA implements a first inventor to file standard for patent approval, changes the legal standards for patentability under section 102 of the statute, and creates a post grant review system. As a result of the added uncertainty of interpretation of the AIA and the uncertainty of patent law in general, we cannot predict with certainty how much protection, if any, will be given to our patents if we attempt to enforce them and they are challenged in court. Changes to the patent law under the AIA also may provoke third parties to assert claims against us or result in our intellectual property being narrowed in scope or declared to be invalid or unenforceable.

Competitors or third parties may infringe our patents. We may be required to file patent infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours is not valid or is unenforceable, or that the third party's technology does not in fact infringe upon our patents. An adverse determination of any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our related pending patent applications at risk of not issuing. Litigation may fail and, even if successful, may result in substantial costs and be a distraction to our management. We may not be able to prevent misappropriation of our proprietary rights, particularly in countries outside the U.S. where patent rights may be more difficult to enforce. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential or sensitive information could be compromised by disclosure in the event of litigation. In addition, during the course of litigation there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

In addition to patents, which alone may not be able to protect the fundamentals of our business, we also rely on unpatented trade secrets and proprietary technological expertise. Some of our intended future cell-related therapeutic products may fit into this category. We rely, in part, on confidentiality agreements with our partners, employees, advisors, vendors, and consultants to protect our trade secrets and proprietary technological expertise. There can be no guarantee that these agreements will not be breached, or that we will have adequate remedies for any breach, or that our unpatented trade secrets and proprietary technological expertise will not otherwise become known or be independently discovered by competitors.

Failure to obtain or maintain patent protection, or protect trade secrets, for any reason (or third-party claims against our patents, trade secrets, or proprietary rights, or our involvement in disputes over our patents, trade secrets, or proprietary rights, including involvement in litigation), could have a substantial negative effect on our results of operations and financial condition.

We may not be able to protect our intellectual property in countries outside the United States

Intellectual property law outside the United States is uncertain and in many countries is currently undergoing review and revisions. The laws of some countries do not protect our patent and other intellectual property rights to the same extent as United States laws. This is particularly relevant to us as most of our current commercial product sales and clinical trials are outside of the United States. Third parties may attempt to oppose the issuance of patents to us in foreign countries by initiating opposition proceedings. Opposition proceedings against any of our patent filings in a foreign country could have an adverse effect on our corresponding patents that are issued or pending in the United States. It may be necessary or useful for us to participate in proceedings to determine the validity of our patents or our competitors' patents that have been issued in countries other than the U.S. This could result in substantial costs, divert our efforts and attention from other aspects of our business, and could have a material adverse effect on our results of operations and financial condition. We currently have pending patent applications in Europe, Australia, Japan, Canada, China, Korea, and Singapore, among others.

We and our medical devices are subject to FDA regulation

As medical devices, the Celution® System family of products, Puregraft ® family of products and components of the Stemsource® cell banks, must receive regulatory clearances or approvals from the FDA and, in many instances, from

non-U.S. and state governments prior to their sale. The Celution® System family of products is subject to stringent government regulation in the United States by the FDA under the Federal Food, Drug and Cosmetic Act. The FDA regulates the design/development process, clinical testing, manufacture, safety, labeling, sale, distribution, and promotion of medical devices and drugs. Included among these regulations are pre-market clearance and pre-market approval requirements, design control requirements, and the Quality System Regulations/Good Manufacturing Practices. Other statutory and regulatory requirements govern, among other things, establishment registration and inspection, medical device listing, prohibitions against misbranding and adulteration, labeling and post-market reporting.

The regulatory process can be lengthy, expensive, and uncertain. Before any new medical device may be introduced to the U.S. market, the manufacturer generally must obtain FDA clearance or approval through either the 510(k) pre-market notification process or the lengthier pre-market approval application, or PMA, process. It generally takes from three to 12 months from submission to obtain 510(k) pre-market clearance, although it may take longer. Approval of a PMA could take four or more years from the time the process is initiated. The 510(k) and PMA processes can be expensive, uncertain, and lengthy, and there is no guarantee of ultimate clearance or approval. We expect that some of our products under development today or in the future will be subject to the lengthier PMA process. Securing FDA clearances and approvals may require the submission of extensive clinical data and supporting information to the FDA, and there can be no guarantee of ultimate clearance or approval. Failure to comply with applicable requirements can result in application integrity proceedings, fines, recalls or seizures of products, injunctions, civil penalties, total or partial suspensions of production, withdrawals of existing product approvals or clearances, refusals to approve or clear new applications or notifications, and criminal prosecution.

Medical devices are also subject to post-market reporting requirements for deaths or serious injuries when the device may have caused or contributed to the death or serious injury, and for certain device malfunctions that would be likely to cause or contribute to a death or serious injury if the malfunction were to recur. If safety or effectiveness problems occur after the product reaches the market, the FDA may take steps to prevent or limit further marketing of the product. Additionally, the FDA actively enforces regulations prohibiting marketing and promotion of devices for indications or uses that have not been cleared or approved by the FDA.

There can be no guarantee that we will be able to obtain the necessary 510(k) clearances or PMA approvals to market and manufacture our other products in the United States for their intended use on a timely basis, if at all. Delays in receipt of or failure to receive such clearances or approvals, the loss of previously received clearances or approvals, or failure to comply with existing or future regulatory requirements could have a substantial negative effect on our results of operations and financial condition.

To sell in international markets, we will be subject to regulation in foreign countries

In cooperation with our distribution partners, we intend to market our current and future products both domestically and in many foreign markets. A number of risks are inherent in international transactions. In order for us to market our products in Europe, Canada, Japan and certain other non-U.S. jurisdictions, we need to obtain and maintain required regulatory approvals or clearances and must comply with extensive regulations regarding safety, manufacturing processes and quality. These regulations, including the requirements for approvals or clearances to market, may differ from the FDA regulatory scheme. International sales also may be limited or disrupted by political instability, price controls, trade restrictions and changes in tariffs. Additionally, fluctuations in currency exchange rates may adversely affect demand for our products by increasing the price of our products in the currency of the countries in which the products are sold.

There can be no assurance that we will obtain regulatory approvals or clearances in all of the countries where we intend to market our products, or that we will not incur significant costs in obtaining or maintaining foreign regulatory approvals or clearances, or that we will be able to successfully commercialize current or future products in various foreign markets. Delays in receipt of approvals or clearances to market our products in foreign countries, failure to receive such approvals or clearances or the future loss of previously received approvals or clearances could have a substantial negative effect on our results of operations and financial condition.

Changing, new and/or emerging government regulations may adversely affect us

Government regulations can change without notice. Given the fact that Cytori operates in various international markets, our access to such markets could change with little to no warning due to a change in government regulations that suddenly up-regulate our product(s) and create greater regulatory burden for our cell therapy and cell banking technology products.

Due to the fact that there are new and emerging cell therapy and cell banking regulations that have recently been drafted and/or implemented in various countries around the world, the application and subsequent implementation of these

new and emerging regulations have little to no precedence. Therefore, the level of complexity and stringency is not known and may vary from country to country, creating greater uncertainty for the international regulatory process.

Anticipated or unanticipated changes in the way or manner in which the FDA regulates products or classes/groups of products can delay, further burden, or alleviate regulatory pathways that were once available to other products. There are no guarantees that such changes in FDA's approach to the regulatory process will not deleteriously affect some or all of our products or product applications.

We may have difficulty obtaining health insurance reimbursement for our products

New and emerging cell therapy and cell banking technologies, such as those provided by the Celution® System family of products, may have difficulty or encounter significant delays in obtaining health care reimbursement in some or all countries around the world due to the novelty of our cell therapy and cell banking technology and subsequent lack of existing reimbursement schemes/pathways. Therefore, the creation of new reimbursement pathways may be complex and lengthy with no assurances that such reimbursements will be successful. The lack of health insurance reimbursement or reduced or minimal reimbursement pricing may have a significant impact on our ability to successfully sell our cell therapy and cell banking technology product(s) into a county or region, which would negatively impact our operating results.

Our concentration of sales in Japan may have negative effects on our business in the event of any crisis in that region

We have operations in a number of regions around the world, including the United States, Japan, and Europe. Our global operations may be subject to risks that may limit our ability to operate our business. We sell our products globally, which exposes us to a number of risks that can arise from international trade transactions, local business practices and cultural considerations, including:

- political unrest, terrorism and economic or financial instability;
- unexpected changes and uncertainty in regulatory requirements and systems related
- nationalization programs that may be implemented by foreign governments;
- import-export regulations;
- difficulties in enforcing agreements and collecting receivables;
- difficulties in ensuring compliance with the laws and regulations of multiple jurisdictions;
- changes in labor practices, including wage inflation, labor unrest and unionization policies;
- longer payment cycles by international customers;
- currency exchange fluctuations;
- disruptions of service from utilities or telecommunications providers, including electricity shortages;
- difficulties in staffing foreign branches and subsidiaries and in managing an expatriate workforce, and differing employment practices and labor issues;
- potentially adverse tax consequences;

We also face risks associated with currency exchange and convertibility, inflation and repatriation of earnings as a result of our foreign operations. We are also vulnerable to appreciation or depreciation of foreign currencies against the U.S. dollar. Although we have significant operations in Asia, a substantial portion of transactions are denominated in U.S. dollars. As appreciation against the U.S. dollar increases, it will result in an increase in the cost of our business expenses abroad. Conversely, downward fluctuations in the value of foreign currencies relative to the U.S. dollar may make our products less price competitive than local solutions. From time to time, we may engage in currency hedging activities, but such activities may not be able to limit the risks of currency fluctuations.

Our revenue, results of operations, and cash flows may suffer upon the loss of a significant customer or a significant reduction in the amount of product ordered by any such customer.

Our largest customer in Japan accounted for 12% of our revenue during the year ended December 31, 2012. Loss of this significant customer or a significant reduction in the amount of product ordered by this customer would adversely affect our revenue, results of operations, and cash flows.

We and our joint venture with Olympus have to maintain quality assurance certification and manufacturing approvals

The manufacture of our products is, and the manufacture of any future cell-related therapeutic products would be, subject to periodic inspection by regulatory authorities and distribution partners. The manufacture of devices and products for human use is subject to regulation and inspection from time to time by the FDA for compliance with the FDA's Quality System Regulation, or QSR, requirements, as well as equivalent requirements and inspections by state and non-U.S. regulatory authorities. There can be no guarantee that the FDA or other authorities will not, during the course of an inspection of existing or new facilities, identify what they consider to be deficiencies in our compliance with QSRs or other requirements and request, or seek remedial action.

Failure to comply with such regulations or a potential delay in attaining compliance may adversely affect our manufacturing activities and could result in, among other things, injunctions, civil penalties, FDA refusal to grant pre-market approvals or clearances of future or pending product submissions, fines, recalls or seizures of products, total or partial suspensions of production, and criminal prosecution. There can be no assurance after such occurrences that we will be able to obtain additional necessary regulatory approvals or clearances on a timely basis, if at all. Delays in receipt of or failure to receive such approvals or clearances, or the loss of previously received approvals or clearances could have a substantial negative effect on our results of operations and financial condition.

The termination or suspension of the BARDA contract could adversely affect our business and our ability to further develop our Celution® System

Cytori was awarded the contract with BARDA in September 2012 with the aim to develop a new countermeasure for a combined injury involving thermal burn and radiation exposure which would be useful following a mass-casualty event. The cost-plus-fixed-fee contract is valued at up to $106 million, with a guaranteed base period of approximately $4.7 million which includes preclinical research and the acceleration of Cytori's ongoing development of Cytori's ongoing development of the Celution® cell processing System (the Celution® System). Upon satisfactory proof of concept, BARDA may elect to exercise up to three contract options which will extend the contract term to up to five years if all options are exercised. BARDA may suspend or terminate this contract should we fail to achieve key objectives or milestones, or fail to comply with the operating procedures and processes approved by BARDA and its audit agency, the Defense Contract Audit Agency. There can be no assurance that we will be able to achieve these milestones or continue to comply with these procedures and protocols, or whether we will be able to successfully develop our Celution® System under the contract. If the BARDA contract were terminated or suspended, our business could be adversely affected.

The BARDA contract has certain contracting requirements that allow the U.S. Government to unilaterally control its contracts. If the U.S. Government suspends, cancels, or otherwise terminates our contract with them, we could experience significant revenue shortfalls, and our financial condition and business may be adversely affected

Contracts with U.S. Government agencies typically contain termination provisions unfavorable to the other party, and are subject to audit and modification by the U.S. government at its sole discretion, which will subject us to additional risks. These risks include the ability of the U.S. Government to unilaterally:

- audit or object to our contract-related costs and fees, and require us to reimburse all such costs and fees;
- suspend or prevent us for a set period of time from receiving new contracts or extending our existing contracts based on violations or suspected violations of laws or regulations;
- cancel, terminate or suspend our contracts based on violations or suspected violations of laws or regulations;
- terminate our contracts if in the Government's best interest, including if funds become unavailable to the applicable governmental agency;
- reduce the scope and value of our contracts; and
- change certain terms and conditions in our contracts.

BARDA is able to terminate its contracts with us, either for its best interests or if we default by failing to perform in accordance with or to achieve the milestones set forth in the contract schedules and terms. Termination-for-convenience provisions generally enable us to recover only our costs incurred or committed and settlement expenses on the work completed prior to termination. Changes to, or an unexpected termination of this contract could result in significant revenue shortfalls. If revenue shortfalls occur and are not offset by corresponding reductions in expenses, our business could be adversely affected. We cannot anticipate if, when or to what extent BARDA might revise, alter or terminate its contract with us in the future.

Under our contract with BARDA, our operations, and those of our contractors, are subject to audit by the U.S. Government, a negative outcome to which could adversely affect our financial conditions and business operations

U.S. government agencies, such as the Department of Health and Human Services, or DHHS, and the Defense Contract Audit Agency, or the DCAA, routinely audit and investigate government contractors and recipients of federal grants. These agencies evaluate a contractor's performance under its contracts, cost structure and compliance with applicable laws, regulations and standards.

The DHHS and the DCAA also review the adequacy of, and a contractor's compliance with, its internal control systems and policies, including the contractor's purchasing, property, estimating, compensation and management information systems. Any costs found to be improperly allocated to a contract will not be reimbursed, while such costs already reimbursed must generally be repaid. If an audit identifies improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions, including, but not limited to:

- termination of contracts;
- forfeiture of profits;
- suspension of payments;
- fines; and
- suspension or prohibition from conducting business with the United States government.

We depend on a few key officers

Our performance is substantially dependent on the performance of our executive officers and other key scientific and sales staff, including Christopher J. Calhoun, our Chief Executive Officer, and Marc Hedrick, MD, our President. We rely upon them for strategic business decisions and guidance. We believe that our future success in developing marketable products and achieving a competitive position will depend in large part upon whether we can attract and retain additional qualified management and scientific personnel. Competition for such personnel is intense, and there can be no assurance that we will be able to continue to attract and retain such personnel. The loss of the services of one or more of our executive officers or key scientific staff, or the inability to attract and retain additional personnel and develop expertise as needed could have a substantial negative effect on our results of operations and financial condition.

We may not have enough product liability insurance

The testing, manufacturing, marketing, and sale of our regenerative cell products involve an inherent risk that product liability claims will be asserted against us, our distribution partners, or licensees. There can be no guarantee that our clinical trial and commercial product liability insurance is adequate or will continue to be available in sufficient amounts or at an acceptable cost, if at all. A product liability claim, product recall, or other claim, as well as any claims for uninsured liabilities or in excess of insured liabilities, could have a substantial negative effect on our results of operations and financial condition. Also, well-publicized claims could cause our stock to fall sharply, even before the merits of the claims are decided by a court.

Risks Related to Ownership of our Common Stock

The market price of our common stock may be volatile and fluctuate significantly, which could result in substantial losses for stockholders and subject us to litigation.

The market price of our common stock may be subject to significant fluctuations. Among the factors that may cause the market price of our common stock to fluctuate are the risks described in this "Risk Factors" section and other factors, including:

- fluctuations in our operating results or the operating results of our competitors;
- changes in estimates of our financial results or recommendations by securities analysts;
- variance in our financial performance from the expectations of securities analysts;
- changes in the estimates of the future size and growth rate of our markets;
- changes in accounting principles or changes in interpretations of existing principles, which could affect our financial results;
- conditions and trends in the markets we serve;

- changes in general economic, industry and market conditions;
- success of competitive products and services;
- changes in market valuations or earnings of our competitors;
- announcements of significant new products, contracts, acquisitions or strategic alliances by us or our competitors;
- the timing and outcome of regulatory reviews and approvals of our products;
- the commencement or outcome of litigation involving our company, our general industry or both;
- changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;
- actual or expected sales of our common stock by the holders of our common stock; and
- the trading volume of our common stock.

In addition, the stock market in general, the NASDAQ Global Market and the market for cell therapy development companies in particular may experience a loss of investor confidence. A loss of investor confidence may result in extreme price and volume fluctuations in our common stock that are unrelated or disproportionate to the operating performance of our business, our financial condition or results of operations. These broad market and industry factors may materially harm the market price of our common stock and expose us to securities class-action litigation. Class-action litigation, even if unsuccessful, could be costly to defend and divert management's attention and resources, which could further materially harm our financial condition and results of operations.

Future sales of our common stock may depress our share price.

As of December 31, 2012, we had 65,914,050 shares of our common stock outstanding. Sales of a number of shares of common stock in the public market, or the expectation of such sales, could cause the market price of our common stock to decline. In addition, our 2004 Equity Incentive Plan provides for annual increases in the number of shares available for issuance under the plan, which may, among other things, result in dilution of the price of our common stock. We may also sell additional common stock in subsequent public offerings, which may adversely affect the market price of our common stock.

We have granted demand registration rights for the registration of the resale of certain shares of our common stock to each of Olympus Corporation, Astellas Pharma Inc. and Green Hospital Supply, Inc. pursuant to common stock purchase agreements previously entered into with each of these stockholders. An aggregate of 5,528,571 shares of our common stock are subject to these demand registration rights. If we receive a written request from any of these stockholders to file a registration statement under the Securities Act covering its shares of unregistered common stock, we are required to use reasonable efforts to prepare and file with the SEC within 30 business days of such request a registration statement covering the resale of the shares for an offering to be made on a continuous basis pursuant to Rule 415 under the Securities Act.

Our charter documents contain anti-takeover provisions and in 2003 we adopted a Stockholder Rights Plan to prevent hostile takeovers.

Certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws could discourage, delay or prevent a merger, acquisition or other change of control that stockholders may consider favorable. These provisions could also prevent or frustrate attempts by our stockholders to replace or remove members of our Board of Directors. Stockholders who wish to participate in these transactions may not have the opportunity to do so. These provisions:

- authorize our Board of Directors to issue without stockholder approval up to 5,000,000 shares of preferred stock, the rights of which will be determined at the discretion of the Board of Directors, of which 9,500 shares are designated as Series RP Preferred Stock pursuant to the Stockholder Rights Plan described below;
- require that stockholder actions must be effected at a duly called stockholder meeting and cannot be taken by written consent;
- establish advance notice requirements for stockholder nominations to our Board of Directors or for stockholder proposals that can be acted on at stockholder meetings; and
- limit who may call stockholder meetings.

In addition, in 2003 we adopted a Stockholder Rights Plan of the kind often referred to as a poison pill. The purpose of the Stockholder Rights Plan is to prevent coercive takeover tactics that may otherwise be utilized in takeover attempts. The existence of such a rights plan may also prevent or delay a change in control of the Company, and this prevention or delay may adversely affect the market price of our shares.

We are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may, unless certain criteria are met, prohibit large stockholders, in particular those owning 15% or more of the voting rights on our common stock, from merging or combining with us for a prescribed period of time.

We pay no dividends.

We have never paid cash dividends in the past, and currently do not intend to pay any cash dividends in the foreseeable future. This could make an investment in our company inappropriate for some investors, and may serve to narrow our potential sources of additional capital.

If securities and/or industry analysts fail to continue publishing research about our business, if they change their recommendations adversely or if our results of operations do not meet their expectations, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline. In addition, it is likely that in some future period our operating results will be below the expectations of securities analysts or investors. If one or more of the analysts who cover us downgrade our stock, or if our results of operations do not meet their expectations, our stock price could decline.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

We lease 77,585 square feet at 3020 and 3030 Callan Road, San Diego, California that we use for our corporate headquarters and manufacturing facilities. The related lease agreement, as amended, bears monthly rent at a rate of $1.80 per square foot, with annual increase of $0.05 per square foot. The lease term is 88 months, commencing on July 1, 2010 and expiring on October 31, 2017. We are eligible to receive a 50% rent abatement for an additional 17,467 square feet through March of 2014 along with a tenant improvement allowance. Additionally, we've entered into several lease agreements for international office locations and corporate housing for our employees on international assignments. For these properties, we pay an aggregate of approximately $162,000 in rent per month.

Item 3. Legal Proceedings

From time to time, we have been involved in routine litigation incidental to the conduct of our business. As of December 31, 2012, we were not a party to any material legal proceeding.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market Prices

From August 2000 (our initial public offering in Germany) through September 2007 our common stock was quoted on the Frankfurt Stock Exchange under the symbol "XMPA" (formerly XMP). In September 2007 our stock closed trading on the Frankfurt Stock Exchange. Effective December 19, 2005, our common stock began trading on the NASDAQ Capital Market under the symbol "CYTX," and has since transferred to the NASDAQ Global Market effective February 14, 2006. Warrants, issued as part of a financing agreement in March 2009, began trading on the NASDAQ Global Market under the symbol "CYTXW" effective June 22, 2009. The following tables show the high and low sales prices for our common stock and warrants for the periods indicated, as reported by the NASDAQ Stock Market. These prices do not include retail markups, markdowns or commissions.

Common Stock

	High	Low
2011		
Quarter ended March 31, 2011	$ 8.06	$ 5.18
Quarter ended June 30, 2011	$ 8.44	$ 4.50
Quarter ended September 30, 2011	$ 5.72	$ 2.32
Quarter ended December 31, 2011	$ 3.30	$ 1.90
2012		
Quarter ended March 31, 2012	$ 4.50	$ 2.20
Quarter ended June 30, 2012	$ 2.86	$ 2.01
Quarter ended September 30, 2012	$ 4.93	$ 2.35
Quarter ended December 31, 2012	$ 4.55	$ 2.46

All of our outstanding shares have been deposited with the Depository Trust & Clearing Corporation (DTCC) since December 9, 2005.

Warrants

	High	Low
2011		
Quarter ended March 31, 2011	$ 5.59	$ 3.39
Quarter ended June 30, 2011	$ 5.83	$ 2.68
Quarter ended September 30, 2011	$ 3.48	$ 1.49
Quarter ended December 31, 2011	$ 1.65	$ 0.78
2012		
Quarter ended March 31, 2012	$ 2.45	$ 1.02
Quarter ended June 30, 2012	$ 1.40	$ 0.86
Quarter ended September 30, 2012	$ 2.73	$ 0.90
Quarter ended December 31, 2012	$ 2.40	$ 1.11

As of February 28, 2013, we had approximately 23 record holders of our common stock and 4 record holders of our warrants. Because many of our shares and warrants are held by brokers and other institutions on behalf of stockholders and warrantholders, we are unable to estimate the total number of individual stockholders and warrantholders represented by these record holders.

Dividends

We have never declared or paid any dividends on our common stock and do not anticipate paying any in the foreseeable future.

Equity Compensation Plan Information

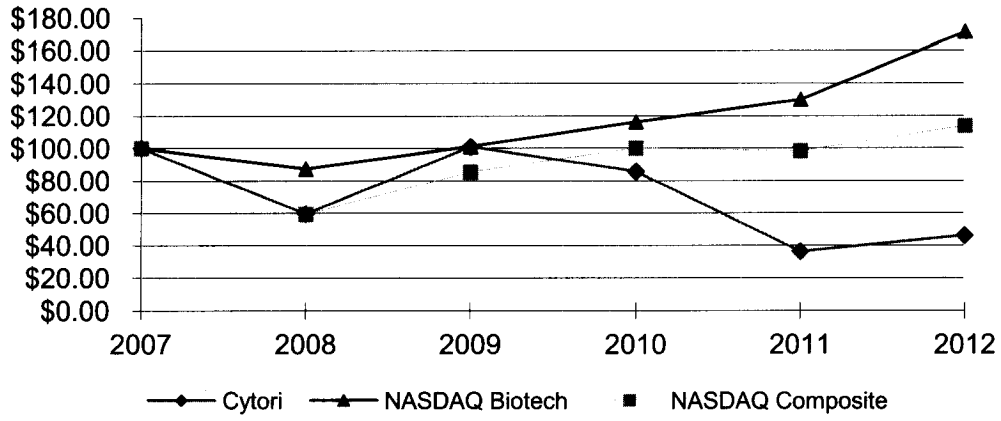
Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column(a)) (c)
Equity compensation plans approved by security holders (1)	1,338,231	$ 4.50	—
Equity compensation plans not approved by security holders (2)	5,962,796	$ 4.67	1,419,831
Total	7,301,027	$ 4.64	1,419,831

(1) The 1997 Stock Option and Stock Purchase Plan expired on October 22, 2007.

(2) See Notes to our Consolidated Financial Statements included elsewhere herein for a description of our 2004 Equity Incentive Plan. The maximum number of shares shall be cumulatively increased on the first January 1 after the Effective Date, August 24, 2004, and each January 1 thereafter for 9 more years, by a number of shares equal to the lesser of (a) 2% of the number of shares issued and outstanding on the immediately preceding December 31, and (b) a number of shares set by the Board.

Comparative Stock Performance Graph

The following graph shows how an initial investment of $100 in our common stock would have compared to an equal investment in the NASDAQ Composite Index and the NASDAQ Biotechnology Index during the period from December 31, 2007 through December 31, 2012. The performance shown is not necessarily indicative of future price performance.



Item 6. Selected Financial Data

The selected data presented below under the captions "Statements of Operations Data," "Statements of Cash Flows Data" and "Balance Sheet Data" for, and as of the end of, each of the years in the five-year period ended December 31, 2012, are derived from, and should be read in conjunction with, our audited consolidated financial statements. The consolidated balance sheets as of December 31, 2012 and 2011, and the related consolidated statements of operations and comprehensive loss, stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2012, which have been audited by KPMG LLP, an independent registered public accounting firm, and their report thereon, are included elsewhere in this annual report. The consolidated balance sheets as of December 31, 2010, 2009 and 2008, and the related consolidated statements of operations and comprehensive loss, stockholders' equity (deficit), and cash flows for the years ended December 31, 2009 and 2008, which were also audited by KPMG LLP, are included with our annual reports previously filed.

The information contained in this table should also be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the financial statements and related notes thereto included elsewhere in this report (in thousands except share and per share data):

	2012	2011	2010	2009	2008
Statements of Operations Data:					
Product revenues:					
Sales to related party	$ —	$ —	$ 590	$ 591	$ 28
Sales to third parties	8,709	7,983	7,664	5,246	4,500
	8,709	7,983	8,254	5,837	4,528
Cost of product revenues	4,000	3,837	3,908	3,394	1,854
Gross profit	4,709	4,146	4,346	2,443	2,674
Development revenues:					
Development, related party	2,882	1,992	2,122	8,840	774
Development	2,529	—	—	—	—
Other, related party	—	—	—	—	1,500
Government contracts and other	381	21	251	53	51
	5,792	2,013	2,373	8,893	2,325
Operating expenses:					
Research and development	13,628	10,904	9,687	12,231	17,371
Sales and marketing	9,488	13,560	11,040	6,583	4,602
General and administrative	15,672	14,727	12,570	10,415	11,727
Change in fair value of warrants	(209)	(4,360)	(1,285)	4,574	—
Change in fair value of option liabilities	340	740	30	(920)	1,060
Total operating expenses	38,919	35,571	32,042	32,883	34,760
Total operating loss	(28,418)	(29,412)	(25,323)	(21,547)	(29,761)
Other income (expense):					
Interest income	4	9	9	20	230
Interest expense	(3,386)	(2,784)	(2,052)	(1,427)	(420)
Other income (expense), net	(314)	(55)	23	(218)	(40)
Equity loss in investments	(165)	(209)	(151)	(44)	(45)
Net loss	$ (32,279)	$ (32,451)	$ (27,494)	$ (23,216)	$ (30,036)
Basic and diluted net loss per share	$ (0.55)	$ (0.61)	$ (0.60)	$ (0.65)	$ (1.12)
Basic and diluted weighted average common shares	58,679,687	53,504,030	45,947,966	35,939,260	26,882,431
Statements of Cash Flows Data:					
Net cash used in operating activities	$ (32,193)	$ (35,323)	$ (23,574)	$ (23,807)	$ (33,389)
Net cash used in investing activities	(1,204)	(560)	(1,290)	(221)	(393)
Net cash provided by financing activities	22,192	20,137	64,678	24,271	34,928
Net (decrease) increase in cash	(11,205)	(15,746)	39,814	243	1,146
Cash and cash equivalents at beginning of year	36,922	52,668	12,854	12,611	11,465
Cash and cash equivalents at end of year	$ 25,717	$ 36,922	$ 52,668	$ 12,854	$ 12,611
Balance Sheet Data:					
Cash, cash equivalents and short-term investments	$ 25,717	$ 36,922	$ 52,668	$ 12,854	$ 12,611
Working capital	16,366	35,516	45,730	9,915	10,090
Total assets	43,250	51,534	66,347	24,749	25,609
Deferred revenues, related party	638	3,520	5,512	7,634	16,474
Deferred revenues	2,635	5,244	4,929	2,388	2,445
Warrant liabilities, long-term	—	627	4,987	6,272	—
Option liabilities	2,250	1,910	1,170	1,140	2,060
Long-term deferred rent	756	504	398	—	168
Long-term obligations, less current portion	12,903	21,962	13,255	2,790	5,044
Total stockholders' equity (deficit)	$ 6,455	$ 9,946	$ 22,873	$ (3,658)	$ (7,717)

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

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This report contains certain statements that may be deemed "forward-looking statements" within the meaning of U.S. securities laws. All statements, other than statements of historical fact, that address activities, events or developments that we intend, expect, project, believe or anticipate and similar expressions or future conditional verbs such as will, should, would, could or may occur in the future are forward-looking statements. Such statements are based upon certain assumptions and assessments made by our management in light of their experience and their perception of historical trends, current conditions, expected future developments and other factors they believe to be appropriate.

These statements include, without limitation, statements about our anticipated expenditures, including those related to clinical research studies and general and administrative expenses; the potential size of the market for our products, future development and/or expansion of our products and therapies in our markets, our ability to generate product revenues or effectively manage our gross profit margins; our ability to obtain regulatory clearance; expectations as to our future performance; the "Liquidity and Capital Resources" section of this report, including our potential need for additional financing and the availability thereof; and the potential enhancement of our cash position through development, marketing, and licensing arrangements. Our actual results will likely differ, perhaps materially, from those anticipated in these forward-looking statements as a result of various factors, including: our need and ability to raise additional cash, our joint ventures, risks associated with laws or regulatory requirements applicable to us, market conditions, product performance, potential litigation, and competition within the regenerative medicine field, to name a few. The forward-looking statements included in this report are subject to a number of additional material risks and uncertainties, including but not limited to the risks described in our filings with the Securities and Exchange Commission and under the "Risk Factors" section in Part I above.

We encourage you to read the risks described under "Risk Factors" carefully. We caution you not to place undue reliance on the forward-looking statements contained in this report. These statements, like all statements in this report, speak only as of the date of this report (unless an earlier date is indicated) and we undertake no obligation to update or revise the statements except as required by law. Such forward-looking statements are not guarantees of future performance and actual results will likely differ, perhaps materially, from those suggested by such forward-looking statements.

Overview

We are a cell therapy company dedicated primarily to the development of novel treatments for cardiovascular disease and soft tissue injuries and burns. We have a global product development strategy with a focus on the U.S cardiovascular disease market. In the U.S. our goal is to bring the Cytori cell therapy to market for treatment of refractory heart failure through Cytori-sponsored clinical development efforts and to develop a treatment for thermal burns combined with radiation injury under a contract from BARDA, a division of the U.S. Department of Health and Human Services.

The Cytori cell therapy is a proprietary formulation of stem and regenerative cells derived from a patient's own adipose (fat) tissue (ADRCs). Adipose tissue is a rich and accessible source of ADRCs. To access these cells from a patient at the time of a surgical procedure, we have designed and developed a sophisticated tissue processing system, the Celution® System, which automates the complex process of digesting fat tissue, releasing the ADRCs, and concentrating them into an optimized and proprietary formulation in a sterile environment. The system is comprised of a central device and requires single-use, per-procedure consumable cartridges. The business model is based on the sale of the central device and generating recurring revenue from the cartridges that are utilized in each procedure.

While our focus is on the development of new therapeutic applications for Cytori's cell therapy, we are currently commercializing the Celution® System under select medical device clearances in Europe, Japan, and other regions. The early sales of systems, consumables and ancillary products contributes margins that partially offset our operating expenses and play an important strategic role in fostering familiarity within the medical community with our technology and to facilitate the discovery of potential new applications for Cytori's cell therapy by customers conducting investigator-initiated and funded research.

In February 2013, we received a CE Mark for Intravase®, a reagent intended to be used with Cytori's Celution® System for preparing safe and optimized ADRCs for intravascular delivery into the same patient. As a result of this approval, we currently plan to target select centers in Europe to build patient data, which we believe can be used to further expand these

claims and increase Celution® adoption. The approval will also allow independent European investigators to conduct their own vascular studies.

We have also refined our corporate priorities to focus on what we believe represents the greatest near term value to our shareholders with our existing capital resources. As part of this strategy, we are going to reduce our 2013 investment in our European heart attack trial, ADVANCE until such time as additional resources are available. This will provide us with flexibility to invest more in areas of higher strategic importance such as in the ATHENA refractory heart failure trial, and in the government funded activities under our BARDA contract.

Development Pipeline

The primary therapeutic areas currently within our development pipeline are cardiovascular disease, specifically refractory heart failure due to chronic myocardial ischemia, and the treatment of thermal burns.

In the U.S., we are conducting our ATHENA trial, a prospective, double blind, placebo-controlled, multi-center trial in up to 45 patients. The trial will measure several endpoints, including peak oxygen consumption (VO_2 Max). Additional endpoints include perfusion defect, left ventricle end-systolic and diastolic volume and ejection fraction at six and 12 months. Enrollment is expected to be complete by mid-2013.

In 2012, we amended our ADVANCE trial and enrolled patients across a small number of European trial centers. 15 patients have been enrolled in ADVANCE to date. In light of the required resources to complete enrollment in an accelerated fashion and competing corporate priorities at this time, we are only prepared to commit a minimal level of investment in ADVANCE for 2013. The goal for 2013 is to bring the total ADVANCE enrollment to 25 patients with an interim analysis to be performed after the first 72 patients.

We have completed two European pilot trials investigating Cytori's cell therapy for cardiovascular disease. We have reported long term, 18-month data from the PRECISE trial for chronic myocardial ischemia, which showed that Cytori cell therapy demonstrated safety and sustained improvement in cardiac functional capacity as measured by VO_2 Max. Results from the APOLLO trial for acute heart attack demonstrated safety and sustained improvement in infarct size and perfusion.

In addition to our cardiovascular disease therapeutic pipeline, Cytori is also developing its cell therapy platform for the treatment of thermal burns combined with radiation injury. In the third quarter of 2012, we were awarded a contract to develop a new countermeasure for thermal burns valued at up to $106 million with the U.S. Department of Health and Human Service's Biomedical Advanced Research and Development Authority (BARDA). The initial base period includes $4.7 million over two years and covers preclinical research and continued development of Cytori's Celution® System to improve cell processing. The additional contract options, if fully executed, could cover our clinical development through FDA approval under a device-based PMA regulatory pathway. We are making progress in fulfilling the required milestones of the base contract with the goal of completing the base period in early 2014.

Results of Operations

Product revenues

Product revenues consisted of revenues primarily from our Celution® and Puregraft® Systems and StemSource® Cell Banks.

The following table summarizes the components for the years ended December 31, 2012, 2011 and 2010:

	Years ended		
	2012	2011	2010
Related party	$ —	$ —	$ 590,000
Third party	8,709,000	7,983,000	7,664,000
Total product revenues	$ 8,709,000	$ 7,983,000	$ 8,254,000
% attributable to Olympus	—	—	0.1%
% attributable to Green Hospital Supply	—	—	7.1%

Beginning in March of 2008, we began sales and shipments of our Celution® 800/CRS System to the European and Asia-Pacific reconstructive surgery markets and during 2010 we began sales of our Puregraft® System in the United States and Europe. Assuming all other applicable revenue recognition criteria have been met, revenue for these product sales is recognized upon delivery to the customer, as all risks and rewards of ownership have been substantively transferred to the customer at that point. For product sales to customers who arrange for and manage all aspects of the shipping process, we recognize revenue upon shipment from our facilities. Beginning in 2011, for product sales that include a combination of equipment, services, or other multiple deliverables that will be provided in the future, we defer an estimate based on the relative selling price method for those future deliverables from product revenue until such deliverables have been provided or earned. Shipping and handling costs that are billed to our customers are classified as revenue.

A significant contributor to Cytori's product revenue historically and throughout 2012 has been sales in Japan. In September 2012 we obtained Class I Device Clearance for Celution® and a number of our other products in Japan which led to increased product revenues in the fourth quarter of 2012. This clearance is expected to facilitate sales growth in Japan and it is anticipated that demand will come mostly from researchers at academic hospitals seeking to perform investigator-initiated and funded studies using Cytori's cell therapy.

The future: We expect to continue to generate product revenues from a mix of Celution® and StemSource® System and consumables sales as well as Puregraft® orders. We will sell the products to a diverse group of customers in Europe, Asia and the U.S., who may apply the products towards reconstructive surgery, soft tissue repair, research, aesthetics, and cell and tissue banking as approved in each country. Additionally, as a result of Class I Device Clearance for Celution® and a number of our other products in Japan, we anticipate to sell these products to researchers at academic hospitals seeking to perform investigator-initiated and funded studies using Cytori's cell therapy.

Cost of product revenues

Cost of product revenues relate primarily to Celution® System products and StemSource® Cell Banks and includes material, manufacturing labor, and overhead costs. The following table summarizes the components of our cost of revenues for the years ended December 31, 2012, 2011 and 2010:

	Years ended		
	2012	2011	2010
Cost of product revenues	$ 3,923,000	$ 3,772,000	$ 3,852,000
Share-based compensation	77,000	65,000	56,000
Total cost of product revenues	$ 4,000,000	$ 3,837,000	$ 3,908,000
Total cost of product revenues as % of product revenues	45.9%	48.1%	47.3%

Cost of product revenues as a percentage of product revenues was 45.9%, 48.1% and 47.3% for the years ended December 31, 2012, 2011 and 2010, respectively. Fluctuation in this percentage is to be expected due to the product mix, distributor and direct sales mix, and allocation of overhead.

The future. We expect to continue to see variation in our gross profit margin as the product mix comprising revenues fluctuates.

Development revenues

The following table summarizes the components of our development revenues for the years ended December 31, 2012, 2011 and 2010:

	Years ended		
	2012	2011	2010
Milestone revenue (Olympus)	$ 2,882,000	$ 1,992,000	$ 2,122,000
Development revenue (Astellas)	2,529,000	—	—
Government contract (BARDA)	355,000	—	—
Grant Revenue	—	—	244,000
Regenerative cell storage services	2,000	4,000	4,000
Other	24,000	17,000	3,000
Total development revenues	$ 5,792,000	$ 2,013,000	$ 2,373,000

We recognize deferred revenues, related party, as development revenue when certain performance obligations are met (i.e., using a proportional performance approach). During the year ended December 31, 2012, we recognized $2,882,000 of revenue associated with our arrangements with Olympus as a result of two remaining milestones for the APOLLO and PRECISE clinical trials that were reached upon the completion of all patient follow up procedures and recognition of a regulatory milestone triggered upon us obtaining Class I Device Clearance for Celution® and a number of our other products in Japan. During the year ended December 31, 2011, we recognized $1,992,000 of revenue associated with our arrangements with Olympus as a result of achieving a product development milestone related to additional preproduction development of the Celution® One System and a regulatory milestone related to our obtaining CE Mark claims for the Celution® One System in Europe. During the year ended December 31, 2010, we recognized $2,122,000 of revenue associated with our arrangements with Olympus as a result of achieving two milestones, one in product development for work in preproduction development of the Celution® One System, and one clinical milestone related to the assessment of trial outcomes at 6 months in one of our cardiac trials.

On December 13, 2010 we raised $10,000,000 in gross proceeds from a sale of 1,428,571 shares of unregistered common stock to Astellas Pharma Inc. for $7.00 per share in a private stock placement. Pursuant to the terms of the purchase agreement, we granted Astellas Pharma Inc. a two year right of first refusal to enter into a development and commercialization collaboration with us regarding the use of our technology, on a worldwide basis, for the treatment of liver conditions. In addition, we have agreed to use reasonable efforts to file a registration statement with the Securities and Exchange Commission to register the shares of common stock for resale upon the request of Astellas Pharma Inc. We also granted Astellas Pharma Inc. a non-voting observer seat on our Board of Directors and the right to designate a representative member to our Scientific Advisory Board. The $10,000,000 in total proceeds we received exceeded the market value of our stock at the completion of the purchase agreement. The $2,529,000 difference between the proceeds received and the fair market values of our common stock was initially recorded as a component of deferred revenues in the accompanying balance sheet. This difference was recorded as deferred revenue since, conceptually, the excess proceeds represent a value paid by Astellas Pharma Inc. attributable to the scientific advisory board seat, the non-voting observer seat on our Board of Directors, and the two year right of first refusal to enter into a development and commercialization collaboration with us regarding the use of our technology, on a worldwide basis, for the treatment of liver conditions, rather than an additional equity investment in Cytori. We recognized this deferred amount as development revenue upon the expiration of the two year period in December 2012. We are still actively involved in discussions with Astellas Pharma, Inc. about a potential future development and commercialization collaboration with us.

In the third quarter of 2012, we were awarded a contract to develop a new countermeasure for thermal burns valued at up to $106 million with U.S. Department of Health and Human Service's Biomedical Advanced Research and Development Authority (BARDA). The initial base period includes $4.7 million over two years and covers preclinical research and continued development of Cytori's Celution® system to improve cell processing. The additional contract options, if fully executed, could cover clinical development through FDA approval under a device-based PMA regulatory pathway. This is a cost reimbursement contract and related government contract revenue was recorded at the gross amount of reimbursement starting in the fourth quarter of 2012. To receive funds under this arrangement, we are required to (i) demonstrate that we incurred "qualifying expenses," as defined in the contract agreement between BARDA and us, (ii) maintain a system of controls, whereby we can accurately track and report all expenditures related solely to develop a new countermeasure for thermal burns, and (iii) file appropriate forms and follow appropriate protocols established by BARDA. During the year ended December 31, 2012, we incurred $331,000 in qualified expenditures. We recognized a total of $355,000 in revenues

for the year ended December 31, 2012, which included allowable fees as well as cost reimbursements. There were no comparable revenues and expenditures for the year ended December 31, 2011 and 2010.

During the year ended December 31, 2010, we received a $244,000 federal grant from the Internal Revenue Service as part of the Qualifying Therapeutic Discovery Program ("QTDP"). The QTDP, administered by the Department of Health and Human Services and the Department of the Treasury, was enacted to encourage biomedical research for projects that show the greatest potential to create and sustain high-quality, high-paying U.S. jobs and to advance U.S. competitiveness in life, biological and medical sciences. Through this program, eligible companies elected to receive either a cash grant or a tax credit. We elected to receive a cash grant and the funds were received during late 2010.

The future: We expect to continue recognizing government contract revenue relating to our contract with BARDA as we continue our development work relating to this contract. Additionally, we may recognize additional development revenues during 2013, as the anticipated completion for the remaining revenue recognition milestone related to our Joint Venture with Olympus is in 2013. The cash related to the joint venture agreements was received when these agreements were signed and no further related cash payments will be made to us even if we recognize additional development revenue related to the joint venture. To date, of the $28,311,000 originally deferred, we have recognized a total of $27,673,000 through December 31, 2012.

Research and development expenses

Research and development expenses include costs associated with the design, development, testing and enhancement of our products, regulatory fees, the purchase of laboratory supplies, pre-clinical studies and clinical studies. The following table summarizes the components of our research and development expenses for the years ended December 31, 2012, 2011 and 2010:

	Years ended		
	2012	2011	2010
Research and development	$ 12,784,000	$ 10,021,000	$ 7,012,000
Development milestone (Joint Venture)	219,000	396,000	2,221,000
Stock-based compensation	625,000	487,000	454,000
Total research and development expenses	$ 13,628,000	$ 10,904,000	$ 9,687,000

Research and development expenses relate to the development of a technology platform that involves using adipose tissue as a source of autologous regenerative cells for therapeutic applications. These expenses, in conjunction with continued development efforts related to our Celution® System, result primarily from the broad expansion of our research and development efforts enabled by the funding we received from Olympus in 2005 and 2006 and from other investors during the last few years.

Research and development expenses for the year ended December 31, 2012 as compared to the same period in 2011 increased due to the increase in salary and related benefits expense (excluding share-based compensation) of $949,000, an increase in professional services expenses of $393,000, increase in research supplies expense of $360,000, and increase in clinical study expense of $370,000 due to increase in our clinical and regulatory activities.

The increase in research and development expenses for the year ended December 31, 2011 as compared to the same period in 2010 is primarily due to the increase in salary and related benefits expense (excluding share-based compensation) of $850,000 due to increase in headcount in our research and development departments.

Expenditures related to the Joint Venture with Olympus, which are included in the variation analysis above, include costs that are necessary to support the commercialization of future generation devices, including the next generation Celution® System. These development activities, which began in November 2005, include performing pre-clinical and clinical studies, seeking regulatory approval, and performing product development related to therapeutic applications for adipose stem and regenerative cells for multiple large markets. The costs associated with the development of the device were comprised of labor and related benefits, consulting and other professional services, supplies and other miscellaneous expenses.

The future: We expect research and development expenditures to increase in 2013 as we continue enrollment in our US trial ATHENA, limited enrollment in the ADVANCE cardiac trial, continue development work under our BARDA contract, and as we seek additional regulatory clearances and potentially seek to initiate additional trials or patient registries during 2013.

Sales and marketing expenses

Sales and marketing expenses include costs of sales and marketing personnel, tradeshows, physician training, and promotional activities and materials. The following table summarizes the components of our sales and marketing expenses for the years ended December 31, 2012, 2011 and 2010:

	Years ended		
	2012	2011	2010
Sales and marketing	$ 8,764,000	$ 12,674,000	$ 10,177,000
Stock-based compensation	724,000	886,000	863,000
Total sales and marketing	$ 9,488,000	$ 13,560,000	$ 11,040,000

The decrease in sales and marketing expense during the year ended December 31, 2012 as compared to the same period in 2011 was mainly attributed to the decrease in salary and related benefits expense (excluding share-based compensation) of $2,122,000 due to a decrease in headcount, and a decrease in professional services expenses of $610,000, as a result of targeted reductions in staff and external costs made prior to year end in 2011 as well as subsequent reductions made in early 2012.

The increase in sales and marketing expense during the year ended December 31, 2011 as compared to the same period in 2010 was mainly attributed to the increase in salary and related benefits expense (excluding share-based compensation) of $1,532,000 due to an increase in headcount in anticipation of US regulatory approval that did not occur in 2011 and an increase in professional services of $558,000.

The future. We expect sales and marketing expenditures to remain relatively stable in 2013.

General and administrative expenses

General and administrative expenses include costs for administrative personnel, legal and other professional expenses, and general corporate expenses. The following table summarizes the general and administrative expenses for the years ended December 31, 2012, 2011 and 2010:

	Years ended		
	2012	2011	2010
General and administrative	$ 13,194,000	$ 12,849,000	$ 10,888,000
Stock-based compensation	2,478,000	1,878,000	1,682,000
Total general and administrative expenses	$ 15,672,000	$ 14,727,000	$ 12,570,000

For the year ended December 31, 2012 as compared to the same period in 2011, the general and administrative expenses (excluding share-based compensation) remained relatively consistent.

For the year ended December 31, 2011 as compared to the same period in 2010, the increase in general and administrative expenses (excluding share-based compensation) occurred primarily due to an increase in professional services expense of $954,000 related mostly to legal costs incurred in connection with European patent validations and maintenance of the worldwide patent estate.

The future. We expect general and administrative expenses to remain relatively stable in 2013.

Stock-based compensation expenses

Stock-based compensation expenses include charges related to options and restricted stock awards issued to employees, directors and non-employees along with charges related to the employee stock purchases under the Employee Stock Purchase Plan (ESPP). We measure stock-based compensation expense based on the grant-date fair value of any awards granted to our employees. Such expense is recognized over the period of time that employees provide service to us and earn all rights to the awards.

The following table summarizes the components of our stock-based compensation for the years ended December 31, 2012, 2011 and 2010:

	Years ended		
	2012	2011	2010
Cost of product revenues	$ 77,000	$ 65,000	$ 56,000
Research and development related	625,000	487,000	454,000
Sales and marketing related	724,000	886,000	863,000
General and administrative related	2,478,000	1,878,000	1,682,000
Total stock-based compensation	$ 3,904,000	$ 3,316,000	$ 3,055,000

Most of the share-based compensation expenses for the years ended December 31, 2012, 2011 and 2010 related to the vesting of stock option and restricted stock awards to employees.

The increase in share-based compensation for the year ended December 31, 2012 as compared to the same period in 2011 is primarily due to the grant of restricted stock awards and performance based stock awards. See Note 14 to the Consolidated Financial Statements included elsewhere herein for disclosure and discussion of share based compensation.

The future. We expect to continue to grant options and stock awards (which will result in an expense) to our employees, directors, and, as appropriate, to non-employee service providers. In addition, previously-granted options will continue to vest in accordance with their original terms. As of December 31, 2012, the total compensation cost related to non-vested stock options and stock awards not yet recognized for all our plans is approximately $4,593,000. Of this amount, $3,918,000 is expected to be recognized as a result of vesting under service conditions over a weighted average period of 1.56 years.

Change in fair value of warrant liability

The following is a table summarizing the change in fair value of warrant liability for the years ended December 31, 2012, 2011 and 2010:

	Years ended December 31,		
	2012	2011	2010
Change in fair value of warrant liability	$ (209,000)	$ (4,360,000)	$ (1,285,000)

Changes in fair value of our warrant liability are primarily due to fluctuations in the valuation inputs, such as stock price, volatility, remaining life and others. See Note 2 to the Consolidated Condensed Financial Statements included elsewhere herein for disclosure and discussion of our warrant liability.

The future: Future changes in the fair value of the warrant liability will be recognized currently in earnings until such time as the warrants are exercised or expire in August 2013.

Change in fair value of option liability

The following is a table summarizing the change in fair value of option liability for the years ended December 31, 2012, 2011 and 2010:

	Years ended		
	2012	2011	2010
Change in fair value of option liability	$ 340,000	$ 740,000	$ 30,000

Changes in fair value of our put option liability are due to changes in assumptions used in estimating the value of the Put, such as bankruptcy threshold for Cytori, fair value of the Olympus-Cytori, Inc. Joint Venture, volatility and others. See Note 3 to the Consolidated Condensed Financial Statements included elsewhere herein for disclosure and discussion of our put option liability.

The future: The Put has no expiration date. Accordingly, we will continue to recognize a liability for the Put until it is exercised or until the arrangements with Olympus are amended.

Financing items

The following table summarizes interest income, interest expense, and other income and expenses for the years ended December 31, 2012, 2011 and 2010:

	Years ended		
	2012	2011	2010
Interest income	$ 4,000	$ 9,000	$ 9,000
Interest expense	(3,386,000)	(2,784,000)	(2,052,000)
Other income (expense), net	(314,000)	(55,000)	23,000
Total	$ (3,696,000)	$ (2,830,000)	$ (2,020,000)

- Interest expense increased for the year ended December 31, 2012 and December 31, 2011 as compared to prior years due to cash interest and non-cash amortization of debt issuance costs and debt discount for our $25.0 million term loan. In September 2011, we entered into a second amendment to the Amended and Restated Loan and Security Agreement, pursuant to which the lenders funded an additional principal, increasing the total principal balance to $25.0 million.

- The changes in other income (expense) in 2012, 2011 and 2010 resulted primarily from changes in foreign currency exchange rates.

The future: Interest income earned in 2012 will be dependent on our levels of funds available for investment as well as general economic conditions. Subject to our future financing activities, we expect interest expense in 2012 to remain relatively stable as we continue to pay interest on the $25.0 million term loan that was amended in September 2011.

Equity loss from investment in Joint Venture

The following table summarizes equity loss from investment in joint venture for the years ended December 31, 2012, 2011 and 2010:

	Years ended		
	2012	2011	2010
Equity loss from investment in joint venture	$ (165,000)	$ (209,000)	$ (151,000)

The losses relate entirely to our 50% equity interest in the Joint Venture, which we account for using the equity method of accounting.

The future: We do not expect to recognize significant losses from the activities of the Joint Venture in the foreseeable future. We are engaged in ongoing discussions with Olympus relating to the future of the Joint Venture relationship, including the potential termination of the Joint Venture.

Liquidity and Capital Resources

Short-term and long-term liquidity

The following is a summary of our key liquidity measures at December 31, 2012 and 2011:

	As of December 31,	
	2012	2011
Cash and cash equivalents	$ 25,717,000	$ 36,922,000
Current assets	$ 33,979,000	$ 43,337,000
Current liabilities	17,613,000	7,821,000
Working capital	$ 16,366,000	$ 35,516,000

We incurred net losses of $32,279,000, $32,451,000 and $27,494,000 for the years ended December 31, 2012, 2011 and 2010, respectively. We have an accumulated deficit of $274,728,000 as of December 31, 2012. Additionally, we have used net cash of $32,193,000, $35,323,000 and $23,574,000 to fund our operating activities for years ended December 31, 2012, 2011 and 2010, respectively. To date, these operating losses have been funded primarily from outside sources of invested capital and gross profits. During 2012, we expanded our commercialization activities while simultaneously pursuing available financing sources to support operations and growth.

We have had, and we will likely continue to have, an ongoing need to raise additional cash from outside sources to fund our future operations. We believe we have sufficient cash to fund operations into the third quarter of 2013, which includes minimum liquidity requirements of the Amended and Restated Loan and Security Agreement, which requires that we make principal payments of $825,000 per month along with accrued interest throughout 2013 and maintain at least three months of cash on hand. In order to fund operations and our continued commercialization efforts through the next twelve months, we are pursuing additional funding through either strategic corporate partnerships, debt restructuring or future issuances of equity or debt securities in addition to our gross profits. We have an established history of raising capital through all these platforms, and are currently involved in negotiations with multiple parties. In the absence of sufficient positive cash flows from operations, no assurance can be given that we can generate sufficient revenue to cover operating costs or that additional financing will be available to us and, if available, on terms acceptable to us in the future.

Without this additional capital, cash generated from sales and containment of costs will not provide adequate funding indefinitely at their current levels. If we cannot raise sufficient capital, we would need to reduce our research, development, and administrative operations, including reductions of our employee base and the deferral of ongoing development projects, to focus almost entirely on the supply of current products to existing distribution channels and our thermal burn contract arrangement with BARDA. As a result, such reductions would negatively affect our ability to achieve certain other corporate goals.

From January 1, 2010 to December 31, 2012, we have financed our operations primarily by:

- In June 2009, we entered into a common stock purchase agreement with Seaside 88, LP relating to the offering and sale of a total of up to 7,150,000 shares of our common stock. The agreement required us to issue and Seaside to buy 275,000 shares of our common stock once every two weeks. Between June 2009 and June 2010, we raised an aggregate of approximately $30,172,000 in gross proceeds from the sale of 7,150,000 shares of our common stock,

- In June 2010, we entered into an Amended and Restated Loan and Security Agreement with the GECC, SVB, and Oxford Finance Corporation (Lenders), pursuant to which the Lenders funded a term loan in the amount of $20,000,000 on June 14, 2010, which refinanced the remaining balance of the term loan entered into with GECC and SVB on October 14, 2008,

- In October 2010, we entered into an underwriting agreement with Jefferies, relating to the issuance and sale of 4,600,000 shares of our common stock. This price to the public in this offering was $4.50 per share and Jefferies agreed to purchase the shares from us at a price of $4.23 per share. The transaction was completed on October 13, 2010 raising approximately $20,700,000 in gross proceeds before deducting underwriting discounts and commissions and other offering expenses payable by us, and

- In December 2010, we raised $10,000,000 in gross proceeds from a sale of 1,428,571 shares of unregistered common stock to Astellas Pharma Inc. for $7.00 per share in a private stock placement.

- In July 2011, we entered into a common stock purchase agreement with Seaside 88, LP relating to the offering and sale of a total of up to 6,326,262 shares of our common stock. The agreement requires us to issue and Seaside to buy 1,326,262 shares of our common stock at an initial closing and 250,000 shares of our common stock once every two weeks, commencing 30 days after the initial closing, for up to an additional 20 closings, subject to the satisfaction of customary closing conditions. At the initial closing, the offering price was $4.52, which equaled to 88% of our common stock's volume-weighted average trading prices, or VWAP, during the ten-day trading period immediately prior to the initial closing date, raising approximately $6,000,000 in gross proceeds. At subsequent closings, the offering price was 90.25% of our common stock's volume-weighted average trading prices during the ten-day trading period immediately prior to each subsequent closing date. We raised approximately $18,233,000 in gross proceeds from the sale of 5,826,262 shares in our scheduled closings through April 9, 2012. Effective, April 30, 2012, we terminated the agreement with Seaside 88, LP and we will not sell the remaining and final 500,000 shares that would otherwise have been sold under this agreement.

- In September 2011, we entered into an Second Amendment to the Amended and Restated Loan and Security Agreement with the GECC, SVB, and Oxford Finance Corporation (Lenders), pursuant to which the Lenders increased the prior term loan made to the Company to a principal amount of $25.0 million. Refer to Note 9 for a more detailed discussion of the Amended and Restated Loan and Security Agreement.

- In December 2012, we entered into an underwriting agreement with Lazard Capital Markets, LLC (underwriter), relating to the issuance and sale of 7,020,000 shares of our common stock. This price to the public in this offering was $2.85 per share and the underwriter has agreed to purchase the shares from us at a price of $2.69 per share. The transaction was completed on December 19, 2012 raising approximately $20,007,000 in gross proceeds before deducting underwriting discounts and commissions and other offering expenses payable by us.

The following summarizes our contractual obligations and other commitments at December 31, 2012, and the effect such obligations could have on our liquidity and cash flow in future periods:

	Payments due by period				
Contractual Obligations	**Total**	**Less than 1 year**	**1 – 3 years**	**3 – 5 years**	**More than 5 years**
Long-term obligations	$ 23,604,000	$ 9,927,000	$ 13,671,000	$ 6,000	$ —
Interest commitment on long-term obligations	2,605,000	1,774,000	831,000	—	—
Operating lease obligations	8,967,000	1,931,000	3,575,000	3,461,000	—
Minimum purchase requirements	1,743,000	1,743,000	—	—	—
Pre-clinical research study obligations	23,000	23,000	—	—	—
Clinical research study obligations	11,700,000	3,150,000	5,700,000	2,850,000	—
Total	$ 48,642,000	$ 18,548,000	$ 23,777,000	$ 6,317,000	$ —

Net cash used in or provided by operating, investing and financing activities for the years ended December 31, 2012, 2011 and 2010 is summarized as follows:

	Years Ended		
	2012	**2011**	**2010**
Net cash used in operating activities	$ (32,193,000)	$ (35,323,000)	$ (23,574,000)
Net cash used in investing activities	(1,204,000)	(560,000)	(1,290,000)
Net cash provided by financing activities	22,192,000	20,137,000	64,678,000

Operating activities

Operational activities, inclusive of research and development, sales and marketing, and general and administrative efforts, offset in part by product sales, generated a $32,279,000 net loss for the year ended December 31, 2012. The

operating cash impact of this loss was $32,193,000, after adjusting for the recognition of non-cash development revenues of $5,411,000, the consideration of non-cash share-based compensation, other adjustments for material non-cash activities, such as depreciation, amortization, change in fair value of option liabilities and warrants, and changes in working capital due to timing of product shipments (accounts receivable) and payment of liabilities.

Operational activities, inclusive of research and development, sales and marketing, and general and administrative efforts, offset in part by product sales, generated a $32,451,000 net loss for the year ended December 31, 2011. The operating cash impact of this loss was $35,323,000, after adjusting for the recognition of non-cash development revenue of $1,992,000, the consideration of non-cash share-based compensation, other adjustments for material non-cash activities, such as depreciation, amortization, change in fair value of option liabilities and warrants, and changes in working capital due to timing of product shipments (accounts receivable) and payment of liabilities.

Operational activities, inclusive of research and development, sales and marketing, and general and administrative efforts, offset in part by product sales, generated a $27,494,000 net loss for the year ended December 31, 2010. The operating cash impact of this loss was $23,574,000, after adjusting for the recognition of non-cash development revenue of $2,122,000, the consideration of non-cash share-based compensation, other adjustments for material non-cash activities, such as depreciation, amortization, change in fair value of option liabilities and warrants, and changes in working capital due to timing of product shipments (accounts receivable) and payment of liabilities.

Investing activities

Net cash used by investing activities for the year ended December 31, 2012 and 2011 resulted primarily from purchases of property and equipment, primarily for use in clinical trials and research.

Net cash used in investing activities for the year ended December 31, 2010 resulted from cash outflow for investment in our Joint Venture, purchases of property and equipment and investment in restricted cash and cash equivalents.

Financing Activities

The net cash provided by financing activities for the year ended December 31, 2012 related primarily to a sale of 1,750,000 shares for approximately $4,881,000 in net proceeds in connection with our common stock purchase agreement with Seaside entered into on July 11, 2011, the sale of 7,020,000 shares of common stock and for approximately $18,590,000 in net proceeds in the December 2012 public offering and proceeds from exercise of warrants and employee stock options and employee stock purchase plan of $1,413,000.

The net cash provided by financing activities for the year ended December 31, 2011 related primarily to a sale of 4,076,262 shares for approximately $13,286,000 in gross proceeds in connection with common stock purchase agreement with Seaside entered into on July 11, 2011 and proceeds from exercise of warrants and employee stock options of $2,849,000. Additionally, in September 2011, we entered into a Second Amendment to the Amended and Restated Loan and Security Agreement with Lenders pursuant to which the Lenders increased the prior term loan made to the Company to a principal amount of $25,000,000 with proceeds of $9,444,000 in additional principal, before debt issuance costs and loan fees.

The net cash provided by financing activities for the year ended December 31, 2010 related primarily to a sale of 3,300,000 shares for approximately $17,314,000 in gross proceeds in connection with the common stock purchase agreement with Seaside entered into on June 19, 2009, the sale of 4,600,000 shares of common stock and for approximately $20,700,000 in gross proceeds in the October 2010 public offering, the sale of 1,428,571 shares of unregistered common stock to Astellas Pharma Inc. for $7.00 per share in a private stock placement raising $10,000,000 in gross proceeds, and proceeds from exercise of warrants and employee stock options of $7,128,000. Additionally, in June 2010, we obtained a term loan in the amount of $20,000,000, less fees and expenses, which was used in part to refinance the remaining balance of the term loan entered into with GECC and SVB on October 14, 2008.

Critical Accounting Policies and Significant Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires us to make estimates and assumptions that affect the reported amounts of our assets, liabilities, revenues and expenses, and that affect our recognition and disclosure of contingent assets and liabilities.

While our estimates are based on assumptions we consider reasonable at the time they were made, our actual results may differ from our estimates, perhaps significantly. If results differ materially from our estimates, we will make adjustments to our financial statements prospectively as we become aware of the necessity for an adjustment.

We believe it is important for you to understand our most critical accounting policies. These are our policies that require us to make our most significant judgments and, as a result, could have the greatest impact on our future financial results.

Warrant and Put Option Liability

See Notes to Consolidated Condensed Financial Statements included elsewhere herein for disclosure and discussion of our warrant liability and our put option liability.

Revenue Recognition

See Notes to Consolidated Condensed Financial Statements included elsewhere herein for disclosure and discussion of revenue recognition.

Stock-based compensation

See Notes to Consolidated Condensed Financial Statements included elsewhere herein for disclosure and discussion of stock-based compensation.

Recent Accounting Pronouncements

See Notes to Consolidated Financial Statements included elsewhere herein for disclosure and discussion of new accounting standards.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk related to fluctuations in interest rates and in foreign currency exchange rates.

Interest Rate Exposure

We are not subject to market risk due to fluctuations in interest rates on our long-term obligations as they bear a fixed rate of interest. Our exposure relates primarily to short-term investments, including funds classified as cash equivalents. As of December 31, 2012, all excess funds were invested in money market funds and other highly liquid investments, therefore our interest rate exposure is not considered to be material.

Foreign Currency Exchange Rate Exposure

Our exposure to market risk due to fluctuations in foreign currency exchange rates relates primarily to our activities in Europe and Japan. Transaction gains or losses resulting from cash balances and revenues have not been significant in the past and we are not currently engaged in any hedging activity in the Euro, the Yen or other currencies. Based on our cash balances and revenues derived from markets other than the United States for the year ended December 31, 2012, a hypothetical 10% adverse change in the Euro or Yen against the U.S. dollar would not result in a material foreign currency exchange loss. Consequently, we do not expect that reductions in the value of such sales denominated in foreign currencies resulting from even a sudden or significant fluctuation in foreign exchange rates would have a direct material impact on our financial position, results of operations or cash flows.

Notwithstanding the foregoing, the indirect effect of fluctuations in interest rates and foreign currency exchange rates could have a material adverse effect on our business, financial condition and results of operations. For example, foreign currency exchange rate fluctuations may affect international demand for our products. In addition, interest rate fluctuations may affect our customers' buying patterns. Furthermore, interest rate and currency exchange rate fluctuations may broadly influence the United States and foreign economies resulting in a material adverse effect on our business, financial condition and results of operations.

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

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Cytori Therapeutics, Inc.:

We have audited the accompanying consolidated balance sheets of Cytori Therapeutics, Inc. and subsidiaries (the Company) as of December 31, 2012 and 2011, and the related consolidated statements of operations and comprehensive loss, stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2012. In connection with our audits of the consolidated financial statements, we have also audited the accompanying schedule of valuation and qualifying accounts. These consolidated financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated 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. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Cytori Therapeutics, Inc. and subsidiaries as of December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2012, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Cytori Therapeutics, Inc. and subsidiaries' internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 15, 2013 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

San Diego, California
March 15, 2013

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Cytori Therapeutics, Inc.:

We have audited Cytori Therapeutics, Inc. and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for maintaining effective internal control over financial reporting and for their assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting (Item 9A). Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit 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 effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting 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 the policies or procedures may deteriorate.

In our opinion, Cytori Therapeutics, Inc. and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Cytori Therapeutics, Inc. and subsidiaries as of December 31, 2012 and 2011, and the related consolidated statements of operations and comprehensive loss, stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2012, and the related financial statement schedule, and our report dated March 15, 2013 expressed an unqualified opinion on those consolidated financial statements and financial statement schedule.

/s/ KPMG LLP

San Diego, California
March 15, 2013

CYTORI THERAPEUTICS, INC.
CONSOLIDATED BALANCE SHEETS

	As of December 31, 2012	As of December 31, 2011
Assets		
Current assets:		
Cash and cash equivalents	$ 25,717,000	$ 36,922,000
Accounts receivable, net of reserves of $278,000 and of $474,000 in 2012 and 2011, respectively	3,926,000	2,260,000
Inventories, net	3,175,000	3,318,000
Other current assets	1,161,000	837,000
Total current assets	33,979,000	43,337,000
Property and equipment, net	2,174,000	1,711,000
Restricted cash and cash equivalents	350,000	350,000
Investment in joint venture	85,000	250,000
Other assets	2,740,000	1,772,000
Intangibles, net	—	192,000
Goodwill	3,922,000	3,922,000
Total assets	$ 43,250,000	$ 51,534,000
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable and accrued expenses	$ 7,411,000	$ 5,334,000
Current portion of long-term obligations, net of discount	9,784,000	2,487,000
Warrant liability, current	418,000	—
Total current liabilities	17,613,000	7,821,000
Deferred revenues, related party	638,000	3,520,000
Deferred revenues	2,635,000	5,244,000
Warrant liability, long-term	—	627,000
Option liability	2,250,000	1,910,000
Long-term deferred rent	756,000	504,000
Long-term obligations, net of discount, less current portion	12,903,000	21,962,000
Total liabilities	36,795,000	41,588,000
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.001 par value; 5,000,000 shares authorized; -0- shares issued and outstanding in 2012 and 2011	—	—
Common stock, $0.001 par value; 95,000,000 shares authorized; 65,914,050 and 56,594,683 shares issued and outstanding in 2012 and 2011, respectively	66,000	57,000
Additional paid-in capital	281,117,000	252,338,000
Accumulated deficit	(274,728,000)	(242,449,000)
Total stockholders' equity	6,455,000	9,946,000
Total liabilities and stockholders' equity	$ 43,250,000	$ 51,534,000

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS

CYTORI THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

	For the Years Ended December 31,		
	2012	2011	2010
Product revenues:			
Related party	$ —	$ —	$ 590,000
Third party	8,709,000	7,983,000	7,664,000
	8,709,000	7,983,000	8,254,000
Cost of product revenues	4,000,000	3,837,000	3,908,000
Gross profit	4,709,000	4,146,000	4,346,000
Development revenues:			
Development, related party	2,882,000	1,992,000	2,122,000
Development	2,529,000	—	—
Government contracts and other	381,000	21,000	251,000
	5,792,000	2,013,000	2,373,000
Operating expenses:			
Research and development	13,628,000	10,904,000	9,687,000
Sales and marketing	9,488,000	13,560,000	11,040,000
General and administrative	15,672,000	14,727,000	12,570,000
Change in fair value of warrants	(209,000)	(4,360,000)	(1,285,000)
Change in fair value of option liability	340,000	740,000	30,000
Total operating expenses	38,919,000	35,571,000	32,042,000
Operating loss	(28,418,000)	(29,412,000)	(25,323,000)
Other income (expense):			
Interest income	4,000	9,000	9,000
Interest expense	(3,386,000)	(2,784,000)	(2,052,000)
Other income (expense), net	(314,000)	(55,000)	23,000
Equity loss from investment in joint venture	(165,000)	(209,000)	(151,000)
Total other income (expense)	(3,861,000)	(3,039,000)	(2,171,000)
Net loss	(32,279,000)	(32,451,000)	(27,494,000)
Basic and diluted net loss per common share	$ (0.55)	$ (0.61)	$ (0.60)
Basic and diluted weighted average common shares	58,679,687	53,504,030	45,947,966

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS

CYTORI THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
FOR THE YEARS ENDED DECEMBER 31, 2012, 2011 AND 2010

	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Total
Balance at December 31, 2009	40,039,259	$ 40,000	$ 178,806,000	$ (182,504,000)	$ (3,658,000)
Stock-based compensation expense	—	—	3,055,000	—	3,055,000
Issuance of common stock under stock option plan	378,705	—	1,393,000	—	1,393,000
Issuance of common stock under stock warrant agreement	2,208,730	2,000	5,733,000	—	5,735,000
Sale of common stock, net	9,328,571	10,000	43,553,000	—	43,563,000
Allocation of fair value for debt-related warrants	—	—	279,000	—	279,000
Net loss for the year ended December 31, 2010	—	—	—	(27,494,000)	(27,494,000)
Balance at December 31, 2010	51,955,265	52,000	232,819,000	(209,998,000)	22,873,000
Stock-based compensation expense	—	—	3,316,000	—	3,316,000
Issuance of common stock under stock option plan	222,283	—	767,000	—	767,000
Issuance of common stock under stock warrant agreement	340,873	1,000	2,081,000	—	2,082,000
Sale of common stock, net	4,076,262	4,000	13,088,000	—	13,092,000
Allocation of fair value for debt-related warrants	—	—	267,000	—	267,000

Net loss for the year ended December 31, 2011	—	—	—	(32,451,000)	(32,451,000)
Balance at December 31, 2011	56,594,683	57,000	252,338,000	(242,449,000)	9,946,000
Stock-based compensation expense	—	—	3,904,000	—	3,904,000
Issuance of common stock under stock option plan and employee stock purchase plan	450,512	—	1,157,000	—	1,157,000
Issuance of common stock under stock warrant agreement	98,855	—	256,000	—	256,000
Sale of common stock, net	8,770,000	9,000	23,462,000	—	23,471,000
Net loss for the year ended December 31, 2012	—	—	—	(32,279,000)	(32,279,000)
Balance at December 31, 2012	65,914,050	$ 66,000	$ 281,117,000	$ (274,728,000)	$ 6,455,000

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS

CYTORI THERAPEUTICS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,		
	2012	2011	2010
Cash flows from operating activities:			
Net loss	$ (32,279,000)	$ (32,451,000)	$ (27,494,000)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	933,000	855,000	931,000
Amortization of deferred financing costs and debt discount	930,000	711,000	703,000
Increase in allowance for doubtful accounts	144,000	483,000	460,000
Change in fair value of warrants	(209,000)	(4,360,000)	(1,285,000)
Change in fair value of option liability	340,000	740,000	30,000
Stock-based compensation	3,904,000	3,316,000	3,055,000
Equity loss from investment in joint venture	165,000	209,000	151,000
Increases (decreases) in cash caused by changes in operating assets and liabilities:			
Accounts receivable	(1,810,000)	(670,000)	(902,000)
Inventories	143,000	60,000	(777,000)
Other current assets	(324,000)	(3,000)	36,000
Other assets	(74,000)	(1,206,000)	(110,000)
Accounts payable and accrued expenses	1,183,000	(1,436,000)	811,000
Deferred revenues, related party	(2,882,000)	(1,992,000)	(2,122,000)
Deferred revenues	(2,609,000)	315,000	2,541,000
Long-term deferred rent	252,000	106,000	398,000
Net cash used in operating activities	(32,193,000)	(35,323,000)	(23,574,000)
Cash flows from investing activities:			
Purchases of property and equipment	(1,204,000)	(560,000)	(610,000)
Cash invested in restricted cash	—	—	(350,000)
Investment in joint venture	—	—	(330,000)
Net cash used in investing activities	(1,204,000)	(560,000)	(1,290,000)
Cash flows from financing activities:			
Principal payments on long-term obligations	(2,692,000)	(4,529,000)	(5,454,000)
Proceeds from long-term obligations	—	9,444,000	20,000,000
Debt issuance costs and loan fees	—	(719,000)	(559,000)
Proceeds from exercise of employee stock options and warrants and stock purchase plan	1,413,000	2,849,000	7,128,000
Proceeds from sale of common stock	24,953,000	13,286,000	45,486,000
Costs from sale of common stock	(1,482,000)	(194,000)	(1,923,000)
Net cash provided by financing activities	22,192,000	20,137,000	64,678,000
Net (decrease) increase in cash and cash equivalents	(11,205,000)	(15,746,000)	39,814,000
Cash and cash equivalents at beginning of year	36,922,000	52,668,000	12,854,000
Cash and cash equivalents at end of year	$ 25,717,000	$ 36,922,000	$ 52,668,000

	For the Years Ended December 31,		
	2012	2011	2010
Supplemental disclosure of cash flows information:			
Cash paid during period for:			
Interest	$ 2,497,000	$ 2,031,000	$ 1,226,000
Final payment fee on long-term debt	—	419,000	205,000
Supplemental schedule of non-cash investing and financing activities:			
Fair value of warrants allocated to additional paid-in capital	$ —	$ 267,000	$ 279,000
Additions to fixed assets included in accounts payable and accrued expenses	—	—	481,000
Capital equipment lease	—	79,000	—

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Operations

The Company

Cytori (NASDAQ: CYTX) is developing cell therapies for cardiovascular disease and for the repair of soft tissue injuries and burns. Cytori's cell therapy utilizes a patient's own adipose derived stem and regenerative cells, uniquely optimized and formulated for specific therapeutic applications.

Principles of Consolidation

The accompanying consolidated financial statements include our accounts and those of our subsidiaries. All significant intercompany transactions and balances have been eliminated. Management evaluates its investments on an individual basis for purposes of determining whether or not consolidation is appropriate. In instances where we do not demonstrate control through decision-making ability and/or a greater than 50% ownership interest, we account for the related investments under the cost or equity method, depending upon management's evaluation of our ability to exercise and retain significant influence over the investee. Our investment in the Olympus-Cytori, Inc. joint venture has been accounted for under the equity method of accounting (see note 3 for further details).

We have three subsidiaries located in Japan, Switzerland and India that have been established primarily to support our sales and marketing activities in these regions.

Certain Risks and Uncertainties

Our prospects are subject to the risks and uncertainties frequently encountered by companies in the early stages of development and commercialization, especially those companies in rapidly evolving and technologically advanced industries such as the biotech/medical device field. Our future viability largely depends on our ability to complete development of new products and receive regulatory approvals for those products. No assurance can be given that our new products will be successfully developed, regulatory approvals will be granted, or acceptance of these products will be achieved. The development of medical devices for specific therapeutic applications is subject to a number of risks, including research, regulatory and marketing risks. There can be no assurance that our development stage products will overcome these hurdles and become commercially viable and/or gain commercial acceptance.

Capital Availability

We incurred net losses of $32,279,000, $32,451,000 and $27,494,000 for the years ended December 31, 2012, 2011 and 2010, respectively. We have an accumulated deficit of $274,728,000 as of December 31, 2012. Additionally, we have used net cash of $32,193,000, $35,323,000 and $23,574,000 to fund our operating activities for years ended December 31, 2012, 2011 and 2010, respectively. To date, these operating losses have been funded primarily from outside sources of invested capital and gross profits. During 2012, we expanded our commercialization activities while simultaneously pursuing available financing sources to support operations and growth.

We have had, and we will likely continue to have, an ongoing need to raise additional cash from outside sources to fund our future operations. We believe we have sufficient cash to fund operations into the third quarter of 2013, which includes minimum liquidity requirements of the Amended and Restated Loan and Security Agreement, which requires that we make principal payments of $825,000 per month along with accrued interest throughout 2013 and maintain at least three months of cash on hand. In order to fund operations and our continued commercialization efforts through the next twelve months, we are pursuing additional funding through either strategic corporate partnerships, debt restructuring or future issuances of equity or debt securities in addition to our gross profits. We have an established history of raising capital through all these platforms, and are currently involved in negotiations with multiple parties. In the absence of sufficient positive cash flows from operations, no assurance can be given that we can generate sufficient revenue to cover operating costs or that additional financing will be available to us and, if available, on terms acceptable to us in the future.

Without this additional capital, cash generated from sales and containment of costs will not provide adequate funding indefinitely at their current levels. If we cannot raise sufficient capital, we would need to reduce our research, development, and administrative operations, including reductions of our employee base and the deferral of ongoing development projects, to focus almost entirely on the supply of current products to existing distribution channels and our thermal burn contract arrangement with BARDA. As a result, such reductions would negatively affect our ability to achieve certain other corporate goals.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions affecting 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 revenue and expenses during the reporting period. Our most significant estimates and critical accounting policies involve recognizing revenue, valuing our put option arrangement with Olympus Corporation, valuing warrants, determining the assumptions used in measuring share-based compensation expense and valuing allowances for doubtful accounts and inventories.

Actual results could differ from these estimates. Management's estimates and assumptions are reviewed regularly, and the effects of revisions are reflected in the consolidated financial statements in the periods they are determined to be necessary.

Cash and Cash Equivalents

We consider all highly liquid investments with maturities of three months or less at the time of purchase to be cash equivalents. Investments with original maturities of three months or less that were included with and classified as cash and cash equivalents totaled $6,145,000 and $30,646,000 as of December 31, 2012 and 2011, respectively. We maintain our cash at insured financial institutions. The combined account balances at each institution periodically exceed FDIC insurance coverage, and as a result, there is a concentration of credit risk related to amounts in excess of FDIC limits.

Short-term Investments

We invest excess cash in money market funds, highly liquid debt instruments of financial institutions and corporations with strong credit ratings, and in United States government obligations. We have established guidelines relative to diversification and maturities to maintain safety and liquidity. These guidelines are periodically reviewed and modified to take advantage of trends in yields and interest rates. After considering current market conditions, and in order to minimize our risk, management has elected to invest all excess funds in money market funds and other highly liquid investments that are appropriately classified as cash equivalents as of December 31, 2012 and December 31, 2011.

Restricted Cash and Cash Equivalents

Restricted cash consists of cash and cash equivalents held in a letter of credit account pursuant to a lease agreement entered into on April 2, 2010 (amended November 4, 2011) for leasing of property at 3020 and 3030 Callan Road, San Diego, California. The lease agreement required us to execute a letter of credit for $350,000 naming the landlord as a beneficiary. The letter of credit was issued in July 2010 and required us to maintain $350,000 as restricted cash for the duration of the lease, which expires October 31, 2017.

Accounts Receivable

Accounts receivable are recorded at the invoiced amount and do not bear interest. Amounts collected on accounts receivable are included in net cash provided by operating activities in the consolidated statements of cash flows. The Company maintains an allowance for doubtful accounts for estimated losses inherent in its accounts receivable portfolio. In establishing the required allowance, management considers historical losses adjusted to take into account current market conditions and our customers' financial condition, the amount of receivables in dispute, and the current receivables aging and current payment patterns. Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote.

Inventories

Inventories include the cost of material, labor, and overhead, and are stated at the lower of cost, determined on the first-in, first-out (FIFO) method, or market. We periodically evaluate our on-hand stock and make appropriate provisions for any stock deemed excess or obsolete. Manufacturing costs resulting from lower than "normal" production levels are expensed as incurred.

Property and Equipment

Property and equipment are stated at cost, net of accumulated depreciation. Depreciation expense, which includes the amortization of capitalized leasehold improvements, is provided for on a straight-line basis over the estimated useful lives of the assets, or the life of the lease, whichever is shorter, and range from three to five years. When assets are sold or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts and the resulting gain or loss is included in operations. Maintenance and repairs are charged to operations as incurred.

Impairment

We assess certain of our long-lived assets, such as property and equipment and intangible assets other than goodwill, for potential impairment when there is a change in circumstances that indicates carrying values of assets may not be recoverable. Such long-lived assets are deemed to be impaired when the undiscounted cash flows expected to be generated by the asset (or asset group) are less than the asset's carrying amount. Any required impairment loss would be measured as the amount by which the asset's carrying value exceeds its fair value, and would be recorded as a reduction in the carrying value of the related asset and a charge to operating expense. We recognized no impairment losses during any of the periods presented in these financial statements.

Goodwill and Intangibles

Goodwill is reviewed for impairment annually or more frequently when events or changes in circumstances indicate that fair value of the reporting unit has been reduced to less than its carrying value. We perform our impairment test annually during the fourth quarter. In September 2011, the FASB issued revised guidance to simplify how entities test goodwill for impairment. Under the revised guidance, entities have the option to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test described in Accounting Standards Codification Topic 350. If, after assessing qualitative factors, an entity determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is unnecessary. If deemed necessary, a two-step test is used to identify the potential impairment and to measure the amount of goodwill impairment, if any. The first step is to compare the fair value of the reporting unit with its carrying amount, including goodwill. If the fair value of the reporting unit exceeds its carrying amount, goodwill is considered not impaired; otherwise, there is an indication that goodwill may be impaired and the amount of the loss, if any, is measured by performing step two. Under step two, the impairment loss, if any, is measured by comparing the implied fair value of the reporting unit goodwill with the carrying amount of goodwill. We completed this assessment as of November 30, 2012, and concluded that no impairment existed.

Separable intangible assets that have finite useful lives continue to be amortized over their respective useful lives. Intangibles, consisting of patents and core technology purchased in the acquisition of StemSource, Inc. in 2002, were amortized on a straight-line basis over their expected useful lives of ten years, and are fully amortized as of December 31, 2012.

The changes in the carrying amounts of other indefinite and finite-life intangible assets and goodwill for the years ended December 31, 2012 and 2011 are as follows:

	December 31, 2012
Other intangibles, net:	
Beginning balance	$ 192,000
Amortization	(192,000)
Ending balance	—
Goodwill, net:	
Beginning balance	3,922,000
Increase (decrease)	—
Ending balance	3,922,000
Total goodwill and other intangibles, net	$ 3,922,000
Cumulative amortization of other intangible assets	$ 2,216,000

	December 31, 2011
Other intangibles, net:	
Beginning balance	$ 413,000
Amortization	(221,000)
Ending balance	192,000
Goodwill, net:	
Beginning balance	3,922,000
Increase (decrease)	—
Ending balance	3,922,000
Total goodwill and other intangibles, net	$ 4,114,000
Cumulative amortization of other intangible assets	$ 2,024,000

Warrant Liability

Warrants with exercise price reset features (down-round protection) are accounted for as liabilities, with changes in fair value included in net loss. The fair value of the liability associated with the warrants with this reset feature decreased to $418,000 as of December 31, 2012 and $209,000, $4,360,000 and $1,285,000 in gains from the change in fair value of warrants were recorded for the years ended December 31, 2012, 2011 and 2010, respectively.

All future changes in the fair value of the warrants are recognized currently in earnings until such time as the warrants are exercised or expire in August 2013. These warrants are not traded in an active securities market, and as such, we estimated the fair value of these warrants using an option pricing model with the following assumptions:

	As of December 31, 2012	As of December 31, 2011
Expected term	0.61 years	1.61 years
Common stock market price	$ 2.80	$ 2.20
Risk-free interest rate	0.11%	0.19%
Expected volatility	73.88%	69.98%
Resulting fair value (per warrant)	$ 0.20	$ 0.32

Expected volatility is based primarily on historical volatility. Historical volatility was computed using daily pricing observations for recent periods that correspond to the expected term of the warrants. We believe this method produces an estimate that is representative of our expectations of future volatility over the expected term of these warrants. We currently have no reason to believe future volatility over the expected remaining life of these warrants is likely to differ materially from historical volatility. The expected life is based on the remaining contractual term of the warrants. The risk-free interest rate is the interest rate for treasury constant maturity instruments published by the Federal Reserve Board that is closest to the expected term of the warrants. The fair value of these warrants also incorporates our assumptions about future equity issuances and their impact to the down-round protection feature.

Fluctuations in the fair value of the warrants are impacted by unobservable inputs, most significantly the assumption with regards to future equity issuances and its impact to the down-round protection feature. Significant increases (decreases) in this input in isolation would result in a significantly higher (lower) fair value measurement.

Revenue Recognition

Product Sales

We recognize revenue from product sales when the following fundamental criteria are met: (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred, (iii) the price to the customer is fixed or determinable and (iv) collection of the resulting accounts receivable is reasonably assured.

For all sales, we use a binding purchase order or a signed agreement as evidence of an arrangement. Revenue for these product sales is recognized upon delivery to the customer, as all risks and rewards of ownership have been substantively transferred to the customer at that point. For sales to customers who arrange for and manage the shipping process, we recognize revenue upon shipment from our facilities. Shipping and handling costs that are billed to our customers are classified as revenue. The customer's obligation to pay and the payment terms are set at the time of delivery and are not dependent on the subsequent use or resale of our products.

For sales that include multiple deliverables, such as sales of our StemSource® Cell Bank (cell bank), we account for products or services (deliverables) separately rather than as a combined unit. Stem cell banks typically consist of a complex array of equipment, proprietary knowledge, license rights, and services, including one or more StemSource® devices, a cryogenic freezer, measuring and monitoring equipment, and a database patient tracking system. In addition, we typically provide consulting, installation, and training services. Web hosting, technical support and maintenance services are generally provided for a period of up to one year subsequent to the date of sale. FASB authoritative guidance requires an evaluation of these deliverables to determine the appropriate "units of accounting" for purposes of revenue recognition. Each cell bank is customized to provide the best solution for the customer. Depending on customers' needs, all or combination of the following units of accounting will apply to cell bank transactions:

- initial consulting services;
- license rights and standard operating procedures;
- equipment and supplies;
- installation services;
- training services;
- database hosting services;
- technical support services; and
- maintenance services.

FASB authoritative guidance establishes a selling price hierarchy for determining the selling price of a deliverable, which is based on: (a) vendor-specific objective evidence ("VSOE"); (b) third-party evidence ("TPE"); or (c) management estimates. This guidance requires arrangement consideration to be allocated at the inception of the arrangement to all deliverables using the relative selling price method. For our cell bank sales, we establish relative selling prices for all deliverables based on vendor-specific quotes for comparable services when available. In the absence of VSOE, we use competitors' products or services considered largely interchangeable with our own or management's best estimate. Revenue allocated to each unit of accounting is calculated and recognized based on the relative selling price of each deliverable. Future services such as web hosting and ongoing maintenance are deferred and recognized into income as the services are provided, generally over one year following the installation of the equipment.

Concentration of Significant Customers & Geographical Sales

For the year ended December 31, 2012, our sales were concentrated with respect to one direct customer, which comprised 12% of our product revenue recognized. Two direct customers and one distributor accounted for 39% of total outstanding accounts receivable as of December 31, 2012.

For the year ended December 31, 2011, our sales were concentrated with respect to one direct customer, which comprised 14% of our product revenue recognized. Two direct customers accounted for 27% of total outstanding accounts receivable as of December 31, 2011.

Product revenues, classified by geographic location, are as follows:

	Years ended					
	2012		2011		2010	
	Product Revenues	% of Total	Product Revenues	% of Total	Product Revenues	% of Total
North America	$ 1,143,000	13%	$ 1,347,000	17%	$ 1,784,000	21%
Japan	4,352,000	50%	3,202,000	40%	4,257,000	52%
Europe	2,004,000	23%	1,973,000	25%	1,640,000	20%
Other countries	1,210,000	14%	1,461,000	18%	573,000	7%
Total product revenues	$ 8,709,000	100%	$ 7,983,000	100%	$ 8,254,000	100%

Research and Development

We earn revenue for performing tasks under research and development agreements with both commercial enterprises, such as Olympus and Senko, and governmental agencies like the U.S. Department of Health and Human Service's Biomedical Advanced Research and Development Authority (BARDA). Revenue earned under development agreements is classified as either research grant or development revenues depending on the nature of the arrangement. Revenues derived from reimbursement of direct out-of-pocket expenses for research costs associated with government contracts are recorded as government contract and other within development revenues. Government contract revenue is recorded at the gross amount of the reimbursement. The costs associated with these reimbursements are reflected as a component of research and development expense in our statements of operations. Additionally, research and development arrangements we have with commercial enterprises such as Olympus and Senko are considered a key component of our central and ongoing operations. Accordingly, when recognized, the inflows from such arrangements are presented as revenues in our statements of operations.

In the third quarter of 2012, we were awarded a contract to develop a new countermeasure for thermal burns valued at up to $106 million with BARDA. The initial base period includes $4.7 million over two years and covers preclinical research and continued development of Cytori's Celution® system to improve cell processing. The additional contract options, if fully executed, cover clinical development through FDA approval under a device-based PMA regulatory pathway. This is a cost reimbursement contract and related government contract revenue was recorded at the gross amount of reimbursement starting in the fourth quarter of 2012.

We received funds from Olympus and Olympus-Cytori, Inc. during 2005 and 2006. We recorded upfront fees totaling $28,311,000 as deferred revenues, related party. In exchange for these proceeds, we agreed to (a) provide Olympus-Cytori, Inc. an exclusive and perpetual license to our Celution® System device technology and certain related intellectual property, and (b) provide future development contributions related to commercializing the Celution® System platform. The license and development services are not separable and as a result the recognition of this deferred amount requires achievement of service related milestones, under a proportional performance methodology. If and as such revenues are recognized, deferred revenue will be decreased. Proportional performance methodology was elected due to the nature of our development obligations and efforts in support of the Joint Venture ("JV"), including product development activities and regulatory efforts to support the commercialization of the JV products. The application of this methodology uses the achievement of R&D milestones as outputs of value to the JV. We received up-front, non-refundable payments in connection with these development obligations, which we have broken down into specific R&D milestones that are definable and substantive in nature, and which will result in value to the JV when achieved. As our research and development efforts progress, we periodically evaluate, and modify if necessary, the milestone points in our proportional performance model to ensure that revenue recognition accurately reflects our best estimate of substantive value deliverable to the JV. Revenue will be recognized as the above mentioned R&D milestones are completed. During the year ended December 31, 2012, we recognized 2,882,000 of revenue associated with our arrangement with Olympus as a result of two milestones for the APOLLO and PRECISE clinical trials that were reached upon the completion of all patient follow up procedures and recognition of a regulatory milestone triggered upon us obtaining Class I Device Clearance for Celution® and a number of our other products in Japan. During the year ended December 31, 2011, we recognized $1,992,000 of revenue associated with our arrangements with Olympus as a result of

achieving a product development and a regulatory milestone related to the preproduction development of the next-generation Celution® One System. During the year ended December 31, 2010, we recognized $2,122,000 of revenue associated with our arrangements with Olympus as a result of achieving two milestones, one in product development, and one clinical milestone related to the assessment of trial outcomes at 6 months in one of our cardiac trials. All related development costs are expensed as incurred and are included in research and development expense on our statements of operations. To date under the contract, of the $28,311,000 originally deferred, we have recognized a total of $27,673,000 through December 31, 2012.

Warranty

Beginning in March 2008, we began sales and shipments of our Celution® 800/CRS System to the European and Asia-Pacific reconstructive surgery market. In September 2008, we completed installation of our first StemSource® Cell Bank. We are selling medical device equipment for use with humans, which is subjected to exhaustive and highly controlled specification compliance and fitness testing and validation procedures before it can be approved for sale to help ensure that the products will be free of defects. We believe that the rigorous nature of the testing and compliance efforts serves to minimize the likelihood of defects in material or workmanship such that recognition of a warranty obligation is not justified at this time. Accordingly, we have not recorded a warranty reserve for our Celution® 800/CRS System and StemSource® Cell Bank product line during the years ended December 31, 2012, 2011 and 2010.

Research and Development

Research and development expenditures, which are charged to operations in the period incurred, include costs associated with the design, development, testing and enhancement of our products, regulatory fees, the purchase of laboratory supplies, and pre-clinical and clinical studies as well as salaries and benefits for our research and development employees.

Also included in research and development expenditures are costs incurred to support government contract reimbursement and costs incurred in connection with our development arrangements with Olympus and Senko.

Expenditures related to the Joint Venture with Olympus include costs that are necessary to support the commercialization of future generation devices based on our Celution® System platform. These development activities, which began in November 2005, include performing pre-clinical and clinical trials, seeking regulatory approval, and performing product development related to therapeutic applications for adipose stem and regenerative cells for multiple large markets. For the years ended December 31, 2012, 2011 and 2010, costs associated with the development of the device were $219,000, $396,000 and $2,221,000, respectively.

Our government contract with BARDA to develop a new countermeasure for thermal burns entitles us to qualifying expenditures of up to $4.7 million during the initial base period. We incurred $331,000 in qualified expenses for the year ended December 31, 2012. There were no comparable expenditures in 2011 and 2010.

Deferred Financing Costs and Other Debt-Related Costs

Deferred financing costs are capitalized and amortized to interest expense over the term of the associated debt instrument. We evaluate the terms of the debt instruments to determine if any embedded or freestanding derivatives or conversion features exist. We allocate the aggregate proceeds of the debt between the warrants and the debt based on their relative fair values. The fair value of the warrant issued to the Lenders was calculated utilizing the Black-Scholes option pricing model. We are accreting the resultant discount over the term of the debt through maturity date using the effective interest method. If the maturity of the debt is accelerated because of default or early debt repayment, then the amortization or accretion would be accelerated.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income (loss) in the years in which those temporary differences are expected to be recovered or settled. Due to our history of loss, a full valuation allowance was recognized against our deferred tax assets.

Stock Based Compensation

We recognize the fair value method of all share-based payment awards in our statements of operations over the requisite vesting period of each award. We estimate the fair value of these options using the Black-Scholes option pricing model using assumptions for expected volatility, expected term, and risk-free interest rate. Expected volatility is based primarily on historical volatility and is computed using daily pricing observations for recent periods that correspond to the expected term of the options. The expected life is based on the expected term of the options. The risk-free interest rate is the interest rate for treasury instruments with maturities that approximate the expected term.

Segment Information

For the years ended December 31, 2012, 2011 and 2010, all of our financial results relate to regenerative cell technology, therefore we report our results as a single segment.

Loss Per Share

Basic per share data is computed by dividing net income or loss applicable to common stockholders by the weighted average number of common shares outstanding during the period. Diluted per share data is computed by dividing net income or loss applicable to common stockholders by the weighted average number of common shares outstanding during the period increased to include, if dilutive, the number of additional common shares that would have been outstanding as calculated using the treasury stock method. Potential common shares were related entirely to outstanding but unexercised options and warrants for all periods presented.

We have excluded all potentially dilutive securities, including unvested performance-based restricted stock, from the calculation of diluted loss per share attributable to common stockholders for the years ended December 31, 2012, 2011, and 2010, as their inclusion would be antidilutive. Potentially dilutive common shares excluded from the calculations of diluted loss per share were 17,426,976, 19,476,425 and 18,926,093 for the years ended December 31, 2012, 2011 and 2010, respectively.

Recently Adopted Accounting Pronouncements

In May 2011, the FASB revised the fair value measurement and disclosure requirements to align the requirements under GAAP and International Financial Reporting Standards ("IFRS"). The guidance clarifies the FASB's intent about the application of existing fair value measurements and requires enhanced disclosures, most significantly related to unobservable inputs used in a fair value measurement that is categorized within Level 3 of the fair value hierarchy. The guidance is effective prospectively during interim and annual periods beginning after December 15, 2011. The adoption of this guidance did not have a material impact on our consolidated financial statements.

3. Transactions with Olympus Corporation

Initial Investment by Olympus Corporation in Cytori

In 2005, we entered into a common stock purchase agreement (the "Purchase Agreement") with Olympus in which we received $11,000,000 in cash proceeds. Under the Purchase Agreement, we issued 1,100,000 shares of common stock to Olympus. In addition, we also granted Olympus an immediately exercisable option to acquire 2,200,000 shares of our common stock at $10 per share, which expired on December 31, 2006. Before its expiration, we accounted for this option as a liability.

The $11,000,000 in total proceeds we received in the second quarter of 2005 exceeded the sum of (i) the market value of our stock as well as (ii) the fair value of the option at the time we entered into the share purchase agreement. The $7,811,000 difference between the proceeds received and the fair values of our common stock and option liability is recorded as a component of deferred revenues, related party in the accompanying consolidated balance sheets. This difference was recorded as deferred revenue since, conceptually, the excess proceeds represent a prepayment for future contributions and obligations of Cytori for the benefit of the Joint Venture (see below), rather than an additional equity investment in Cytori. The recognition of this deferred amount is based on achievement of related milestones, under a proportional performance methodology. As such revenues are recognized, deferred revenue is reduced (see note 2 – Revenue Recognition).

As of December 31, 2012, Olympus holds approximately 6.09% (unaudited) of our issued and outstanding shares. Additionally, Olympus has a right, which it has not yet exercised, to designate a director to serve on our Board of Directors.

Formation of the Olympus-Cytori Joint Venture

On November 4, 2005, we entered into a joint venture and other related agreements (the "Joint Venture Agreements") with Olympus. The Joint Venture is owned equally by Olympus and us.

Under the Joint Venture Agreements:

- Olympus paid $30,000,000 for its 50% interest in the Joint Venture. Moreover, Olympus simultaneously entered into a License/Joint Development Agreement with the Joint Venture and us to develop a second generation commercial system and manufacturing capabilities.

- We licensed our Celution® System device technology and certain related intellectual property, to the Joint Venture for use in future generation devices. These devices will process and purify regenerative cells residing in adipose tissue for various therapeutic clinical applications. In exchange for this license, we received a 50% interest in the Joint Venture, as well as an initial $11,000,000 payment from the Joint Venture; the source of this payment was the $30,000,000 contributed to the Joint Venture by Olympus. Moreover, upon receipt of a CE mark for the Celution® 600 in January 2006, we received an additional $11,000,000 development milestone payment from the Joint Venture.

We have determined that the Joint Venture is a variable interest entity (VIE), but that Cytori is not the VIE's primary beneficiary. Accordingly, we have accounted for our interests in the Joint Venture using the equity method of accounting, since we can have significant influence over the Joint Venture's operations. At December 31, 2012, the carrying value of our investment in the Joint Venture is $85,000.

We are under no obligation to provide additional funding to the Joint Venture, but may choose to do so. We contributed $330,000 during 2010. The Company made no contributions during 2012 and 2011.

Put Option

The Shareholders' Agreement between Cytori and Olympus provides that in certain specified circumstances of insolvency or if we experience a change in control, Olympus will have the rights to (i) repurchase our interests in the Joint Venture at the fair value of such interests or (ii) sell its own interests in the Joint Venture to Cytori at the higher of (a) $22,000,000 or (b) the Put's fair value.

As of November 4, 2005, the fair value of the Put was determined to be $1,500,000. At December 31, 2012 and 2011, the fair value of the Put was $2,250,000 and $1,910,000, respectively. Fluctuations in the Put value are recorded in the consolidated statements of operations as a component of change in fair value of option liabilities. The fair value of the Put has been recorded as a long-term liability in the caption option liability in our consolidated balance sheets.

The valuations of the Put were completed using an option pricing theory based simulation analysis (i.e., a Monte Carlo simulation). The valuations are based on assumptions as of the valuation date with regard to the market value of Cytori and the estimated fair value of the Joint Venture, the expected correlation between the values of Cytori and the Joint Venture, the expected volatility of Cytori and the Joint Venture, the bankruptcy recovery rate for Cytori, the bankruptcy threshold for Cytori, the probability of a change of control event for Cytori, and the risk free interest rate. Assumptions of Joint Venture fair value and its statistical correlation to Cytori's fair value are judgmental and require consideration of factors such as future product mix and sales opportunities, strategic initiatives, and directional expectations of both Olympus and Cytori.

The following assumptions were employed in estimating the value of the Put:

	December 31, 2012	December 31, 2011	November 4, 2005
Expected volatility of Cytori	79.40%	76.07%	63.20%
Expected volatility of the Joint Venture	79.40%	76.07%	69.10%
Bankruptcy recovery rate for Cytori	28.00%	28.00%	21.00%
Bankruptcy threshold for Cytori	$ 12,622,000	$ 8,594,000	$ 10,780,000
Probability of a change of control event for Cytori	1.54%	3.33%	3.04%
Expected correlation between fair values of Cytori and the Joint Venture in the future	46.00%	99.00%	99.00%
Risk free interest rate	1.78%	1.89%	4.66%

The Put has no expiration date. Accordingly, we will continue to recognize a liability for the Put and mark it to market each quarter until it is exercised or until the arrangements with Olympus are amended.

Fluctuations in the fair value of the Put are impacted by unobservable inputs, most significantly the fair value of Cytori and the Joint Venture and the bankruptcy threshold for Cytori. Generally, a change in the assumption used for the fair value of Cytori is accompanied by a directionally opposite change in the fair value of the Put, whereas a change in assumption used for the bankruptcy threshold for Cytori is accompanied by a directionally similar change in the fair value of the Put.

Olympus-Cytori Joint Venture

The Joint Venture has exclusive access to our Celution® System device technology for the development, manufacture, and supply of such systems to us. Once the second generation Celution® System is developed and approved by regulatory agencies, the Joint Venture will exclusively supply us with these systems at a formula-based transfer price. We have retained all marketing rights (subject to our various distribution arrangements) to sell the Celution® System devices for all therapeutic applications of adipose regenerative cells.

In August 2007, we entered into a License and Royalty Agreement with the Joint Venture. This Royalty Agreement provides us the ability to commercialize the Celution® System platform earlier than we could have otherwise done so under the terms of the Joint Venture Agreements. The Royalty Agreement enables Cytori to manufacture the Cytori systems, including Celution® 800/CRS, until such time as the Joint Venture's products are commercially available, subject to a reasonable royalty that will be payable to the Joint Venture for all such sales. In November 2007, we amended our License/Commercial Agreement with the Joint Venture to provide the continuance of our right to early commercialization on substantially the same terms after the three year term of the License and Royalty agreement. During the years ended December 31, 2012, 2011 and 2010, in connection with our sales of our Celution® 800/CRS System products to the European and Asia-Pacific reconstructive surgery market, we incurred approximately $232,000, $166,000 and $253,000, respectively, in royalty cost related to our agreement with the Joint Venture. This cost is included as a component of cost of product revenues in our consolidated statements of operations.

During the fourth quarter of 2010, partial development was completed on the Joint Venture's Celution® System to be used for research purposes only. Although not yet available for commercial sale, the Joint Venture sold systems to Cytori (see product revenue and cost of product revenue below) for use in the ATHENA clinical trial.

Deferred revenues, related party

As of December 31, 2012, the deferred revenues, related party account primarily consists of the consideration we have received in exchange for contributions and obligations that we have agreed to on behalf of Olympus and the Joint Venture (less any amounts that we have recognized as revenues in accordance with our revenue recognition policies set out in note 2). These contributions include product development, regulatory approvals, and generally associated pre-clinical and clinical trials to support the commercialization of the Celution® System platform. Our obligations also include maintaining the exclusive and perpetual license to our device technology, including the Celution® System platform and certain related intellectual property.

Condensed financial information for the Joint Venture (Unaudited)

A summary of the unaudited condensed financial information for the Joint Venture as of December 31, 2012 and 2011 and for the years ended December 31, 2012, 2011 and 2010 and reconciliation of net income (loss) of the joint venture to Cytori's equity loss from investment in joint venture is as follows:

	December 31, 2012 (Unaudited)	December 31, 2011 (Unaudited)
Balance Sheets		
Assets:		
Cash	$ 64,000	$ 69,000
Amounts due from related party	160,000	104,000
Prepaid insurance	—	19,000
Computer equipment and software, net	566,000	797,000
Total assets	$ 790,000	$ 989,000
Liabilities and Stockholders' Equity:		
Accrued expenses	$ 9,000	$ 48,000
Amounts due to related party	9,000	95,000
Stockholders' equity	772,000	846,000
Total liabilities and stockholders' equity	$ 790,000	$ 989,000

	Years ended December 31,		
	2012	2011	2010
Statements of Operations	(Unaudited)	(Unaudited)	(Unaudited)
Product revenue	$ 972,000	$ 90,000	$ 458,000
Cost of product revenue	892,000	87,000	458,000
Gross profit	80,000	3,000	—
Royalty revenue	232,000	166,000	253,000
Operating expenses:			
Research and development	—	—	14,000
General and administrative:			
Accounting and other corporate services	96,000	164,000	88,000
Regulatory and quality system services	48,000	145,000	135,000
Depreciation expense for tooling equipment	231,000	230,000	130,000
Other	11,000	23,000	33,000
Operating expenses	386,000	562,000	400,000
Operating loss	(74,000)	(393,000)	(147,000)
Other income (expense):			
Interest income	—	—	1,000
Net loss	$ (74,000)	$ (393,000)	$ (146,000)
Reconciliation of net loss to equity loss from investment in joint venture			
Net loss	$ (74,000)	$ (393,000)	$ (146,000)
Intercompany eliminations	256,000	25,000	156,000
Net loss after intercompany eliminations	(330,000)	(418,000)	(302,000)
Cytori's percentage of interest in joint venture	50%	50%	50%
Cytori's equity loss from investment in joint venture	$ (165,000)	$ (209,000)	$ (151,000)

4. Fair Value Measurements

Fair value measurements are market-based measurements, not entity-specific measurements. Therefore, fair value measurements are determined based on the assumptions that market participants would use in pricing the asset or liability. We follow a three-level hierarchy to prioritize the inputs used in the valuation techniques to derive fair values. The basis for fair value measurements for each level within the hierarchy is described below:

- Level 1: Quoted prices in active markets for identical assets or liabilities.

- Level 2: Quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable in active markets.
- Level 3: Valuations derived from valuation techniques in which one or more significant inputs are unobservable in active markets.

The following table provides a summary of the recognized assets and liabilities that we measure at fair value on a recurring basis:

	Balance as of December 31, 2012	Basis of Fair Value Measurements Level 1	Level 2	Level 3
Assets:				
Cash equivalents	$ 6,145,000	$ 6,145,000	$ —	$ —
Liabilities:				
Put option liability	$ (2,250,000)	$ —	$ —	$ (2,250,000)
Warrant liability	$ (418,000)	$ —	$ —	$ (418,000)

	Balance as of December 31, 2011	Basis of Fair Value Measurements Level 1	Level 2	Level 3
Assets:				
Cash equivalents	$ 30,646,000	$ 30,646,000	$ —	$ —
Liabilities:				
Put option liability	$ (1,910,000)	$ —	$ —	$ (1,910,000)
Warrant liability	$ (627,000)	$ —	$ —	$ (627,000)

We use quoted market prices to determine the fair value of our cash equivalents, which consist of money market funds and therefore these are classified in Level 1 of the fair value hierarchy.

We value our put liability (see note 3) using an option pricing theory based simulation analysis (i.e., a Monte Carlo simulation).

The following table summarizes the change in our Level 3 put option liability value:

Put option liability	Year ended December 31, 2012	Year ended December 31, 2011
Beginning balance	$ (1,910,000)	$ (1,170,000)
Decrease (increase) in fair value recognized in operating expenses	(340,000)	(740,000)
Ending balance	$ (2,250,000)	$ (1,910,000)

Common stock purchase warrants issued in connection with our August 2008 private equity placement do not trade in an active securities market, and as such, we estimate the fair value of these warrants using the option pricing model. Some of the significant inputs are observable in active markets, such as common stock market price, volatility, and risk free rate. The fair value of these warrants also incorporate our assumptions about future equity issuances and their impact to the down-round protection feature. Because some of the inputs to our valuation model are either not observable quoted prices or are not derived principally from or corroborated by observable market data by correlation or other means, the warrant liability is classified as Level 3 in the fair value hierarchy.

The following table summarizes the change in our Level 3 warrant liability value:

Warrant liability	Year ended December 31, 2012	Year ended December 31, 2011
Beginning balance	$ (627,000)	$ (4,987,000)
Decrease (increase) in fair value recognized in operating expenses	209,000	4,360,000
Ending balance	$ (418,000)	$ (627,000)

No other assets or liabilities are measured at fair value on a recurring basis, or have been measured at fair value on a non-recurring basis subsequent to initial recognition, on the accompanying consolidated balance sheet as of December 31, 2012.

5. Fair Value

Financial Instruments

We disclose fair value information about all financial instruments, whether or not recognized in the balance sheet, for which it is practicable to estimate fair value. The disclosures of estimated fair value of financial instruments at December 31, 2012 and 2011, were determined using available market information and appropriate valuation methods. Considerable judgment is necessary to interpret market data and develop estimated fair value. The use of different market assumptions or estimation methods may have a material effect on the estimated fair value amounts.

The carrying amounts for cash and cash equivalents, accounts receivable, inventories, other current assets, accounts payable, accrued expenses and other liabilities approximate fair value due to the short-term nature of these instruments.

We utilize quoted market prices to estimate the fair value of our fixed rate debt, when available. If quoted market prices are not available, we calculate the fair value of our fixed rate debt based on a currently available market rate assuming the loans are outstanding through maturity and considering the collateral. In determining the current market rate for fixed rate debt, a market spread is added to the quoted yields on federal government treasury securities with similar terms to the debt.

At December 31, 2012 and 2011, the aggregate fair value and the carrying value of the Company's fixed rate long-term debt were as follows:

	December 31, 2012		December 31, 2011	
	Fair Value	Carrying Value	Fair Value	Carrying Value
Fixed rate long-term debt	$ 22,425,000	$ 22,608,000	$ 24,211,000	$ 24,341,000

The fair value of debt is classified as Level 3 in the fair value hierarchy as some of the inputs to our valuation model are either not observable quoted prices or are not derived principally from or corroborated by observable market data by correlation or other means.

Carrying value is net of debt discount of $917,000 and $1,847,000 as of December 31, 2012 and 2011, respectively.

Nonfinancial Assets and Liabilities

We apply fair value techniques on a non-recurring basis associated with: (1) valuing potential impairment losses related to goodwill which are accounted for pursuant to the authoritative guidance for intangibles—goodwill and other; and (2) valuing potential impairment losses related to long-lived assets which are accounted for pursuant to the authoritative guidance for property, plant and equipment.

All of our goodwill is associated with regenerative cell technology, and we determine the fair value based on a combination of inputs including the market capitalization of the company, as well as Level 3 inputs such as discounted cash flows which are not observable from the market, directly or indirectly. We conduct our goodwill impairment analysis annually as of November 30 each year, or upon the occurrence of certain triggering events. No such triggering events occurred during the year ended December 31, 2012. Historically, the fair value has significantly exceeded its carrying value.

We test for the impairment of our long-lived assets when triggering events occur and such impairment, if any, is measured at fair value. The inputs for fair value of our long lived assets would be based on Level 3 inputs as data used for such fair value calculations would be based on discounted cash flows using one or more significant unobservable inputs. No triggering events occurred during the year ended December 31, 2012.

6. Thin Film Japan Distribution Agreement

The Company has entered into a Distribution Agreement with Senko. Under this agreement, we granted to Senko an exclusive license to sell and distribute certain Thin Film products in Japan and are responsible for the completion of the initial regulatory application to the MHLW and commercialization of the Thin Film product line in Japan. The Distribution Agreement with Senko commences upon "commercialization." Essentially, commercialization occurs when one or more Thin Film product registrations are completed with the MHLW.

As of December 31, 2012 commercialization has not yet occurred. At the inception of this arrangement, we received a $1,500,000 license fee which was recorded as deferred revenues in 2004. Half of the license fee is refundable if the parties agree commercialization is not achievable and a proportional amount is refundable if we terminate the arrangement, other than for material breach by Senko, before three years post-commercialization. We have also received $1,250,000 in milestone payments from Senko. We recognized no development revenue during the years ended December 31, 2012, 2011 and 2010 under this agreement.

Refer to note 16 for a discussion of subsequent event relating to our agreement with Senko.

7. Composition of Certain Financial Statement Captions

Inventories, net

As of December 31, 2012 and 2011, inventories, net, were comprised of the following:

	December 31, 2012	December 31, 2011
Raw materials	$ 1,384,000	$ 1,503,000
Work in process	404,000	790,000
Finished goods	1,387,000	1,025,000
	$ 3,175,000	$ 3,318,000

Other Current Assets

As of December 31, 2012 and 2011, other current assets were comprised of the following:

	December 31, 2012	December 31, 2011
Prepaid insurance	$ 291,000	$ 234,000
Prepaid other	759,000	372,000
Other receivables	111,000	231,000
	$ 1,161,000	$ 837,000

Property and Equipment, net

As of December 31, 2012 and 2011, property and equipment, net, were comprised of the following:

	December 31, 2012	December 31, 2011
Manufacturing and development equipment	$ 5,250,000	$ 4,268,000
Office and computer equipment	2,266,000	2,177,000
Leasehold improvements	3,267,000	3,255,000
	10,783,000	9,700,000
Less accumulated depreciation and amortization	(8,609,000)	(7,989,000)
	$ 2,174,000	$ 1,711,000

Depreciation expense totaled $741,000, $618,000 and $710,000 for the years ended December 31, 2012, 2011, and 2010, respectively.

Other Assets

As of December 31, 2012 and 2011, other assets were comprised of the following:

	December 31, 2012	December 31, 2011
Deposits	$ 401,000	$ 415,000
Prepaid supplies, long-term	2,339,000	1,357,000
	$ 2,740,000	$ 1,772,000

Accounts Payable and Accrued Expenses

As of December 31, 2012 and 2011, accounts payable and accrued expenses were comprised of the following:

	December 31, 2012	December 31, 2011
Accrued legal fees	$ 826,000	$ 829,000
Accrued R&D studies	896,000	534,000
Accounts payable	1,579,000	272,000
Accrued vacation	873,000	908,000
Accrued bonus	846,000	866,000
Accrued expenses	2,071,000	1,572,000
Deferred rent	35,000	37,000
Accrued accounting fees	190,000	90,000
Accrued payroll	95,000	226,000
	$ 7,411,000	$ 5,334,000

8. Commitments and Contingencies

We have contractual obligations to make payments on leases of office, manufacturing, and corporate housing space as follows:

Years Ending December 31,	Operating Leases
2013	$ 1,931,000
2014	1,752,000
2015	1,823,000
2016	1,870,000
2017	1,591,000
Total	$ 8,967,000

Rent expense, which includes common area maintenance, for the years ended December 31, 2012, 2011 and 2010 was $2,980,000, $2,524,000 and $2,186,000, respectively.

We have entered into agreements with various research organizations for pre-clinical and clinical development studies, which have provisions for cancellation. Under the terms of these agreements, the vendors provide a variety of services including conducting research, enrolling patients, recruiting patients, monitoring studies and data analysis. Payments under these agreements typically include fees for services and reimbursement of expenses. The timing of payments due under these agreements was estimated based on current schedules of pre-clinical and clinical studies in progress. As of December 31, 2012, we have pre-clinical research study obligations of $23,000 (all of which are expected to be complete within a year) and clinical research study obligations of $11,700,000 ($3,150,000 of which are expected to be complete within a year). Should the timing of the pre-clinical and clinical trials change, the timing of the payment of these obligations would also change.

During 2008, we entered into a supply agreement with a minimum purchase requirements clause. As of December 31, 2012, we have minimum purchase obligations of $1,743,000 ($1,743,000 of which are expected to be paid within a year).

We are subject to various claims and contingencies related to legal proceedings. Due to their nature, such legal proceedings involve inherent uncertainties including, but not limited to, court rulings, negotiations between affected parties and governmental actions. Management assesses the probability of loss for such contingencies and accrues a liability and/or discloses the relevant circumstances, as appropriate. Management believes that any liability to us that may arise as a result of currently pending legal proceedings will not have a material adverse effect on our financial condition, liquidity, or results of operations as a whole.

Refer to note 3 for a discussion of our commitments and contingencies related to our transactions with Olympus, including (a) our obligation to the Joint Venture in future periods and (b) certain put and call rights embedded in the arrangements with Olympus.

Refer to note 6 for a discussion of our commitments and contingencies related to our arrangements with Senko.

Refer to note 9 for a discussion of our commitments and contingencies related to our long-term obligations.

9. Long-term Obligations

On September 9, 2011 we entered into a Second Amendment to the Amended and Restated Loan and Security Agreement (loan agreement) with General Electric Capital Corporation (GECC), Silicon Valley Bank (SVB) and Oxford Finance Corporation (together, the "Lenders"), pursuant to which the Lenders increased the prior term loan made to the Company to a principal amount of $25.0 million (Term Loan), subject to the terms and conditions set forth in the loan agreement. The Term Loan accrues interest at a fixed rate of 9.87% per annum. Pursuant to the loan agreement, we are required to make (i) twelve (12) equal consecutive monthly principal payments of $20,833 on the first day of each calendar month, commencing on October 1, 2011, (ii) twenty-nine (29) equal consecutive monthly principal payments of $825,000 on the first day of each calendar month, commencing on October 1, 2012, and (iii) one (1) final principal payment of $825,000 on March 1, 2015. In addition, the maturity date of the Term Loan has been extended until March 1, 2015, and at maturity of the Term Loan, the Company will make a final payment fee equal to 5% ($1,250,000) of the Term Loan. We may incur additional fees if we elect to prepay the Term Loan. In connection with the Term Loan, on September 9, 2011, we issued to the Lenders warrants to purchase up to an aggregate of 132,891 shares of our common stock at an exercise price of $3.01 per share. These warrants are immediately exercisable and will expire on September 9, 2018.

The Term Loan amended the Amended and Restated Loan and Security Agreement, of which an aggregate balance of approximately $15.6 million remained outstanding along with a prorated final payment fee of $419,000. The net proceeds of the Term Loan, after payment of lender fees and expenses, were approximately $8.6 million.

We accounted for this amendment as debt modification since the terms of the amended Term Loan and the Original Term Loan were not substantially different and as present value of cash flows of the modified instrument (using a net method of comparing the present value of cash flows related to the lowest common principal balance between the old and the new loans) was within 10% of the original debt instrument. Accordingly, the fees associated with the amended Term Loan of $300,000, final payment fee of $1,250,000, and the existing unamortized debt discount from the Original Term Loan of $332,000 will be amortized as an adjustment of interest expense over the term of the Amended Term Loan using the effective interest method.

We allocated the aggregate proceeds of the Term Loan between the warrants and the debt obligations based on their relative fair values. The fair value of the warrants issued to the Lenders is calculated utilizing the Black-Scholes option pricing model. We are amortizing the relative fair value of the warrants as a discount of $267,000 over the term of the loan using the effective interest method, with an effective interest rate of 13.63%. If the maturity of the debt is accelerated due to an event of default, then the amortization would be accelerated. The Term Loan is collateralized by the tangible assets of the company, including a security interest in substantially all of its existing and after-acquired assets.

Additional details relating to the above term loan that is outstanding as of December 31, 2012, are presented in the following table:

Origination Date	Original Loan Amount	Interest Rate	Current Monthly Payment*	Term	Remaining Principal (Face Value)
September 2011	$ 25,000,000	9.87%	$ 1,008,212	42 Months	$ 22,275,000

* *Current monthly payment is inclusive of interest and principal*

As of December 31, 2012, the future contractual principal and final fee payments on all of our debt and lease obligations are as follows:

Years Ending December 31,	
2013	$ 9,927,000
2014	9,922,000
2015	3,749,000
2016	6,000
Total	$ 23,604,000

Reconciliation of Face Value to Book Value as of December 31, 2012	
Total debt and lease obligations, including final payment fee (Face Value)	$ 23,604,000
Less: Debt discount	(917,000)
Total:	22,687,000
Less: Current portion	(9,784,000)
Long-term obligation	$ 12,903,000

Our interest expense for the years ended December 31, 2012, 2011 and 2010 (most of which related to the loan entered into September 2011, June 2010 and October 2008 was $3,386,000, $2,784,000 and $2,052,000, respectively. Interest expense is calculated using the effective interest method, therefore it is inclusive of non-cash amortization in the amount of $930,000, $711,000 and $703,000, respectively, related to the amortization of the debt discount and capitalized loan fees.

10. Income Taxes

Due to our net losses for the years ended December 31, 2012, 2011 and 2010, and since we have recorded a full valuation allowance against deferred tax assets, there was no provision or benefit for income taxes recorded. There were no components of current or deferred federal or state income tax provisions for the years ended December 31, 2012, 2011 and 2010.

A reconciliation of the total income tax provision tax rate to the statutory federal income tax rate of 34% for the years ended December 31, 2012, 2011 and 2010 is as follows:

	2012	2011	2010
Income tax expense (benefit) at federal statutory rate	(34.00)%	(34.00)%	(34.00)%
Income tax expense (benefit) at state statutory rate..	(2.79)%	(3.36)%	(2.62)%
Mark to market permanent adjustment	(0.24)%	(5.02)%	(1.71)%
Change in federal valuation allowance	35.86%	45.72%	40.47%
Change in State Rate	(8.36)%	(3.29)%	0.00%
Deferred revenue	0.00%	(2.09)%	(2.82)%
Foreign rate differential	(0.04)%	0.00%	0.00%
Other, net	9.57%	2.04%	0.68%
	0.00%	0.00%	0.00%

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities as of December 31, 2012 and 2011 are as follows:

	2012	2011
Deferred tax assets:		
Allowances and reserves	$ 169,000	$ 292,000
Accrued expenses	1,053,000	587,000
Deferred revenue	1,138,000	3,276,000
Stock based compensation	5,635,000	4,886,000
Net operating loss carryforwards	87,045,000	73,774,000
Income tax credit carryforwards	5,729,000	5,569,000
Property and equipment, principally due to differences in depreciation	422,000	707,000
Other	295,000	181,000
	101,486,000	89,272,000
Valuation allowance	(101,476,000)	(89,200,000)
Total deferred tax assets, net of allowance	10,000	72,000
Deferred tax liabilities:		
Intangibles	(10,000)	(72,000)
Total deferred tax liability	(10,000)	(72,000)
Net deferred tax assets (liability)	$ —	$ —

We have established a valuation allowance against our net deferred tax assets due to the uncertainty surrounding the realization of such assets. We periodically evaluate the recoverability of the deferred tax assets. At such time as it is determined that it is more likely than not that deferred assets are realizable, the valuation allowance will be reduced. We have recorded a valuation allowance of $101,476,000 as of December 31, 2012 to reflect the estimated amount of deferred tax assets that may not be realized. We increased our valuation allowance by approximately $12,276,000 during the year ended December 31, 2012. The valuation allowance includes approximately $579,000 related to stock option deductions, the benefit of which, if realized, will eventually be credited to equity and not to income.

At December 31, 2012, we had federal, California, and Massachusetts tax loss carryforwards of approximately $222,237,000, $137,500,000, and $671,000 respectively. The federal and state net operating loss carryforwards begin to expire in 2019 and 2013 respectively, if unused. At December 31, 2012, we had federal and state tax credit carryforwards of approximately $4,096,000 and $4,244,000 respectively. The federal credits will begin to expire in 2018, if unused, and the state credits carry forward indefinitely. In addition, we had a foreign tax loss carryforward of $11,730,000 in Japan, $1,632,000 in Switzerland, and $78,000 in India. The entity in Italy was dissolved in 2012, therefore there is no longer any NOL to carryforward for Italy.

Pursuant to the Internal Revenue Code ("IRC") of 1986, as amended, specifically IRC §382 and IRC §383, our ability to use net operating loss and R&D tax credit carry forwards to offset future taxable income is limited if we experience a cumulative change in ownership of more than 50% within a three-year period. We have completed an ownership change analysis pursuant to IRC Section 382 through April 17, 2007. We did not have any ownership change limitations based

on that study. If ownership changes within the meaning of IRC Section 382 are identified as having occurred subsequent to April 17, 2007, the amount of remaining tax carry forwards available to offset future taxable income in future years may be significantly restricted or eliminated.

We recognize tax benefits associated with the exercise of stock options directly to stockholders' equity only when realized. Accordingly, deferred tax assets are not recognized for net operating loss carryforwards resulting from windfall tax benefits. At December 31, 2012, deferred tax assets do not include $1,169,000 of excess tax benefits from stock-based compensation.

We changed our accounting method of accounting for uncertain tax positions on January 1, 2007. We had no unrecognized tax benefits as of the date of adoption.

Following is a tabular reconciliation of the unrecognized tax benefits activity during the years ended December 31, 2012, 2011 and 2010:

	2012	2011	2010
Unrecognized Tax Benefits – Beginning	$ 1,304,000	$ 1,166,000	$ 1,115,000
Gross increases – tax positions in prior period	—	—	—
Gross decreases – tax positions in prior period	—	—	(49,000)
Gross increase – current-period tax positions	90,000	138,000	100,000
Settlements	—	—	—
Lapse of statute of limitations	—	—	—
Unrecognized Tax Benefits – Ending	$ 1,394,000	$ 1,304,000	$ 1,166,000

None of the amount included in our liability for uncertain tax benefits if recognized would affect the Company's effective tax rate, since it would be offset by an equal reduction in the deferred tax asset valuation allowance. The Company's deferred tax assets are fully reserved.

The Company did not recognize interest related to unrecognized tax benefits in interest expense and penalties in operating expenses as of December 31, 2012.

The Company's material tax jurisdictions are United States and California. To our knowledge, the Company is currently not under examination by the Internal Revenue Service or any other taxing authority.

The Company's tax years for 1999 and forward can be subject to examination by the United States and California tax authorities due to the carryforward of net operating losses and research development credits.

The Company does not foresee material changes to its liability for uncertain tax benefits within the next twelve months.

11. Employee Benefit Plan

We implemented a 401(k) retirement savings and profit sharing plan (the "Plan") effective January 1, 1999. We may make discretionary annual contributions to the Plan, which is allocated to the profit sharing accounts based on the number of years of employee service and compensation. At the sole discretion of the Board of Directors, we may also match the participants' contributions to the Plan. We made no discretionary or matching contributions to the Plan in 2012, 2011 and 2010.

12. Stockholders' Equity

Preferred Stock

We have authorized 5,000,000 shares of $.001 par value preferred stock, with no shares outstanding as of December 31, 2012 and 2011. Our Board of Directors is authorized to designate the terms and conditions of any preferred stock we issue without further action by the common stockholders.

Common Stock

On March 10, 2009, we raised approximately $10,000,000 in gross proceeds from sale to institutional investors of a total of 4,771,174 shares of our common stock and warrants to purchase up to a total of 6,679,644 additional shares of our

common stock at a purchase price of $2.10 per unit, with each unit consisting of one (1) share and one and four-tenths (1.4) warrants. The warrants are not exercisable until six months after the date of issuance and will expire five years after the date the warrants are first exercisable. The warrants have an exercise price of $2.59 per share, which was the consolidated closing bid price of the Company's common stock on March 9, 2009, as reported by NASDAQ. The shares and the warrants are immediately separable and will be issued separately. We have accounted for the warrants as a component of stockholders' deficit. The warrants must be settled through a cash exercise whereby the warrant holder exchanges cash for shares of Cytori common stock, unless the exercise occurs when the related registration statement is not effective, in which case the warrant holder can only exercise through the cashless exercise feature of the warrant agreement.

On May 14, 2009, we raised approximately $4,252,000 in gross proceeds from a private placement of 1,864,783 shares of our common stock and warrants to purchase up to a total of 3,263,380 additional shares of our common stock at a purchase price of $2.28 per unit, with each unit consisting of one (1) share and one and three-fourths (1.75) warrants. The warrants are exercisable immediately and will expire five years after the date of issuance. The warrants have an exercise price of $2.62 per share. We have accounted for the warrants as a component of stockholders' deficit.

Additionally, on June 19, 2009, we entered into a common stock purchase agreement with Seaside 88, LP relating to the offering and sale of a total of up to 7,150,000 shares of our common stock. The agreement required us to issue and Seaside to buy 275,000 shares of our common stock once every two weeks, subject to the satisfaction of customary closing conditions. Upon completions of our scheduled closings pursuant to the agreement with Seaside 88, LP in June 2010, we raised approximately $30,172,000 in aggregate gross proceeds from this transaction from the sale of 7,150,000 shares of our common stock between June 2009 and June 2010, of which $17,314,000 in gross proceeds from the sale of 3,300,000 shares was raised during 2010. We have accounted for each of the completed closings as a component of stockholders' equity.

In October 2010, we entered into an underwriting agreement with Jefferies & Company, relating to the issuance and sale of 4,600,000 shares of our common stock. This price to the public in this offering was $4.50 per share and the underwriter has agreed to purchase the shares from us at a price of $4.23 per share. The transaction was completed on October 13, 2010 raising approximately $20,700,000 in gross proceeds before deducting underwriting discounts and commissions and other offering expenses payable by us.

On December 13, 2010 we raised $10,000,000 in gross proceeds from a sale of 1,428,571 shares of unregistered common stock to Astellas Pharma Inc. for $7.00 per share in a private stock placement. Pursuant to the terms of the purchase agreement, we granted Astellas Pharma Inc. a two year right of first refusal to enter into a development and commercialization collaboration with us regarding the use of our technology, on a worldwide basis, for the treatment of liver conditions. In addition, we have agreed to use reasonable efforts to file a registration statement with the Securities and Exchange Commission to register the shares of common stock for resale upon the request of Astellas Pharma Inc. We also granted Astellas Pharma Inc. a non-voting observer seat on our Board of Directors and the right to designate a representative member to our Scientific Advisory Board. The $10,000,000 in total proceeds we received exceeded the market value of our stock at the completion of the purchase agreement. The $2,526,000 difference between the proceeds received and the fair market values of our common stock was recorded as a component of deferred revenues in the accompanying balance sheet. This difference was recorded as deferred revenue since, conceptually, the excess proceeds represent a value paid by Astellas Pharma Inc. attributable to the scientific advisory board seat, the non-voting observer seat on our Board of Directors, and the two year right of first refusal to enter into a development and commercialization collaboration with us regarding the use of our technology, on a worldwide basis, for the treatment of liver conditions, rather than an additional equity investment in Cytori. We recognized this deferred amount as development revenue upon the expiration of the two year period in December 2012. We are still actively involved in discussions with Astellas Pharma, Inc. about a potential future development and commercialization collaboration with us.

On July 11, 2011, we entered into a common stock purchase agreement with Seaside 88, LP relating to the offering and sale of a total of up to 6,326,262 shares of our common stock. The agreement required us to issue and Seaside to buy 1,326,262 shares of our common stock at an initial closing and 250,000 shares of our common stock once every two weeks, commencing 30 days after the initial closing, for up to an additional 20 closings, subject to the satisfaction of customary closing conditions. At the initial closing, the offering price was $4.52, which equaled 88% of our common stock's volume-weighted average trading prices, or VWAP, during the ten-day trading period immediately prior to the initial closing date, raising approximately $6,000,000 in gross proceeds. At subsequent closings, the offering price was 90.25% of our common stock's volume-weighted average trading prices during the ten-day trading period immediately prior to each subsequent closing date. We raised approximately $18,233,000 in gross proceeds from the sale of

5,826,262 shares in our scheduled closings through April 9, 2012. Effective, April 30, 2012, we terminated the agreement with Seaside 88, LP and we did not sell the remaining and final 500,000 shares that would otherwise have been sold under this agreement.

In December 2012, we entered into an underwriting agreement with Lazard Capital Markets, LLC (underwriter), relating to the issuance and sale of 7,020,000 shares of our common stock. The price to the public in this offering was $2.85 per share and the underwriter purchased the shares from us at a price of $2.69 per share. The transaction was completed on December 19, 2012 raising approximately $20,007,000 in gross proceeds before deducting underwriting discounts and commissions and other offering expenses payable by us. Under the terms of the underwriting agreement, we granted the underwriter an option, exercisable for 30 days, to purchase up to an additional 1,053,000 shares. Subsequently, in January 2013, the underwriter exercised this option and as a result we sold an additional 1,053,000 shares raising approximately $3,001,000 in gross proceeds before deducting underwriting discounts and commissions and other offering expenses payable by us.

Warrant Adjustments

Our March 2009 offering of 4,771,174 shares of our common stock and warrants to purchase up to a total of 6,679,644 additional shares of our common stock with an exercise price of $2.59 per share, our May 2009 equity offering of 1,864,783 shares of our common stock and warrants to purchase up to a total of 3,263,380 additional shares of our common stock with an exercise price of $2.62 per share, our closings with Seaside 88, LP, our October 2010 offering of 4,600,000 shares of our common stock, our December 2010 sale of 1,428,571 shares of our common stock, and our December 2012 offering of 7,020,000 shares of our common stock triggered an adjustment to the exercise price and number of shares issuable under the warrants issued to investors in our August 2008 private placement financing. As a result, as of December 31, 2012, the common stock warrants issued on August 11, 2008 are currently exercisable for 2,129,309 shares of our common stock at an exercise price of $5.44 per share.

13. Stockholders Rights Plan

On May 28, 2003, the Board of Directors declared a dividend distribution of one preferred share purchase right (a "Right") for each outstanding share of our common stock. The dividend is payable to the stockholders of record on June 10, 2003, and with respect to shares of common stock issued thereafter until the Distribution Date (as defined below) and, in certain circumstances, with respect to shares of common stock issued after the Distribution Date. Except as set forth below, each Right, when it becomes exercisable, entitles the registered holder to purchase from us one one-thousandth (1/1000th) of a share of our Series RP Preferred Stock, $0.001 par value per share (the "Preferred Stock"), at a price of $25.00 per one one-thousandth (1/1000th) of a share of Preferred Stock, subject to adjustment. Each share of the Preferred Stock would entitle the holder to our common stock with a value of twice that paid for the Preferred Stock. The description and terms of the Rights are set forth in a Rights Agreement (the "Rights Agreement") between us and Computershare Trust Company, Inc., as Rights Agent, dated as of May 29, 2003, and as amended on May 12, 2005 and August 28, 2007.

The Rights attach to all certificates representing shares of our common stock outstanding, and are evidenced by a legend on each share certificate, incorporating the Rights Agreement by reference. The Rights trade with and only with the associated shares of our common stock and have no impact on the way in which holders can trade our shares. Unless the Rights Agreement was to be triggered, it would have no effect on the Company's consolidated balance sheet or income statement and should have no tax effect on the Company or its stockholders. The Rights Agreement is triggered upon the earlier to occur of (i) a person or group of affiliated or associated persons having acquired, without the prior approval of the Board, beneficial ownership of 15% or more (20% or more for certain shareholders) of the outstanding shares of our common stock or (ii) 10 days, or such later date as the Board may determine, following the commencement of or announcement of an intention to make, a tender offer or exchange offer the consummation of which would result in a person or group of affiliated or associated persons becoming an Acquiring Person (as defined in the Rights Agreement) except in certain circumstances (the "Distribution Date"). The Rights are not exercisable until the Distribution Date and will expire at the close of business on May 29, 2013, unless we redeem them earlier.

14. Stock-based Compensation

During 1997, we adopted the 1997 Stock Option and Stock Purchase Plan (the "1997 Plan"), which provides for the direct award or sale of shares and for the grant of incentive stock options ("ISOs") and non-statutory options to employees, directors or consultants. The 1997 Plan, as amended, provides for the issuance of up to 7,000,000 shares of

our common stock. The exercise price of ISOs cannot be less than the fair market value of the underlying shares on the date of grant. ISOs can be granted only to employees. The 1997 Plan expired on October 22, 2007.

During 2004, we adopted the 2004 Equity Incentive Plan (the "2004 Plan"), which provides our employees, directors and consultants the opportunity to purchase our common stock through non-qualified stock options, stock appreciation rights, restricted stock units, or restricted stock and cash awards. The 2004 Plan initially provides for issuance of 3,000,000 shares of our common stock, which number may be cumulatively increased (subject to Board discretion) on an annual basis beginning January 1, 2005, which annual increase shall not exceed 2% of our then outstanding stock. As of December 31, 2012, there are 1,419,831 securities remaining and available for future issuances under 2004 Plan, which is exclusive of securities to be issued upon an exercise of outstanding options, warrants, and rights.

In August 2011, stockholders approved the 2011 Employee Stock Purchase Plan (ESPP), with a maximum of 500,000 shares of our common stock to be issued under this plan. Under the ESPP, eligible employees may purchase shares of our common stock through payroll deductions, which may not exceed 15% of an employee's compensation. The price at which shares are sold under the ESPP is established by the duly appointed committee of the Board but may not be less than 90% of the lesser of the fair market value per share of our common stock on the offering date or on the purchase date. As of December 31, 2011, there were no stock issuances under this plan and no stock-based compensation was recorded for this plan for the year then ended. The ESPP is compensatory under FASB authoritative guidance. During the year ended December 31, 2012, we issued 53,672 shares of our common stock to our employees under the ESPP raising $100,000 in gross proceeds and recorded a related stock-based compensation of $53,000 for the year then ended.

Stock Options

Generally, options issued under the 2004 Plan or the 1997 Plan are subject to four-year vesting, and have a contractual term of 10 years. Most options contain one of the following two vesting provisions:

- 12/48 of a granted award will vest after one year of service, while an additional 1/48 of the award will vest at the end of each month thereafter for 36 months, or
- 1/48 of the award will vest at the end of each month over a four-year period.

A summary of activity for the year ended December 31, 2012 is as follows:

	Options	Weighted Average Exercise Price
Balance as of January 1, 2012	7,457,184	$ 5.13
Granted	864,750	$ 3.17
Exercised	(346,432)	$ 3.05
Expired	(379,957)	$ 4.17
Cancelled/forfeited	(850,559)	$ 5.34
Balance as of December 31, 2012	6,744,986	$ 5.02

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Balance as of December 31, 2012	6,744,986	$ 5.02	5.45	$ 217,028
Vested and expected to vest at December 31, 2012	6,721,818	$ 5.02	5.44	$ 215,799
Exercisable at December 31, 2012	5,307,773	$ 5.16	4.66	$ 134,764

The total intrinsic value of stock options exercised was $311,000, $541,000 and $1,529,000 for the years ended December 31, 2012, 2011 and 2010, respectively.

The fair value of each option awarded during the year ended December 31, 2012, 2011 and 2010 was estimated on the date of grant using the Black-Scholes-Merton option valuation model based on the following weighted-average assumptions:

	Years ended December 31,		
	2012	2011	2010
Expected term	5.20 years	5.5 years	5 years
Risk-free interest rate	0.83%	1.95%	2.22%
Volatility	75.63%	72.36%	72.81%
Dividends	—	—	—
Resulting weighted average grant date fair value	$ 1.96	$ 3.24	$ 4.02

We calculated the expected term of our stock options based on our historical data. The expected term is calculated for and applied to all employee awards as a single group as we do not expect (nor does historical data suggest) substantially different exercise or post-vesting termination behavior amongst our employee population.

We estimate volatility based on the historical volatility of our daily stock price over the period preceding grant date commensurate with the expected term of the option.

The weighted average risk-free interest rate represents the interest rate for treasury constant maturity instruments published by the Federal Reserve Board. If the term of available treasury constant maturity instruments is not equal to the expected term of an employee option, we use the weighted average of the two Federal Reserve securities closest to the expected term of the employee option.

The dividend yield has been assumed to be zero as we (a) have never declared or paid any dividends and (b) do not currently anticipate paying any cash dividends on our outstanding shares of common stock in the foreseeable future.

Restricted Stock Awards

Generally, restricted stock awards issued under the 2004 Plan are subject to a vesting period that coincides with the fulfillment of service requirements for each award and have a contractual term of 10 years. These awards are amortized to compensation expense over the estimated vesting period based upon the fair value of our common stock on the award date.

A summary of activity for the year ended December 31, 2012 is as follows:

	Restricted Stock Awards	Weighted Average Grant Date Fair Value
Balance as of January 1, 2012	79,741	$ 5.59
Granted	280,408	$ 3.06
Exercised/Released	(50,408)	$ 4.08
Cancelled/forfeited	(15,000)	$ 3.44
Balance as of December 31, 2012	294,741	$ 3.55

	Restricted Stock Awards	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term (years)
Balance as of December 31, 2012	294,741	$ 3.55	8.9
Vested and expected to vest at December 31, 2012	294,741	$ 3.55	8.9
Exercisable at December 31, 2012	109,241	$ 3.34	8.6

Performance-Based Restricted Stock Awards

We granted 246,225 performance-based restricted stock awards under the 2004 Equity Incentive Plan in February 2011. The awards provide certain employees until January 1, 2012 to achieve certain performance goals established by the Compensation Committee. Effective January 2012, the outstanding awards were terminated in their entirety based upon the decision by the Compensation Committee that performance criteria had not been met as of January 1, 2012. No compensation expense was recognized related to these awards.

In January 2012, we granted 276,375 performance-based restricted stock awards under the 2004 Equity Incentive Plan. The awards provide certain employees until December 31, 2012 to achieve certain performance goals established by the Compensation Committee. The performance goals are weighted based on the following achievements: entering into a major collaboration for development and/or commercialization of the Company's products (40%), obtaining certain FDA clearance or approvals, which include FDA approval for and initiation of the ATHENA feasibility trial in chronic myocardial ischemia (40%), obtaining CE mark for certain products (15%), and achieving a targeted revenue increase for the fiscal year ended December 31, 2012 (5%). To the extent that any of the performance goals are partially achieved, the Compensation Committee maintains the discretion to continue the vesting of all or a portion of the awards following December 31, 2012. Once earned, the awards will remain unvested until January 10, 2014. Termination of employment prior to vesting will result in the forfeiture of the awards. We recognized $107,000 of compensation expense related to these awards, respectively, during the year ended December 31, 2012.

The following table summarizes activity with respect to the performance based restricted stock awards during the year ended December 31, 2012:

	Restricted Stock Awards	Weighted Average Grant-Date Fair Value
Outstanding at January 1, 2012	246,225	$ 5.82
Granted	276,375	$ 3.44
Vested	0	
Cancelled/forfeited	(261,300)	$ 5.68
Outstanding at December 31, 2012	261,300	$ 3.44
Vested at December 31, 2012	0	

The following summarizes the total compensation cost recognized for the stock options and restricted stock awards in the accompanying financial statements:

	Years ended December 31,		
	2012	2011	2010
Total compensation cost for share-based payment arrangements recognized in the statement of operations (net of tax of $0)	$ 3,904,000	$ 3,316,000	$ 3,055,000

As of December 31, 2012, the total compensation cost related to non-vested stock options and stock awards not yet recognized for all our plans is approximately $4,593,000. Of this amount, $3,918,000 is expected to be recognized as a result of vesting under service conditions over a weighted average period of 1.56 years.

Cash received from stock option and warrant exercises and employee stock purchase for the years ended December 31, 2012, 2011 and 2010 was approximately $1,413,000, $2,849,000 and $7,128,000, respectively. No income tax benefits have been recorded related to the stock option exercises as the benefits have not been realized in our income tax returns.

To settle stock options and restricted stock awards, we will issue new shares of our common stock. At December 31, 2012, we have an aggregate of 17,460,673 shares authorized and available to satisfy option exercises under our plans.

15. Related Party Transactions

During the year ended December 31, 2010, we recognized $583,000 in product revenues, related party, from our sales transactions through our distribution partner, Green Hospital Supply, Inc. No similar sales occurred during the years ended December 31, 2012 and 2011. As of December 31, 2011 and 2010, Green Hospital, Inc. was a beneficial owner of more than five percent of our outstanding shares of common stock. During the year ended December 31, 2012, Green Hospital, Inc. beneficial ownership has decreased to be less than five percent of our outstanding shares of common stock.

During the year ended December 31, 2012, 2011 and 2010, we incurred approximately $232,000, $166,000 and $253,000, respectively, in royalty costs in connection with our sales of our Celution® 800/CRS System products to the European and Asia-Pacific reconstructive surgery market, pursuant to our License and Royalty Agreement and the Amended License/Commercial Agreement with the Olympus-Cytori, Inc. joint venture. Additionally, in February 2012, we purchased second generation Celution® Systems and consumable sets from the Olympus-Cytori, Inc. joint venture, at a formula-based transfer price aggregating to $1,048,000. As of December 31, 2012, 2011 and 2010, Olympus Corporation was a beneficial owner of more than five percent of our outstanding shares of common stock.

Additionally, refer to note 3 for a discussion of related party transactions with Olympus.

16. Subsequent Events

We have evaluated events after the balance sheet date of December 31, 2012 and up to the date we filed this report.

Subsequent to the year ended December 31, 2012, under the terms of the December 2012 underwriting agreement with Lazard Capital Markets, LLC (underwriter), the underwriter exercised the option to purchase an additional 1,053,000 shares and as a result we sold 1,053,000 shares on January 14, 2013, raising approximately $3,001,000 in gross proceeds before deducting underwriting discounts and commissions and other offering expenses payable by us.

In February 2013, we entered into a mutual termination and release agreement with Senko, which terminated the Distribution Agreement with Senko, and all Senko rights, licenses and privileges granted under the distribution agreement terminated and reverted to the Company. As a result of this termination agreement, we are obligated to pay Senko $1,200,000 in six quarterly installment payments of $200,000 each through May 2014.

17. Quarterly Information (unaudited)

The following unaudited quarterly financial information includes, in management's opinion, all the normal and recurring adjustments necessary to fairly state the results of operations and related information for the periods presented.

	For the three months ended			
	March 31, 2012	June 30, 2012	September 30, 2012	December 31, 2012
Product revenues	$ 1,481,000	$ 1,947,000	$ 1,314,000	$ 3,967,000
Gross profit	628,000	915,000	611,000	2,555,000
Development revenues	3,000	2,429,000	2,000	3,358,000
Operating expenses	8,996,000	10,304,000	10,945,000	8,674,000
Other income (expense)	(960,000)	(923,000)	(916,000)	(1,062,000)
Net loss	$ (9,325,000)	$ (7,883,000)	$ (11,248,000)	$ (3,823,000)
Basic and diluted net loss per share	$ (0.16)	$ (0.13)	$ (0.19)	$ (0.06)

	For the three months ended			
	March 31, 2011	June 30, 2011	September 30, 2011	December 31, 2011
Product revenues	$ 1,362,000	$ 2,411,000	$ 2,134,000	$ 2,076,000
Gross profit	520,000	1,302,000	1,192,000	1,132,000
Development revenues	1,235,000	11,000	5,000	762,000
Operating expenses	12,998,000	5,685,000	9,020,000	7,868,000
Other income (expense)	(829,000)	(766,000)	(512,000)	(932,000)
Net loss	$ (12,072,000)	$ (5,138,000)	$ (8,335,000)	$ (6,906,000)
Basic and diluted net loss per share	$ (0.23)	$ (0.10)	$ (0.15)	$ (0.13)

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports filed or furnished pursuant to the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management necessarily is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As required by Rule 13a-15(b) under the Exchange Act, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended, as of the end of the period covered by this Annual Report on Form 10-K. Based on the foregoing, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this Annual Report.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) or 15d-15(f) under the Securities Exchange Act of 1934 as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers and effected by the Company's 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 the transactions and dispositions of the Company's assets;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting 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 the policies or procedures may deteriorate.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we have conducted an evaluation of the effectiveness of our internal control over financial reporting as of the end of the fiscal year covered by this annual report on Form 10-K based on the criteria set forth in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2012 based on the COSO criteria. KPMG LLP, an independent registered public accounting firm, who audited our consolidated financial statements included in this Form 10-K, has issued an attestation report on our internal control over financial reporting, which is included herein.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during the quarter ended December 31, 2012 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

The information called for by Item 10 is incorporated herein by reference to the material under the captions "Election of Directors" and "Directors, Executive Officers and Corporate Governance" in our Definitive Proxy Statement for our 2013 Annual Meeting of Stockholders, to be filed with SEC on or before April 30, 2013 (the "2013 Proxy Statement").

Item 11. Executive Compensation

The information called for by Item 11 is incorporated herein by reference to the material under the caption "Executive Compensation" in our 2013 Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information called for by Item 12 is incorporated herein by reference to the material under the caption "Security Ownership of Certain Beneficial Owners and Management" in our 2013 Proxy Statement.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information called for by Item 13 is incorporated herein by reference to the material under the caption "Information Concerning Directors and Executive Officers- Certain Relationships and Related Transactions" in our 2013 Proxy Statement.

Item 14. Principal Accounting Fees and Services

The information called for by Item 14 is incorporated herein by reference to the material under the caption "Principal Accountant Fees and Services" in our 2013 Proxy Statement.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) (1) Financial Statements

(a) (2) Financial Statement Schedules

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

For the years ended December 31, 2012, 2011 and 2010
(in thousands of dollars)

	Balance at beginning of year	Additions (A)	Deductions (B)	Other (C)	Balance at end of year
Allowance for doubtful accounts					
Year ended December 31, 2012	$ 474	$ 144	$ (313)	$ (27)	$ 278
Year ended December 31, 2011	$ 306	$ 483	$ (256)	$ (59)	$ 474
Year ended December 31, 2010	$ 751	$ 460	$ (1,014)	$ 109	$ 306

(A) Includes charges to costs and expenses, net of any equipment recovered
(B) Includes deductions for uncollectible accounts receivable, net of any equipment recovered
(C) Miscellaneous activity for product sales recognized on a cash basis

(a)(3) Exhibits

CYTORI THERAPEUTICS, INC.					
EXHIBIT INDEX					
		Filed with this Form 10-K	Incorporated by Reference		
Exhibit Number	Exhibit Title		Form	File No.	Date Filed
1.1	Underwriting Agreement, dated October 8, 2010, between Cytori Therapeutics, Inc. and Jefferies & Company.		8-K	001-34375 Exhibit 1.1	10/08/2010
1.2	Underwriting Agreement, dated December 14, 2012, between Cytori Therapeutics, Inc. and Lazard Capital Markets LLC		8-K	001-34375 Exhibit 1.1	12/14/2012
2.5	Asset Purchase Agreement dated May 30, 2007, by and between Cytori Therapeutics, Inc. and MacroPore Acquisition Sub, Inc.		10-Q	000-32501 Exhibit 2.5	08/14/2007
3.1	Amended and Restated Certificate of Incorporation.		10-Q	000-32501 Exhibit 3.1	08/13/2002
3.2	Amended and Restated Bylaws of Cytori Therapeutics, Inc.		10-Q	000-32501 Exhibit 3.2	08/14/2003
3.3	Certificate of Ownership and Merger.		10-Q	000-32501 Exhibit 3.1.1	11/14/2005
4.1	Rights Agreement, dated as of May 19, 2003, between Cytori Therapeutics, Inc. and Computershare Trust Company, Inc. as Rights Agent, which includes: as Exhibit A thereto, the Form of Certificate of Designation, Preferences and Rights of Series RP Preferred Stock of Cytori Therapeutics, Inc.; as Exhibit B thereto, the Form of Right Certificate; and, as Exhibit C thereto, the Summary of Rights to Purchase Series RP Preferred Stock.		8-A	000-32501 Exhibit 4.1	05/30/2003
4.1.1	Amendment No. 1 to Rights Agreement dated as of May 12, 2005, between Cytori Therapeutics, Inc. and Computershare Trust Company, Inc. as Rights Agent.		8-K	000-32501 Exhibit 4.1.1	05/18/2005
4.1.2	Amendment No. 2 to Rights Agreement, dated as of August 28, 2007, between us and Computershare Trust Company, N.A. (as successor to Computershare Trust Company, Inc.), as Rights Agent.		8-K	000-32501 Exhibit 4.1.1	09/04/2007
4.2	Form of Warrant.		8-K	000-32501 Exhibit 4.2	03/10/2009
4.3	Form of Warrant to be dated February 28, 2007.		8-K	000-32501 Exhibit 10.4	02/26/2007
4.4	Form of Warrant to Purchase Common Stock issued on August 11, 2008 pursuant to the Securities Purchase Agreement, dated August 7, 2008, by and among the Company and the Purchasers identified on the signature pages thereto.		8-K	000-32501 Exhibit 10.34	08/08/2008
4.5	Registration Rights Agreement, dated August 7, 2008, by and among the Company and the Purchasers identified on the signature pages thereto.		8-K	000-32501 Exhibit 10.35	08/08/2008
4.6	Warrant to Purchase Common Stock issued by the Company on October 14, 2008 in favor of GE Capital Equity Investments, Inc., pursuant to the Loan and Security Agreement dated October 14, 2008.		10-K	000-32501 Exhibit 10.61	03/06/2009
4.7	Warrant to Purchase Common Stock issued by the Company on October 14, 2008 in favor of Silicon Valley Bank, pursuant to the Loan and Security Agreement dated October 14, 2008.		10-K	000-32501 Exhibit 10.62	03/06/2009
4.8	Form of Warrant to Purchase Common Stock to be issued on or about May 11, 2009.		8-K	000-32501 Exhibit 10.64	05/08/2009
4.9	Registration Rights Agreement, dated May 7, 2009, by and among Cytori Therapeutics, Inc. and the Purchasers identified on the signature pages thereto.		8-K	000-32501 Exhibit 10.65	05/08/2009

4.10	Warrant to Purchase Common Stock issued by the Company on June 11, 2010 in favor of GE Capital Equity Investments, Inc., pursuant to the Amended and Restated Loan and Security Agreement dated June 11, 2010.		8-K	001-34375 Exhibit 10.73	06/17/2010
4.11	Warrant to Purchase Common Stock issued by the Company on June 11, 2010 in favor of Silicon Valley Bank, pursuant to the Amended and Restated Loan and Security Agreement dated June 11, 2010.		8-K	001-34375 Exhibit 10.74	06/17/2010
4.12	Warrant to Purchase Common Stock issued by the Company on June 11, 2010 in favor of Oxford Financial Corporation, pursuant to the Amended and Restated Loan and Security Agreement dated June 11, 2010.		8-K	001-34375 Exhibit 10.75	06/17/2010
4.13	Warrant to Purchase Common Stock issued by the Company on September 9, 2011 in favor of GE Capital Equity Investments, Inc., pursuant to the Amended and Restated Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.84	09/15/2011
4.14	Warrant to Purchase Common Stock issued by the Company on September 9, 2011 in favor of Silicon Valley Bank, pursuant to the Amended and Restated Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.85	09/15/2011
4.15	Warrant to Purchase Common Stock issued by the Company on September 9, 2011 in favor of Oxford Financial Corporation, pursuant to the Amended and Restated Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.86	09/15/2011
4.16	Warrant to Purchase Common Stock issued by the Company on September 9, 2011 in favor of Oxford Financial Corporation, pursuant to the Amended and Restated Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.87	09/15/2011
10.1#	Amended and Restated 1997 Stock Option and Stock Purchase Plan.		10	000-32501 Exhibit 10.1	03/30/2001
10.1.1#	Board of Directors resolution adopted November 9, 2006 regarding determination of fair market value for stock option grant purposes (incorporated by reference to Exhibit 10.10.1 filed as Exhibit 10.10.1 to our Form 10-K Annual Report, as filed on March 30, 2007 and incorporated by reference herein)		10-K	000-32501 Exhibit 10.10.1	03/30/2007
10.10#	2004 Equity Incentive Plan of Cytori Therapeutics, Inc		8-K	000-32501 Exhibit 10.1	08/27/2004
10.10.1#	Board of Directors resolution adopted November 9, 2006 regarding determination of fair market value for stock option grant purposes.		10-K	000-32501 Exhibit 10.10.1	03/30/2007
10.12#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Nonstatutory).		10-Q	000-32501 Exhibit 10.19	11/15/2004
10.13#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Nonstatutory) with Cliff.		10-Q	000-32501 Exhibit 10.20	11/15/2004
10.14#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Incentive).		10-Q	000-32501 Exhibit 10.21	11/15/2004
10.15#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Incentive) with Cliff.		10-Q	000-32501 Exhibit 10.22	11/15/2004
10.16#	Form of Options Exercise and Stock Purchase Agreement Relating to the 2004 Equity Incentive Plan.		10-Q	000-32501 Exhibit 10.23	11/15/2004
10.17#	Form of Notice of Stock Options Grant Relating to the 2004 Equity Incentive Plan.		10-Q	000-32501 Exhibit 10.24	11/15/2004
10.22	Common Stock Purchase Agreement dated April 28, 2005, between Olympus Corporation and the Company.		10-Q	000-32501 Exhibit 10.21	08/15/2005
10.23	Sublease Agreement dated May 24, 2005, between Biogen Idec, Inc. and the Company.		10-Q	000-32501 Exhibit 10.21	08/15/2005
10.27+	Joint Venture Agreement dated November 4, 2005, between Olympus Corporation and the Company.		10-K	000-32501 Exhibit 10.27	03/30/2006
10.28+	License/ Commercial Agreement dated November 4, 2005, between Olympus-		10-K	000-32501	03/30/2006

	Cytori, Inc. and the Company			Exhibit 10.28	
10.28.1	Amendment One to License/ Commercial Agreement dated November 14, 2007, between Olympus-Cytori, Inc. and the Company.		10-K	000-32501 Exhibit 10.28.1	03/14/2008
10.29+	License/ Joint Development Agreement dated November 4, 2005, between Olympus Corporation, Olympus-Cytori, Inc. and the Company.		10-K	000-32501 Exhibit 10.29	03/30/2006
10.29.1	Amendment No. 1 to License/ Joint Development Agreement dated May 20, 2008, between Olympus Corporation, Olympus-Cytori, Inc. and the Company.		10-Q	000-32501 Exhibit 10.29.1	08/11/2008
10.30+	Shareholders Agreement dated November 4, 2005, between Olympus Corporation and the Company.		10-K	000-32501 Exhibit 10.30	03/30/2006
10.32	Common Stock Purchase Agreement, dated August 9, 2006, by and between Cytori Therapeutics, Inc. and Olympus Corporation.		8-K	000-32501 Exhibit 10.32	08/15/2006
10.33	Form of Common Stock Subscription Agreement, dated August 9, 2006 (Agreements on this form were signed by Cytori and each of respective investors in the Institutional Offering).		8-K	000-32501 Exhibit 10.33	08/15/2006
10.43	Financial services advisory engagement letter agreement, dated February 16, 2007, between Cytori Therapeutics, Inc. and WBB Securities, LLC.		8-K	000-32501 Exhibit 10.2	02/26/2007
10.46	Common Stock Purchase Agreement, dated March 28, 2007, by and between Cytori Therapeutics, Inc. and Green Hospital Supply, Inc.		10-Q	000-32501 Exhibit 10.46	05/11/2007
10.47	Consulting Agreement, dated May 3, 2007, by and between Cytori Therapeutics, Inc. and Marshall G. Cox.		10-Q	000-32501 Exhibit 10.47	08/14/2007
10.48+	Master Cell Banking and Cryopreservation Agreement, effective August 13, 2007, by and between Green Hospital Supply, Inc. and Cytori Therapeutics, Inc.		10-Q	000-32501 Exhibit 10.48	11/13/2007
10.48.1	Amendment No. 1 to Master Cell Banking and Cryopreservation Agreement, effective June 4, 2008, by and between Green Hospital Supply, Inc. and the Company.		8-K	000-32501 Exhibit 10.48.1	06/10/2008
10.49+	License & Royalty Agreement, effective August 23, 2007, by and between Olympus-Cytori, Inc. and Cytori Therapeutics, Inc.		10-Q	000-32501 Exhibit 10.49	11/13/2007
10.51	Common Stock Purchase Agreement, dated February 8, 2008, by and between Green Hospital Supply, Inc. and Cytori Therapeutics, Inc.		8-K	000-32501 Exhibit 10.51	02/19/2008
10.51.1	Amendment No. 1 to Common Stock Purchase Agreement, dated February 29, 2008, by and between Green Hospital Supply, Inc. and Cytori Therapeutics, Inc.		8-K	000-32501 Exhibit 10.51.1	02/29/2008
10.52#	Agreement for Acceleration and/or Severance, dated January 31, 2008, by and between Christopher J. Calhoun and Cytori Therapeutics, Inc.		10-K	000-32501 Exhibit 10.52	03/14/2008
10.53#	Agreement for Acceleration and/or Severance, dated January 31, 2008, by and between Marc H. Hedrick and Cytori Therapeutics, Inc.		10-K	000-32501 Exhibit 10.53	03/14/2008
10.54#	Agreement for Acceleration and/or Severance, dated January 31, 2008, by and between Mark E. Saad and Cytori Therapeutics, Inc.		10-K	000-32501 Exhibit 10.54	03/14/2008
10.55	Common Stock Purchase Agreement, dated August 7, 2008, by and between the Company and Olympus Corporation.		8-K	000-32501 Exhibit 10.32	08/08/2008
10.55.1	Amendment No. 1 to Common Stock Purchase Agreement, dated August 8, 2008, by and between the Company and Olympus Corporation.		8-K	000-32501 Exhibit 10.32.1	08/14/2008
10.56	Securities Purchase Agreement, dated August 7, 2008, by and among the Company and the Purchasers identified on the signature pages thereto.		8-K	000-32501 Exhibit 10.33	08/08/2008
10.59	Loan and Security Agreement, dated October 14, 2008, by and among the Company, General Electric Capital Corporation, and the other lenders signatory thereto.		10-K	000-32501 Exhibit 10.59	03/06/2009
10.60	Promissory Note issued by the Company in favor of General Electric Capital Corporation or any subsequent holder thereof, pursuant to the Loan and Security Agreement dated October 14, 2008.		10-K	000-32501 Exhibit 10.60	03/06/2009

10.63	Form of Subscription Agreement by and between Cytori Therapeutics, Inc. and the Purchaser (as defined therein), dated as of March 9, 2009.		8-K	000-32501 Exhibit 10.63	03/10/2009
10.64	Placement Agency Agreement, dated March 9, 2009, between Cytori Therapeutics, Inc. and Piper Jaffray & Co.		8-K	000-32501 Exhibit 10.64	03/10/2009
10.65	Securities Purchase Agreement, dated May 7, 2009, by and among Cytori Therapeutics, Inc. and the Purchasers identified on the signature pages thereto.		8-K	000-32501 Exhibit 10.63	05/08/2009
10.68	Form of Common Stock Purchase Agreement by and between Cytori Therapeutics, Inc. and Seaside 88, LP, dated as of June 19, 2009.		8-K	001-34375 Exhibit 10.68	06/22/2009
10.69	Lease Agreement entered into on April 2, 2010, between HCP Callan Rd, LLC. and Cytori Therapeutics, Inc..		10-Q	001-34375 Exhibit 10.69	05/06/2010
10.70	Amended and Restated Loan and Security Agreement, dated June 11, 2010, by and among the Company, General Electric Capital Corporation, and the other lenders signatory thereto.		8-K	001-34375 Exhibit 10.70	06/17/2010
10.71	Promissory Note issued by the Company in favor of General Electric Capital Corporation or any subsequent holder thereof, pursuant to the Loan and Security Agreement dated June 11, 2010.		8-K	001-34375 Exhibit 10.71	06/17/2010
10.72	Promissory Note issued by the Company in favor of Oxford Financial Corporation or any subsequent holder thereof, pursuant to the Loan and Security Agreement dated June 11, 2010.		8-K	001-34375 Exhibit 10.72	06/17/2010
10.76	Common Stock Purchase Agreement, dated December 6, 2010, by and among Cytori Therapeutics, Inc. and Astellas Pharma Inc.		8-K	001-34375 Exhibit 10.76	12/09/2010
10.77	Form of Notice and Restricted Stock Award Agreement for grants of performance-based restricted stock awards under the 2004 Equity Incentive Plan.		8-K	001-34375 Exhibit 10.1	03/04/2011
10.78	Form of Common Stock Purchase Agreement by and between Cytori Therapeutics, Inc. and Seaside 88, LP, dated July 11, 2011		8-K	001-34375 Exhibit 10.78	07/12/2011
10.79	First Amendment to Amended and Restated Loan and Security Agreement, dated June 23, 2011, by and among the Company, Oxford Finance LLC, the other lenders party hereto and General Electric Capital Corporation.		10-Q	001-34375 Exhibit 10.79	08/09/2011
10.80	Second Amendment to the Amended and Restated Loan and Security Agreement, dated September 9, 2011, by and among the Company, General Electric Capital Corporation, and the other lenders signatory thereto.		8-K	001-34375 Exhibit 10.80	09/15/2011
10.81	Promissory Note issued by the Company in favor of General Electric Capital Corporation or any subsequent holder thereof, pursuant to the Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.81	09/15/2011
10.82	Promissory Note issued by the Company in favor of Silicon Valley Bank or any subsequent holder thereof, pursuant to the Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.82	09/15/2011
10.83	Promissory Note issued by the Company in favor of Oxford Financial Corporation or any subsequent holder thereof, pursuant to the Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.83	09/15/2011
10.88	First Amendment to Lease Agreement entered into on November 4, 2011, between HCP Callan Rd, LLC. and the Company.		10-Q	001-34375 Exhibit 10.88	11/08/2011
10.89#	2011 Employee Stock Purchase Plan		DEF 14A	001-34375 Appendix A	05/02/2011
10.90+	Contract HHSO100201200008C dated September 27, 2012, by and between the Company and the U.S. Department of Health and Human Services Biomedical Advanced Research and Development Authority (portions of the exhibit have been omitted pursuant to a request for confidential treatment).		8-K	001-34375 Exhibit 10.90	10/03/2012
14.1	Code of Ethics.		10-K	000-32501 Exhibit 14.1	03/30/2004

23.1	Consent of KPMG LLP, Independent Registered Public Accounting Firm	X			
31.1	Certification of Principal Executive Officer Pursuant to Securities Exchange Act Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
31.2	Certification of Principal Financial Officer Pursuant to Securities Exchange Act Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
32.1	Certifications Pursuant to 18 U.S.C. Section 1350/ Securities Exchange Act Rule 13a-14(b), as adopted pursuant to Section 906 of the Sarbanes - Oxley Act of 2002	X			
101.INS*	XBRL Instance Document	X			
101.SCH*	XBRL Schema Document	X			
101.CAL*	XBRL Calculation Linkbase Document	X			
101.DEF*	XBRL Definition Linkbase Document	X			
101.LAB*	XBRL Label Linkbase Document	X			
*	XBRL Presentation Linkbase Document	X			

+ *Portions of these exhibits have been omitted pursuant to a request for confidential treatment.*

Indicates management contract or compensatory plan or arrangement.

* *XBRL information is furnished and not filed for purposes of Sections 11 and 12 of the Securities Act of 1933 and Section 18 of the Securities Exchange Act of 1934, and is not subject to liability under those sections, is not part of any registration statement or prospectus to which it relates and is not incorporated or deemed to be incorporated by reference into any registration statement, prospectus or other document.*

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized.

CYTORI THERAPEUTICS, INC.

By: /s/ Christopher J. Calhoun
Christopher J. Calhoun
Chief Executive Officer
March 15, 2013

Pursuant to the requirements of the Securities Exchange Act of 1934, this annual report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
/s/ Lloyd H. Dean Lloyd H. Dean	*Chairman of the Board of Directors*	March 15, 2013
/s/ Christopher J. Calhoun Christopher J. Calhoun	*Chief Executive Officer, Vice-Chairman, Director (Principal Executive Officer)*	March 15, 2013
/s/ Marc H. Hedrick, MD Marc H. Hedrick, MD	*President, Director*	March 15, 2013
/s/ Mark E. Saad Mark E. Saad	*Chief Financial Officer (Principal Financial Officer)*	March 15, 2013
/s/ John W. Townsend John W. Townsend	*Chief Accounting Officer*	March 15, 2013
/s/ Richard J. Hawkins Richard J. Hawkins	*Director*	March 15, 2013
/s/ Paul W. Hawran Paul W. Hawran	*Director*	March 15, 2013
/s/ E. Carmack Holmes, MD E. Carmack Holmes, MD	*Director*	March 15, 2013
/s/ David M. Rickey David M. Rickey	*Director*	March 15, 2013
/s/ Tommy G. Thompson Tommy G. Thompson	Director	March 15, 2013

EXHIBIT 23.1

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Cytori Therapeutics, Inc.:

We consent to the incorporation by reference in the registration statements (Nos. 333-181764, 333-82074, and 333-122691) on Form S-8 and (Nos. 333-134129, 333-140875, 333-153233, 333-157023, 333-159912, 333-169822, and 333-172787) on Form S-3 of Cytori Therapeutics, Inc. of our reports dated March 15, 2013, with respect to the consolidated balance sheets of Cytori Therapeutics, Inc. and subsidiaries as of December 31, 2012 and 2011, and the related consolidated statements of operations and comprehensive loss, stockholders' equity (deficit), and cash flows for each of the years in the three year period ended December 31, 2012, the accompanying schedule of valuation and qualifying accounts, and the effectiveness of internal control over financial reporting of Cytori Therapeutics, Inc. and subsidiaries as of December 31, 2012, and to the reference to our firm in Item 6, Selected Financial Data, which reports and reference to our firm appears in the December 31, 2012, annual report on Form 10-K of Cytori Therapeutics, Inc.

/s/ KPMG LLP

San Diego, California
March 15, 2013

EXHIBIT 31.1

Certification of Principal Executive Officer Pursuant to
Securities Exchange Act Rule 13a-14(a)
As Adopted Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002

I, Christopher J. Calhoun, certify that:

1. I have reviewed this annual report on Form 10-K of Cytori Therapeutics, 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(s) 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(s) 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 persons 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: March 15, 2013
/s/ Christopher J. Calhoun
Christopher J. Calhoun,
Chief Executive Officer

EXHIBIT 31.2

Certification of Principal Financial Officer Pursuant to
Securities Exchange Act Rule 13a-14(a)
As Adopted Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002

I, Mark E. Saad, certify that:

1. I have reviewed this annual report on Form 10-K of Cytori Therapeutics, 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(s) 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(s) 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 persons 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: March 15, 2013
/s/ Mark E. Saad
Mark E. Saad,
Chief Financial Officer

EXHIBIT 32.1

CERTIFICATIONS PURSUANT TO 18 U.S.C. SECTION 1350/ SECURITIES EXCHANGE ACT RULE 13a-14(b), AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES – OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of Cytori Therapeutics, Inc. for the year ended December 31, 2012 as filed with the Securities and Exchange Commission on the date hereof, Christopher J. Calhoun, as Chief Executive Officer of Cytori Therapeutics, Inc., and Mark E. Saad, as Chief Financial Officer of Cytori Therapeutics, Inc., each hereby certifies, respectively, that:

1. The Form 10-K report of Cytori Therapeutics, Inc. that this certification accompanies fully complies with the requirements of section 13(a) of the Securities Exchange Act of 1934.

2. The information contained in the Form 10-K report of Cytori Therapeutics, Inc. that this certification accompanies fairly presents, in all material respects, the financial condition and results of operations of Cytori Therapeutics, Inc.

By: /s/ Christopher J. Calhoun
Christopher J. Calhoun
Chief Executive Officer

Dated: March 15, 2013

By: /s/ Mark E. Saad
Mark E. Saad
Chief Financial Officer

Dated: March 15, 2013

Proxy Statement

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

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant ☒
Filed by a Party other than the Registrant ☐

Check the appropriate box:

☒ Preliminary Proxy Statement
☐ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
☐ Definitive Proxy Statement
☐ Definitive Additional Materials
☐ Soliciting Material Pursuant to Rule 14a-11(c) or Rule 14a-12

CYTORI THERAPEUTICS, INC.
(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

☒ No fee required

☐ Fee computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11
(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11:

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

☐ Fee paid previously with preliminary materials.

☐ Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

NOTICE OF 2013 ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON AUGUST 28, 2013

CYTORI THERAPEUTICS, INC
Headquarters
3020 CALLAN RD
SAN DIEGO, CALIFORNIA 92121

Meeting Location
HILTON SAN DIEGO/DEL MAR
DEL MAR BALLROOM
15575 JIMMY DURANTE BLVD.
DEL MAR, CALIFORNIA 92014

Dear Cytori Therapeutics, Inc. Stockholder:

You are cordially invited to attend the 2013 Annual Meeting of the stockholders of Cytori Therapeutics, Inc. The Annual Meeting will be held on August 28, 2013, commencing at 9:00 a.m., San Diego local time.

The meeting will be webcast live for those who are unable to attend in person. To access the webcast of the meeting, please visit the Investor Relations section of our corporate website at ir.cytori.com. To vote online, please see the instructions on the accompanying proxy card.

The items of business for the meeting are:

- Election of members of our Board of Directors for a one-year term;
- Ratification of appointment of the independent registered public accounting firm;
- Approval of an Amendment to our Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 95,000,000 shares to 145,000,000 shares; and to transact such other business properly brought before the meeting or any adjustments or postponements thereof.

We have attached a Proxy Statement that contains more information about these items and the meeting. Stockholders that own stock at the close of business on July 2, 2013, the record date, can vote at the meeting. A list of our stockholders entitled to vote will be available for inspection by any stockholder at our offices in San Diego, during normal business hours for ten business days prior to the meeting. This list will also be available during the meeting.

As permitted by rules adopted by the U.S. Securities and Exchange Commission, we are using the Internet as our primary means of furnishing proxy materials to our stockholders. We will send our stockholders a notice with instructions for accessing the proxy materials and voting electronically over the Internet or by telephone. The notice also provides information on how stockholders may request paper copies of our proxy materials. For those stockholders who elect to receive their proxy materials in the mail, please review the Proxy Statement and Annual Report and vote using the enclosed proxy card.

We hope that you will find it convenient to attend the meeting in person. Whether or not you expect to attend, please vote electronically over the Internet or by telephone, or if you receive a proxy card in the mail, by mailing the completed proxy card to the Company to ensure your representation at the meeting and the presence of a quorum. If you decide to attend the meeting and wish to change your proxy vote, you may do so by voting in person at the meeting. If your shares are held in the name of a bank or broker, however, you must obtain a legal proxy from the bank or broker to attend the meeting and vote in person.

By Order of the Board of Directors,

CHRISTOPHER J. CALHOUN
Chief Executive Officer

San Diego, California, USA
July 19, 2013

Cytori Therapeutics, Inc.
3020 Callan Road
San Diego, CA 92121
(858) 458-0900

PROXY STATEMENT

2013 ANNUAL MEETING OF STOCKHOLDERS

The 2012 Annual Report to Stockholders, including financial statements, is being made available to stockholders together with these proxy materials on or about July 19, 2013.

This Proxy Statement is being furnished in connection with the solicitation of proxies by and on behalf of our Board of Directors to be used at our Annual Meeting of stockholders to be held on August 28, 2013 at 9:00 a.m., San Diego local time, and at any postponement of the Annual Meeting, for the purposes set forth in the accompanying notice of Annual Meeting.

We have fixed the close of business on July 2, 2013 as the record date for the determination of the stockholders entitled to notice of and to vote at the Annual Meeting. Only holders of record of shares of our common stock on that date are entitled to notice of and to vote at the Annual Meeting.

Questions and Answers about the Meeting and Voting

1. What is a Proxy Statement and why has this Proxy Statement been provided to me?

A Proxy Statement is a document that the U.S. Securities and Exchange Commission ("SEC") regulations require us to give you when we ask you to sign a proxy card with regard to voting on proposals at the Annual Meeting. Among other things, a Proxy Statement describes those proposals and provides information about us. Our Board of Directors is soliciting your proxy to vote at the Annual Meeting and at any postponement of the Annual Meeting. The Annual Meeting will be held at the Hilton San Diego/Del Mar, Del Mar Ballroom, 15575 Jimmy Durante Blvd., Del Mar, CA 92014. We will use the proxies received in connection with proposals to:

- Elect members of our Board of Directors for a one-year term;
- Ratify the appointment of KPMG LLP as our independent registered public accounting firm for the 2013 fiscal year;
- Approve the Amendment to our Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock; and
- Transact any other business that is proposed in accordance with our by-laws before the Annual Meeting is finally adjourned.

2. Why did I receive a notice in the mail regarding Internet availability of proxy materials this year instead of a full set of proxy materials?

We are now providing access to our proxy materials on the Internet. Some stockholders (those who hold in "street name") will not receive printed copies of the proxy materials unless requested. Instead, these stockholders will receive a Notice of Internet Availability of Proxy Materials that will instruct you as to how you may access and review the proxy materials on the Internet. The Notice explains how you may vote your proxy. If you received a Notice by mail and would like to receive a printed copy of our proxy materials, you should follow the instructions for requesting printed materials included in the Notice.

3. *What is a proxy?*

A proxy is your legal designation of another person to vote the stock you own. That designee is referred to as a proxy holder. Designation of a particular proxy holder can be effected by completion of a written proxy card, or by voting via the Internet or by telephone. Our Chief Executive Officer and Director, Christopher J. Calhoun, and our President and Director, Marc H. Hedrick, M.D., have each been designated as the proxy holders for the Annual Meeting.

4. *What is the difference between a stockholder of record and a beneficial owner who holds stock in street name?*

You are a stockholder of record, or a "registered holder", if your shares are registered in your own name through our transfer agent. You are a beneficial owner of our stock in street name if you hold your shares through a broker, bank or other third party institution (in this situation, the banks, brokers, etc. are the stockholders of record). The vast majority of our stockholders are represented on our share register in the name of a bank, broker or other third party institution and not in their own name. If you have elected to hold your shares in certificate form, your name will appear directly on our register as a stockholder of record.

5. *What different methods can I use to vote?*

If you are a registered holder and you are viewing this proxy over the Internet, you may vote electronically over the Internet. For those stockholders who receive a paper proxy in the mail, you may also vote electronically over the Internet or by telephone or by completing and mailing the proxy card provided. The website identified in our Notice of Internet Availability of Proxy Materials provides specific instructions on how to vote electronically over the Internet. Those stockholders who receive a paper proxy by mail, and who elect to vote by mail, should complete and return the mailed proxy card in the prepaid and addressed envelope that was enclosed with the proxy materials.

If you are the beneficial owner of stock in street name, that is, your shares are held in the name of a brokerage firm, bank or other nominee, you will receive instructions from your broker, bank or other nominee that must be followed in order for you to vote your shares. Your broker will be sending you a Notice of Internet Availability which contains instructions on how to access the website and to vote your shares. If, however, you have elected to receive paper copies of our proxy materials from your brokerage firm, bank or other nominee, you will receive a voting instruction form. Please complete and return the enclosed voting instruction form in the addressed, postage paid envelope provided.

Stockholders who have previously elected to access our proxy materials and annual report electronically over the Internet will continue to receive an email, referred to in this Proxy Statement as an email notice, with information on how to access the proxy information and voting instructions.

Only proxy cards and voting instruction forms that have been signed, dated and timely returned and only proxies that have been timely voted electronically or by telephone will be counted in the quorum and voted. *The Internet and telephone voting facilities will close at 11:59 p.m. Eastern Time, August 27, 2013.*

Stockholders who vote over the Internet or by telephone need not return a proxy card or voting instruction form by mail, but may incur costs, such as usage charges, from telephone companies or Internet service providers.

You may also vote your shares in person at the Annual Meeting. If you are a registered holder, you may request a ballot at the Annual Meeting. If your shares are held in street name and you wish to vote in person at the meeting, you must obtain a proxy issued in your name from your broker, bank or other nominee and bring it with you to the Annual Meeting. We recommend that you vote your shares in advance as described above so that your vote will be counted if you later decide not to attend the Annual Meeting.

If you receive more than one Notice of Internet Availability of Proxy Materials, email notice, proxy card or voting instruction form because your shares are held in multiple accounts or registered in different names or addresses, please vote your shares held in *each account* to ensure that all of your shares will be voted.

6. What is the record date and what does it mean?

The record date for the 2013 Annual Meeting is July 2, 2013. The record date is established by our Board of Directors as required by Delaware General Corporation law. Owners of our common stock at the close of business on the record date are entitled to receive notice of the meeting and to vote at the meeting and any postponements of the meeting.

7. How can I change my vote?

You may revoke your proxy and change your vote at any time before the final vote at the meeting. You can revoke a proxy by giving written notice or revocation to our corporate secretary, following the Internet voting instructions, delivering a later dated proxy, or voting in person at the meeting. However, your attendance at the Annual Meeting will not automatically revoke your proxy unless you vote again at the meeting or specifically request in writing that your proxy be revoked.

8. What are my voting choices when voting for director nominees and what vote is needed to elect directors?

In voting on the election of director nominees to serve until the 2014 Annual Meeting, stockholders may vote in favor of each nominee, or may withhold votes as to each nominee. In addition, if any other candidates are properly nominated at the meeting, stockholders of record who attend the meeting could vote for the other candidates. Directors will be elected by a plurality of the votes cast. Stockholders are not entitled to cumulative voting rights with respect to the election of directors. Abstentions and broker non-votes will not be counted as votes cast and, therefore, have no direct effect on the election of directors.

The Board recommends a vote "FOR" each of the director nominees identified in this proxy statement.

9. What are my voting choices when voting to ratify the appointment of our independent registered public accounting firm?

In voting on the ratification of the appointment our independent registered public accounting firm, stockholders may vote in favor of or against the appointment, or may abstain from voting on the appointment. The affirmative vote of a majority of the shares of common stock present in person or represented by proxy and voting at the meeting is required to approve this proposal. Abstentions will be counted as present for purposes of determining a quorum and are considered shares present and entitled to vote and thus will have the effect of a vote "AGAINST" this proposal. Broker non-votes will not be counted as votes cast and, therefore, have no direct effect on this proposal.

The Board recommends a vote "FOR" ratification.

10. What are my voting choices when voting to approve the amendment to the Company's Amended and Restated Certificate of Incorporation?

In voting on the approval of the amendment to our Amended and Restated Certificate of Incorporation to increase the authorized shares of common stock from 95,000,000 to 145,000,000, stockholders may vote in favor of the approval or against the approval, or may abstain from voting on the approval of the amendment. The affirmative vote of a majority of the shares of common stock issue and outstanding is required to approve this proposal. As a result, any shares not voted (whether by abstention or otherwise) will have the same effect as a vote "AGAINST" this proposal.

The Board recommends a vote "FOR" the amendment of the Company's Amended and Restated Certificate of Incorporation.

11. How will a proxy get voted?

If you properly complete and return a proxy card or vote by Internet or by telephone, the designated proxy holders will vote your shares as you have directed. If you sign a proxy card but do not make specific choices or if you vote by Internet or telephone but do not make specific choices, the designated proxy holders will vote your shares as recommended by the Board of Directors as follows:

- "**FOR**" the election of each listed nominee for director;
- "**FOR**" ratification of KPMG LLP as our independent registered public accounting firm for the 2013 fiscal year.
- "**FOR**" approval of the Amendment to the Company's Amended and Restated Certificate of Incorporation.

12. How are abstentions and broker non-votes counted?

Abstentions and broker non-votes will be counted as present for purposes of determining a quorum. An abstention occurs when a stockholder withholds his or her vote by checking the "abstain" box on the proxy card or (if present and voting at the meeting) a ballot. A broker non-vote occurs when a broker, bank, or other stockholder of record, in nominee name or otherwise, exercising fiduciary powers submits a proxy for the Annual Meeting, but does not vote on a particular proposal because that holder does not have discretionary voting power with respect to that proposal and has not received voting instructions from the beneficial owner. Under the rules that govern brokers who are voting with respect to shares held in street name, brokers have the discretion to vote those shares on routine matters, but not on non-routine matters. Routine matters include the ratification of the appointment of our independent registered public accounting firm. Non-routine matters include the election of directors and the amendment of the Company's Amended and Restated Certificate of Incorporation to increase the number of authorized shares of our common stock from 95,000,000 shares to 145,000,000 shares.

13. Who pays for the solicitation of proxies?

We pay the entire cost of the solicitation of proxies. This includes preparation, assembly, printing, and mailing of the Notice of Internet Availability, this Proxy Statement and any other information we send to stockholders. We may supplement our efforts to solicit your proxy in the following ways:

- We may contact you using the telephone or electronic communication;
- Our directors, officers, or other regular employees may contact you personally; or
- We may hire agents for the sole purpose of contacting you regarding your proxy.

If we hire soliciting agents, we will pay them a reasonable fee for their services. We will not pay directors, officers, or other regular employees any additional compensation for their efforts to supplement our proxy solicitation. We anticipate banks, brokerage houses and other custodians, nominees, and fiduciaries will forward soliciting material to the beneficial owners of shares of common stock entitled to vote at the Annual Meeting and that we will reimburse those persons for their out-of-pocket expenses incurred in this connection.

14. What constitutes a quorum?

In order for business to be conducted at the Annual Meeting, a quorum must be present. A quorum exists when at least 33 ⅓ % of the holders of shares of common stock issued, outstanding and entitled to vote are represented at the meeting. Shares of common stock represented in person or by proxy (including broker non-votes and shares that abstain or do not vote with respect to one or more of the matters to be voted upon) will be counted for the purpose of determining whether a quorum exists.

15. How many votes may I cast? How many shares are eligible to be voted?

You may cast one vote for every share of our common stock that you owned on the record date. As of the record date, July 2, 2013, there were 67,235,591 shares of our common stock outstanding, each of which is entitled to one vote.

16. How will voting on "any other business" be conducted?

Although we do not know of any business to be considered at the Annual Meeting other than the proposals described in this Proxy Statement, if any additional business is presented at the Annual Meeting, your signed proxy card gives authority to the designated proxy holders to vote on such matters at their discretion.

17. Where can I find the voting results of the Annual Meeting?

We will publish the final voting results in a current report on Form 8-K, which we expect to file with the SEC within four business days of the Annual Meeting. If the final voting results are unavailable in time to file a current report on Form 8-K with the SEC within four business days after the Annual Meeting, we intend to file a Form 8-K to disclose the preliminary results and, within four business days after the final results are known, we will file an additional current report on Form 8-K with the SEC to disclose the final voting results.

PROPOSAL #1.

ELECTION OF DIRECTORS

The Board of Directors, upon recommendation of our Governance and Nominating Committee, has nominated the following persons listed below for election as directors. The names of the eight nominees for election as directors are set forth below (the ages shown are as of August 28, 2013). Each of the nominees is currently serving as a member of our Board of Directors. All directors are elected annually and serve a one-year terms until the next Annual Meeting, or until their respective successors are duly elected. All of the nominees listed below are expected to serve as directors if they are elected. If any nominee should decline or be unable to accept such nomination or to serve as a director, an event which our Board of Directors does not now expect, our Board of Directors reserves the right to nominate another person or to vote to reduce the size of our Board of Directors. If another person is nominated, the proxy holders intend to vote the shares to which the proxy relates for the election of the persons nominated by our Board of Directors.

For more information on nomination of directors, see "Director Nominations" below in the section entitled "Corporate Governance."

The Board of Directors recommends a vote "FOR" the nominees named below:

Nominees and Business Experience

Name	Age	Position
David M. Rickey	57	Chairman of the Board of Directors
Christopher J. Calhoun	47	Chief Executive Officer and Director
Lloyd H. Dean	63	Director
Richard J. Hawkins	64	Director
Paul W. Hawran	61	Director
Marc H. Hedrick, MD	51	President and Director
E. Carmack Holmes, MD	75	Director
Tommy G. Thompson	71	Director

David M. Rickey has served as a Director of the Company since November 1999 and was appointed the Chairman of the Board in June 2013. Mr. Rickey was President and Chief Executive Officer of Applied Micro Circuits Corporation (AMCC), which provides high-performance, high-bandwidth silicon solutions for optical networks, from February 1996 to March 2005. Mr. Rickey served on the Board of Directors of AMCC from February 1996 to March 2005, and as its Chairman of the Board from August 2000 to March 2005. Mr. Rickey also served as a Director of AMI Semiconductor, Inc. from 2000 to 2006 and was a Director of Netlist, Inc. from 2005 to 2008, as well as several private technology companies. He holds a B.S. from Marietta College, a B.S. from Columbia University and an M.S. from Stanford

University. Mr. Rickey's qualifications to sit on our Board of Directors include his extensive executive experience, and his service on other public company boards and committees.

Christopher J. Calhoun is a co-founder of the Company and has served as Chief Executive Officer and Director since 1997. Mr. Calhoun also served as our President from April 2002 to May 2005 and from 1996 to 1998. He is a co-inventor on multiple U.S. and international patents for medical devices and implant instrumentation, and was involved in research and management for the Plastic Surgery Bone Histology and Histometry Laboratory at the University of California, San Diego. Mr. Calhoun is a co-founder and Chairman of the Board of Leonardo MD, and previously served on the Board of Directors of StemSource, Inc. which was acquired by the Company in 2002. Mr. Calhoun serves on the Board of Directors of The Alliance for Regenerative Medicine (ARM) and also serves as a member of their Executive Committee. Mr. Calhoun earned a B.A. from the University of California, San Diego and an M.B.A from the University of Phoenix. Mr. Calhoun's qualifications to sit on our Board of Directors include his knowledge of the medical device business, his experience in manufacturing, biotechnology and regenerative medicine, and his in-depth operating experience as a senior executive of our Company, and his service on other company boards.

Lloyd H. Dean has served as a director of the Company since 2010 and served as Chairman of our Company's Board of Directors from April 2011 until June 2013. Mr. Dean is a nationally recognized leader within and beyond the field of health care. He is President/CEO of Dignity Health, the 5th largest health system in the U.S. with 40 hospitals and more than 80 ancillary care centers throughout California, Arizona, and Nevada. He is responsible for the organization's $13 billion in assets, overall management, governance, strategy, and direction. He has led Dignity Health through significant strategic, operational, and financial transformations and has brought the organization to its current status as a leading health care organization recognized for high quality, compassionate care, operational excellence, and strong financial results. Mr. Dean is a member of the Board of Directors of Wells Fargo & Company since 2005, and is chairperson for its Board Human Resources Committee, and serves on the Board Corporate Responsibility Committee, Board Risk Committee and Board Governance Nominating Committee. He is also the Chair of the Board of Directors for the Committee on Jobs, an organization that brings employment to the San Francisco Bay Area. Mr. Dean is a member of the Board of Directors for Mercy Housing California, a not-for-profit organization dedicated to developing, operating and financing affordable housing. He previously served as the chairperson of the Catholic Health Association of the United States and was a member of its Board of Trustees. A strong advocate for health care reform, Mr. Dean has been actively engaged with the White House Cabinet on health care issues. He directly participated in health care reform discussions with President Barack Obama and his staff at the White House and has been appointed to the State Health Care Cost Commission charged to develop practical state policies to contain health care costs in the nation. Mr. Dean holds degrees in sociology and education from Western Michigan University, and received an honorary doctorate of humane letters from the University of San Francisco. In 2012 he was ranked number 23 in *"Modern Healthcare's 100 Most Influential People in Healthcare"* and is also consistently named one of the *"Top 25 Minority Leaders in Healthcare."* Mr. Dean's qualifications to sit on our Board of Directors include his extensive executive experience, his in-depth knowledge of the healthcare industry, and his service on other public company boards and committees.

Richard J. Hawkins has served as a Director of the Company since December 2007. In 1982, Mr. Hawkins founded Pharmaco, a clinical research organization (CRO) that merged with the predecessor of PPD-Pharmaco in 1991 and is one of the largest CROs in the world today. In 1992, Mr. Hawkins co-founded Sensus Drug Development, which developed and received regulatory approval for SOMAVERT®, a growth hormone antagonist approved for the treatment of acromegaly, which is now marketed by Pfizer in both the United States and Europe, and he served as Chairman until 2000. In 1994, Mr. Hawkins co-founded Corning Biopro, a contract protein manufacturing firm where he served on the Board until 2000. In September 2003 Mr. Hawkins founded LabNow, Inc., a privately held company that develops lab-on-a-chip sensor technology, where he served as the Chairman and CEO until October 2009. Mr. Hawkins has served on the Board of SciClone Pharmaceuticals, Inc. since October 2004. In February 2011, Mr. Hawkins became CEO, and is currently CEO, of Lumos Pharma, Inc., a start-up pharma company. He served on the Presidential Advisory Committee for the Center for Nano and Molecular Science and Technology at the University of Texas in Austin, and was inducted into the Hall of Honor for the College of Natural Sciences at the University of Texas. Mr. Hawkins graduated cum laude with a B.S. in Biology from Ohio University. Mr. Hawkins's qualifications to sit on our Board of Directors include his executive experience working with life sciences companies, his extensive experience in pharmaceutical research and development, his knowledge, understanding and experience in the regulatory development and approval process and his service on other public company boards and committees.

Paul W. Hawran has served as a Director of the Company since February 2005. Mr. Hawran has held various executive, strategic, financial and operational positions in the health care industry for over 30 years. Currently, Mr. Hawran is a Founder and President and CEO of Ascendant MDx, a molecular diagnostic testing company focused on women's health care, since November, 2010. Prior to Ascendant MDx, Mr. Hawran was the Chief Financial Officer of Sequenom, Inc., a publicly traded genetics company, from April, 2007 to September, 2009, served on their Board of Directors from August, 2006 to February, 2007 and was the Chairman of the Audit Committee of the Board of Directors. Mr. Hawran also served as a Founder, Executive Vice President and Chief Financial Officer of Neurocrine Biosciences, Inc. from May 1993 through September 2006, and as a Senior Advisor to Neurocrine from September 2006 through April 2007. Neurocrine Biosciences, Inc. is a publicly traded company engaged in pharmaceutical drug development. Mr. Hawran was employed by SmithKline Beecham (now Glaxo SmithKline) from July 1984 to May 1993, most recently as Vice President and Treasurer. Prior to joining SmithKline in 1984, he held various financial positions at Warner Communications (now Time Warner) involving corporate finance and financial planning and forecasting. Mr. Hawran earned a B.S. in Finance from St. John's University and an M.S. in Taxation from Seton Hall University. He is a Certified Public Accountant (currently inactive) and is a member of the American Institute of Certified Public Accountants. Mr. Hawran's qualifications to sit on our Board of Directors include his executive experience in life sciences industries, his extensive experience in corporate finance and financial planning, his status as a audit committee financial expert within the meaning of Item 407(d)(5) of SEC Regulation S-K and his service on other public company boards and committees.

Marc H. Hedrick, M.D. was appointed President of the Company in May 2004, and joined us as Chief Scientific Officer, Medical Director and Director in October 2002. In December 2000, Dr. Hedrick co-founded and served as President and Chief Executive Officer and Director of StemSource, Inc., a company specializing in stem cell research and development, which was acquired by the Company in 2002. He is a plastic surgeon and is a former Associate Professor of Surgery and Pediatrics at the University of California, Los Angeles (UCLA). From 1998 until 2005, he directed the Laboratory of Regenerative Bioengineering and Repair for the Department of Surgery at UCLA. Dr. Hedrick earned his M.D. degree from University of Texas Southwestern Medical School, Dallas and an M.B.A. from UCLA Anderson School of Management. Dr. Hedrick's qualifications to sit on our Board of Directors include his experience as a general, vascular and plastic surgeon; his academic appointments and achievements in the life sciences; his executive and managerial experience in stem cell research and scientific product development, and his foundational knowledge, experience and contributions to the specific technology and operations of our company. In addition, Dr. Hedrick has extensive global experience and familiarity with the cell therapy and regenerative medical industry.

E. Carmack Holmes, M.D. has served as a Director of the Company since August 2003. Dr. Holmes served as the Surgeon-in-Chief of the University of California Los Angeles (UCLA) Medical Center and held the position of William P. Longmire, Jr. Professor and Chairman, Department of Surgery, UCLA School of Medicine, from 1994 to 2004. He joined UCLA in 1973 and has held professorial positions in the Divisions of Cardiothoracic Surgery and Surgical Oncology for over 30 years. He served as Vice-Chairman for five years prior to holding the positions of Chairman and Surgeon-in-Chief. He also founded and served as Director of the Wunderman Foundation Cell Growth Regulation Program. Dr. Holmes is the recipient of numerous awards and grants and professional memberships including the American Surgical Association, the American College of Surgeons and the Association for Academic Surgeons. He has authored 250 medical publications throughout his career and has been an internationally invited lecturer for over 25 years. His surgical training was conducted at Johns Hopkins University and the National Cancer Institute at the National Institutes of Health (NIH). Dr. Holmes also served on the Board of Directors of StemSource, Inc. which was acquired by the Company in 2002. Dr. Holmes graduated from Duke University and holds an M.D. from the University of North Carolina Medical School. Dr. Holmes's qualifications to sit on our Board of Directors include his medical and academic experience at a prominent institution, his experience with stem cell research and his prominent status as a surgeon, author and international lecturer.

Tommy G. Thompson has served as a Director of the Company since April, 2011. Mr. Thompson was a partner at the law firm of Akin Gump Strauss Hauer & Feld from March 2005 to January 2012. He served as U.S Department of Health and Human Services Secretary from January 2001 to January 2005, and was Governor of Wisconsin from January 1987 to January 2001. Mr. Thompson was the Chairman of the Board of Logistics Health, Inc., having been President from February 2005 to January 2011. Mr. Thompson has served as a Director of C.R. Bard since August 2005; a Director of CareView Communications, Inc. since July 2005; a Director of Centene Corporation since April 2005 and a Director of United Therapeutics Corporation since February 2011. He also served as Chairman of the Board of AGA Medical Corporation from July 2005 to November 2011. He is a recipient of the prestigious Horatio Alger Award and has served as chairman of the National Governors' Association, the Education Commission of the States, and the Midwestern Governors' Conference. Mr. Thompson received both his B.S. and his J.D. from the University of Wisconsin-Madison

and also served in the Wisconsin National Guard and the Army Reserve. Mr. Thompson's qualifications to sit on our Board of Directors include his significant experience in the healthcare industry both as a public official and in the private sector; his advocacy of innovative solutions to health care challenges, and his service on other public company boards and committees.

Required Vote

The nominees will be elected by a plurality of the votes cast in person or by proxy at the Annual Meeting assuming a quorum is present, which means that the director nominees receiving the highest number of "FOR" votes will be elected. Abstentions and broker non-votes will not be counted as votes cast and, therefore, will have no effect on the election of directors. Stockholders do not have cumulative voting rights in the election of directors.

YOUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE NOMINEES TO THE BOARD OF DIRECTORS NAMED ABOVE.

PROPOSAL #2.

RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Our Audit Committee has selected KPMG LLP ("KPMG") as our independent registered public accounting firm for the fiscal year ending December 31, 2013, and has further directed that we submit the selection of the independent registered public accounting firm for ratification by our stockholders at the Annual Meeting. KPMG was our independent registered public accounting firm for the fiscal year ended December 31, 2012. The selection of the independent registered public accounting firm is not required to be submitted for stockholder approval. However, if the stockholders do not ratify this selection, the Audit Committee will reconsider its selection of KPMG. Even if the selection is ratified, our Audit Committee may direct the appointment of a different independent accounting firm at any time during the year if the Audit Committee determines that the change would be in the Company's best interests.

Representatives of KPMG will be present at the Annual Meeting and will have an opportunity to make a statement if they desire to do so and will be available to respond to appropriate questions from stockholders.

Additional information concerning the Audit Committee and KPMG can be found in the "Audit Matters" section of this Proxy Statement.

Required Vote

The proposal to ratify the appointment of KPMG requires the affirmative vote of a majority of the shares present in person or represented by proxy at the Annual Meeting and entitled to vote on such proposal. Abstentions are considered present and entitled to vote with respect to this proposal and will, therefore, be treated as votes against this proposal. Broker non-votes will have no direct effect on this proposal.

YOUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE RATIFICATION OF THE SELECTION OF KPMG LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR FISCAL YEAR 2013.

PROPOSAL #3.

APPROVAL OF AN AMENDMENT TO OUR AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK FROM 95,000,000 TO 145,000,000.

Background

Article IV of our Amended and Restated Certificate of Incorporation, as amended (the **"Certificate"),** currently authorizes us to issue a total of 95,000,000 shares of common stock. On April 26, 2013, the Board unanimously approved an amendment to the Certificate to authorize an additional 50,000,000 shares of common stock (the **"Amendment"),** subject to stockholder approval. The Board has unanimously determined that the Amendment is advisable and in the best interests of the Company and our stockholders, and recommends that our stockholders approve the Amendment. In accordance with the General Corporation Law of the State of Delaware, we are hereby seeking approval of the Amendment by our stockholders.

Proposed Amendment

The Board is proposing the Amendment, in substantially the form proposed below, to increase the number of authorized shares of our common stock from 95,000,000 shares to 145,000,000 shares. Of the 95,000,000 shares of common stock currently authorized by the Certificate, as of June 30, 2013, 67,235,591 shares are issued and outstanding, 8,794,557 shares are reserved for issuance upon exercise of outstanding options and vesting of Restricted Stock Awards, 10,742,255 shares reserved for exercise of outstanding warrants, and 985,475 shares are reserved for future issuance under existing equity incentive plans. Therefore, we are currently limited to the issuance of 7,242,122 shares of common stock.

There are no shares of Preferred Stock currently outstanding, and no changes to the Certificate are being proposed with respect to the number of authorized shares of preferred stock. Other than the proposed increase in the number of authorized shares of common stock, the Amendment is not intended to modify the rights of existing stockholders in any material respect.

Regarding the authorized capital structure of the Company, the first paragraph of Article IV of the Certificate currently provides as follows:

> "This Corporation is authorized to issue two classes of stock to be designated, respectively, 'Common Stock' and 'Preferred Stock.' The total number of shares which the Corporation is authorized to issue is One Hundred Million (100,000,000) shares, Ninety Five Million (95,000,000) shares of which shall be Common Stock (the 'Common Stock') and Five Million (5,000,000) shares of which shall be Preferred Stock ('Preferred Stock'). The Common Stock and Preferred Stock shall each have a par value of $0.001 per share."

The Company's Board of Directors has approved the following amendment to Article IV, subject to approval of such amendment by the stockholders of the Company at the Annual Meeting, as specified below:

> The first paragraph of Article IV is to be deleted in its entirety and be replaced by the following paragraph:
>
> "This Corporation is authorized to issue two classes of stock to be designated, respectively, 'Common Stock' and 'Preferred Stock.' The total number of shares which the Corporation is authorized to issue is One Hundred Fifty Million (150,000,000) shares, One Hundred Forty Five Million (145,000,000) shares of which shall be Common Stock (the 'Common Stock') and Five Million (5,000,000) shares of which shall be Preferred Stock ('Preferred Stock'). The Common Stock and Preferred Stock shall each have a par value of $0.001 per share."

Reasons for the Amendment

The Board believes the Amendment is advisable and in the best interests of the Company and our stockholders to make available for future issuance a sufficient number of authorized shares of common stock to give us appropriate flexibility to issue shares for future corporate needs. The Board believes the proposed Amendment is advisable in order to maintain flexibility in today's competitive and changing environment.

As discussed under "Potential Effects of the Amendment" below, additional shares could be issued to oppose a hostile takeover attempt or delay or prevent changes in control of the Company or could be reserved as part of an anti-

takeover strategy or in connection with a stockholder rights plan. The additional authorized shares would also provide us with increased financing and capital raising flexibility and could be used for other business and financial purposes that the Board deems are in the Company's best interest, including the acquisition of other companies, businesses or products in exchange for common stock, attraction and retention of employees through the issuance of additional securities under our equity incentive plans, implementation of stock splits and issuance of dividends in the future and delay or prevent changes in control of the Company. Without an increase in the number of authorized shares of common stock, the Company may be constrained in its ability to raise capital, should the need arise, and may lose important business opportunities, including to competitors, which could adversely affect our financial performance and growth.

The additional authorized shares of common stock would enable us to act quickly in response to capital raising and other corporate opportunities that may arise (as described above), in most cases without the necessity of holding a special stockholders' meeting and obtaining further stockholder approval before the issuance of common stock could proceed, except as may be required by applicable law or the rules of the NASDAQ Stock Market or any other stock exchange on which our securities may be listed. Frequently, opportunities arise that require prompt action, and it is the belief of the Board that the delay necessitated for stockholder approval of a specific issuance could be to the detriment of the Company and its stockholders.

In determining the size of the proposed authorized share increase, the Board considered a number of factors, including the potential that over a number of years the Board may determine to effect one or more stock splits (in the form of stock dividends), that over a number of years the Company may potentially need additional shares in connection with future equity transactions, acquisitions or other strategic transactions.

Although at present the Board has no other plans to issue the additional shares of common stock, the Board believes it would be prudent and advisable to have those shares available to provide additional flexibility regarding the potential use of shares of common stock for business and financial purposes in the future. The additional shares could be used for various purposes without further stockholder approval. These purposes may include: raising capital; providing equity incentives to employees, officers or directors; establishing strategic relationships with other companies; expanding our business or product lines through the acquisition of other businesses or products; and other purposes. We review and evaluate potential capital raising activities, transactions and other corporate opportunities and potential anti-takeover strategies on an ongoing basis to determine if any such actions would be in the best interests of the Company and our stockholders.

Rights of Additional Authorized Shares

The additional authorized shares of common stock, if and when issued, would be part of the existing class of common stock and would have the same rights and privileges as the shares of common stock currently outstanding. Stockholders do not have preemptive rights with respect to our common stock. Therefore, should the Board determine to issue additional shares of common stock, existing stockholders would not have any preferential rights to purchase such shares in order to maintain their proportionate ownership thereof.

Potential Effects of the Amendment

The increase in the number of authorized shares of common stock will not have any immediate effect on the rights of our existing stockholders. The Board will have the authority to issue the additional shares of common stock without requiring future stockholder approval of such issuances, except as may be required by applicable law or rules of the NASDAQ Stock Market or any other stock exchange on which our securities may be listed. The adoption of the Amendment would not have any immediate dilutive effect on the proportionate voting power or other rights of existing stockholders. Any issuance of shares of our common stock would not affect the rights of our stockholders except for effects incidental to increasing the number of shares of common stock outstanding. Incidental effects of the increase in the outstanding number of shares of common stock may include dilution of the earnings per share and voting rights of current holders of common stock.

The authorization of additional shares of common stock could have an anti-takeover effect, in that the additional shares could be issued to oppose a hostile takeover attempt or delay or prevent changes in control of the Company or could be reserved as part of an anti-takeover strategy or in connection with a stockholder rights plan. For example, without further stockholder approval, the Board could sell shares of our common stock in a private transaction to purchasers who would oppose a takeover attempt or favor our current Board. Although this proposal to increase the number of authorized shares of common stock has not been prompted by any current or threatened hostile takeover

attempt, stockholders should be aware that approval of this proposal could facilitate future attempts by the Company to oppose changes in control of the Company and to perpetuate our then-current management, including the opposition of transactions in which the stockholders might otherwise receive a premium for their shares over then-current market prices. At the present time, our Board has no intention to use these additional shares for anti-takeover purposes.

Although we have no immediate plans to do so, we could use the additional authorized shares of common stock for potential strategic transactions, including, among other things, acquisitions, strategic partnerships, joint ventures, restructurings, divestitures, business combinations and investments. We cannot provide assurances that any such transactions would be consummated on favorable terms or at all, that they would enhance stockholder value or that they would not adversely affect our business or the trading price of our common stock. Any such transactions may require us to incur non-recurring or other charges and may pose significant integration challenges and/or management and business disruptions, any of which could materially and adversely affect our business and financial results.

Effectiveness of the Amendment and Required Vote

If the Amendment is approved by our stockholders, the Amendment will become effective upon its filing with the Delaware Secretary of State, which filing is expected to occur promptly after the Annual Meeting. If the Amendment is not approved by our stockholders, the Certificate will not be amended and the number of authorized shares of common stock will remain unchanged. Our Board reserves the right, notwithstanding stockholder approval of the Amendment and without further action by our stockholders, not to proceed with the amendment at any time before the filing of the Certificate of Amendment.

Approval of the Amendment will require that the holders of the shares of our common stock issued and outstanding and entitled to vote on the matter, vote to approve the Amendment by a majority vote of all votes entitled to be cast. As a result, abstentions will have the effect of a vote "AGAINST" this proposal. Broker non votes will have no direct effect on this proposal.

YOUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR"THE PROPOSAL OF THE AMENDMENT TO THE CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK FROM 95,000,000 to 145,000,000.

CORPORATE GOVERNANCE

The Board of Directors held seven meetings during 2012. The Audit Committee met seven times; the Compensation Committee met two times and took action via unanimous written consent four times; the Governance and Nominating Committee met three times; and the Executive Committee met five times and took action via unanimous written consent once.

Each member of the Board of Directors attended 75% or more of the aggregate of (i) the total number of Board meetings held during the period of such member's service and (ii) the total number of meetings of committees of the Board of Directors on which such member served, during the period of such member's service.

All board members are encouraged to attend our annual stockholders' meetings in person.

Board Independence

The Board of Directors has determined that Messrs. Hawkins, Hawran, Rickey, Dean, Thompson, and Dr. Holmes are "independent" under the rules of the NASDAQ Stock Market. Under applicable SEC and the NASDAQ rules, the existence of certain "related person" transactions above certain thresholds between a director and the Company are required to be disclosed and preclude a finding by the Board that the director is independent. The Board of Directors is not able to consider Mr. Calhoun, our Chief Executive Officer, or Dr. Hedrick, our President, independent, as a result of their respective employment with us during the past three years.

Board of Directors Leadership Structure

Our Amended and Restated Bylaws and governance principles provide the Board of Directors with the flexibility to combine or separate the positions of Chairman and Chief Executive Officer. Historically, these positions have been separate. Our Board believes that the separation of these positions strengthens the independence of our Board and allows us to have a Chairman focused on the leadership of the Board while allowing our Chief Executive Officer to focus more of his time and energy on managing our operations. The Board currently believes this structure works well to meet the leadership needs of the Board and of the Company. Mr. Calhoun, our Chief Executive Officer, has deep industry expertise and is able to devote substantial time to the Company, and Mr. Rickey, our Chairman, is able to devote focus on longer term and strategic matters, and to provide related leadership to the Board. As a result, we do not currently intend to combine these positions; however a change in this leadership structure could be made if the Board of Directors determined it was in the best long-term interests of stockholder based upon a departure of either our Chief Executive Officer or Chairman. For example, if the two roles were to be combined, we believe that the independence of the majority of our directors, and the three fully independent Board committees, would provide effective oversight of our management and the Company.

The Board's Role in Risk Oversight

The Board's role in risk oversight includes assessing and monitoring risks and risk management. The Board reviews and oversees strategic, financial and operating plans and holds management responsible for identifying and moderating risk in accordance with those plans. The Board fulfills its risk oversight function by reviewing and assessing reports from members of management on a regular basis regarding material risks faced by the Company and applicable mitigation strategy and activity, not less than quarterly. The reports cover the critical areas of operations, sales and marketing, development, regulatory and quality affairs, intellectual property, clinical development, legal and financial affairs. The Board and its Committees (described below) consider these reports; discuss matters with management and identify and evaluate any potential strategic or operational risks, and appropriate activity to address those risks.

Board Committees

The Board of Directors has standing Audit, Compensation, Executive, and Governance and Nominating Committees. All members of the Compensation Committee, Audit Committee, and Governance and Nominating Committee are independent directors. In January 2012, the Board expanded the Executive Committee to replace the prior Executive Committee and Special Pricing Committee of the Board.

Compensation Committee

In 2012, the Compensation Committee consisted of David M. Rickey (Chairman), Ronald D. Henriksen, Paul W. Hawran and Richard J. Hawkins. Each of these members is independent as defined by NASDAQ, a "Non-Employee Director" as defined by rule 16b-3(b)(3)(i) of the Securities Exchange Act of 1934, as amended, and an "outside director" as defined by Section 162(m) of the Internal Revenue Code of 1986, as amended. The Committee Chairman is responsible for setting the Committee's calendar and meeting agenda. Effective December 31, 2012, Mr. Henriksen retired from our Board of Directors and from the Compensation Committee. Effective January 1, 2013, the Compensation Committee consists of David M. Rickey (Chairman), Paul W. Hawran and Richard J. Hawkins.

The Compensation Committee is responsible for developing and implementing compensation programs for our executive officers and other employees, subject only to the discretion of the full Board. More specifically, our Compensation Committee establishes base salary rates for each of the Company's officers, and administers our Amended and Restated 1997 Stock Option and Stock Purchase Plan, our 2004 Equity Incentive Plan, our Executive Management Incentive Compensation Plan, and our 2011 Employee Stock Purchase Plan. This Committee establishes the compensation and benefits for our Chief Executive Officer and other executive officers, and annually reviews the relationship between our performance and our compensation policies as well as assessing any risks associated with our compensation policies. In addition, this Committee reviews and advises the Board concerning regional and industry-wide compensation practices and trends in order to assess the adequacy of our executive compensation programs. The charter of the Compensation Committee has been established and approved by the Board of Directors, and a copy of the charter has been posted on our website at www.cytori.com under Investor Relations – Corporate Governance.

The Compensation Committee has delegated to our CEO the authority to award stock option grants to non-executive employees from a pool of stock options set aside by the Committee from time to time. Any grant made from such pool to a non-executive employee may not exceed 16,000 shares and all of the grants shall have an exercise price equal to 100% of our Common Stock's fair market value on the grant date. We have a written policy that addresses the dates on which it is appropriate to grant such options. In addition, Mr. Calhoun:

- Makes recommendations to the Committee regarding the base salary, bonus and stock option award levels for our other executive officers; and
- Provides an annual recommendation to the Committee regarding overall Company performance objectives for the year and the individual performance objectives of each of our executive officers with respect to our Executive Management Incentive Compensation Plan, and reports to the Committee on the satisfaction of each such objective.

Mr. Calhoun attends some of the meetings of the Committee upon invitation, but does not participate in the executive sessions of the Committee.

Audit Committee

During 2012, Mr. Hawran (Committee Chairman), Mr. Henriksen, and Mr. Rickey were the members of our Audit Committee. Effective December 31, 2012, Mr. Henriksen retired from our Board of Directors and from the Audit Committee. Effective January 31, 2013, Mr. Henriksen was replaced on the Committee by Mr. Tommy G. Thompson. The Audit Committee is comprised solely of independent directors, as defined by NASDAQ. The Board of Directors has determined that Mr. Hawran is an "audit committee financial expert" within the meaning of Item 407(d)(5) of SEC Regulation S-K. The charter of the Audit Committee has been established and approved by the Board of Directors, and a copy of the charter has been posted on our website at www.cytori.com Investor Relations – Corporate Governance.

The Audit Committee selects our auditors, reviews the scope of the annual audit, approves the audit fees and non-audit fees to be paid to our auditors, and reviews our financial accounting controls with the staff and the auditors. The Audit Committee is also charged with review and oversight of management's enterprise risk management assessment.

Governance and Nominating Committee

Mr. Hawkins (Committee Chairman), Dr. Holmes, Mr. Dean, and Mr. Thompson comprised the members of our Governance and Nominating Committee in 2012. The Governance and Nominating Committee is comprised solely of independent directors, as defined by NASDAQ. The Governance and Nominating Committee interviews, evaluates, nominates and recommends individuals for membership on the Board, evaluates the effectiveness of the Board and its

serving members, and recommends the structure, responsibility and composition of the committees of the Board. The Committee is also responsible for recommending guidelines and policies for corporate governance for adoption by the Board. The charter of the Governance and Nominating Committee has been established and approved by the Board of Directors, and a copy of the charter has been posted on our website at www.cytori.com under Investor Relations – Corporate Governance.

Executive Committee

In January 2012, the Board expanded the Executive Committee to replace the prior Executive Committee and Special Pricing Committee of the Board. In January 2012, Mr. Dean replaced Mr. Henriksen as Chairman of the Executive Committee. Also in January 2012, Mr. Hawkins, Mr. Hawran, and Mr. Rickey joined the Executive Committee. In June 2013, when Mr. Rickey assumed the role of Chairman of the Board, he assumed the Role of Chairman of the Executive Committee, as well. The Executive Committee currently consists of Mr. Rickey (Chairman of the Board and Chair of the Compensation Committee), Mr. Calhoun (Chief Executive Officer), Mr. Hawkins (Chair of the Governance and Nominating Committee), and Mr. Hawran (Chair of the Audit Committee).

In January 2012, under the Executive Committee's new charter, the Committee is responsible to evaluate and approve the material terms of any financing transactions or business transactions as well as to authorize and approve the issuance of stock and/or other equity securities. The new Executive Committee also would be able to act on behalf of the full Board in urgent or exigent circumstances wherein it would be very difficult or impossible to assemble the full Board between regularly scheduled meetings. The Sub-Committee, consisting of Chairman of the Board and the CEO, has the authority to approve corporate expenditures presented by Management in excess of $250,000 up to a maximum of $1,000,000 for a single corporate transaction.

DIRECTOR NOMINATIONS

Criteria for Board Membership

In selecting candidates for appointment or re-election to the Board, the Governance and Nominating Committee seeks candidates with a broad diversity of experience, skills, professions, and backgrounds. The criteria include the candidate's integrity, business acumen, commitment, reputation among our various constituencies and communities, ability to make independent analytical inquiries, understanding of the Company's business environment, and willingness to devote adequate time to Board duties. The Board has also determined that gender and ethnic diversity of the Board will be an important factor in evaluation of candidates. There are no other pre-established qualifications, qualities or skills at this time that any particular Director nominee must possess and nominees are not discriminated against on the basis of race, religion, national origin, sexual orientation, disability or any other basis proscribed by law. The Governance and Nominating Committee does not assign specific weights to particular criteria, nor has it adopted a particular policy. Rather, the Board of Directors believes that the backgrounds and qualifications of the directors, considered as a group, should provide a composite mix of experience, knowledge and abilities that will allow the Board of Directors to fulfill its responsibilities. The goal of the Governance and Nominating Committee is to assemble a Board of Directors that brings to our Company a variety of skills derived from high quality businesses and professional experience. The Committee seeks to ensure that at least a majority of the directors are independent under NASDAQ rules, and that members of the Company's Audit Committee meet the financial literacy and sophistication requirements under the NASDAQ rules, and at least one of them qualifies as an "audit committee financial expert" under the rules of the SEC.

Stockholder Nominees

The Governance and Nominating Committee is responsible for the consideration of any director candidates recommended by security holders, provided such nominations are made in accordance with the Company's by-laws and applicable law. Any recommendations received from the security holders will be evaluated in the same manner that potential nominees suggested by Board members, management or other parties are evaluated. Any such nominations should be submitted to the Governance and Nominating Committee c/o the Secretary of the Company and should include the following information: (a) all information relating to such nominee that is required by the Company's Amended and Restated Bylaws (the "Bylaws"), and that is required to be disclosed pursuant to Regulation 14A under the Securities Exchange Act of 1934 (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected); (b) the names and addresses of the stockholders making the nomination and the number of shares of the Company's common stock which are owned beneficially and of record by such stockholders; and (c) other

appropriate biographical information and a statement as to the qualification of the nominee, and should be submitted no later than the deadlines described in the Bylaws of the Company and under the caption, "Stockholder Proposals for 2014 Annual Meeting" below.

STOCKHOLDER COMMUNICATION WITH THE BOARD

Stockholders may contact an individual director, the Board as a group, or a specified Board committee or group, including the independent directors as a group, by the following means:

- Mail:

  Chairman of the Board
  Cytori Therapeutics, Inc.
  3020 Callan Road
  San Diego, CA 92121

  CC: General Counsel

- E-mail: chairman@cytori.com

Each communication should specify the applicable addressee or addressees to be contacted as well as the general topic of the communication. The Chairman of the Board will initially receive and process communications before forwarding them to the addressee. Communications also may be referred to other departments within the Company. The Chairman of the Board generally will not forward to the directors a communication that he/she determines to be primarily commercial in nature or related to an improper or irrelevant topic, or that requests general information about the Company. Concerns about questionable accounting or auditing matters or possible violations of the Cytori Code of Business Conduct & Ethics should be reported pursuant to the procedures outlined in the Code of Business Conduct & Ethics, which are available on the Company's Web site in the Investor Relations Section under Corporate Governance Materials.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

In 2012, the Compensation Committee consisted of Messrs. Rickey (Chairman), Hawkins, Henriksen and Hawran, each of whom was an independent director and none of whom is a current or former employee of the Company. During 2012, none of our executive officers served as a director or member of the Compensation Committee or any Board committee performing equivalent functions for another entity that has one or more executive officers serving on our Board of Directors.

CODE OF BUSINESS CONDUCT AND ETHICS

We have adopted a Code of Business Conduct and Ethics that applies to all of our directors, officers and employees, including our principal executive officer, principal financial officer and controller. This Code of Business Conduct and Ethics has been posted on our website at www.cytori.com. We intend to post amendments to this code, or any waivers of its requirements, on our website at www.cytori.com under Investor Relations – Corporate Governance, as permitted under SEC rules and regulations.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information regarding ownership of our Common Stock as of June 30, 2013 (or earlier date for information based on filings with the SEC) by (a) each person known to us to own more than 5% of the outstanding shares of our Common Stock, (b) each director and nominee for director, (c) our Chief Executive Officer, President, Chief Financial Officer and each other executive officer named in the compensation tables appearing later in this Proxy Statement and (d) all directors and executive officers as a group. The information in this table is based solely on statements in filings with the SEC or other reliable information. A total of 67,235,591 shares of our common stock were issued and outstanding as of June 30, 2013.

Name and Address of Beneficial Owner [1]	Number of Shares of Common Stock Owned [2]	Number of Shares of Common Stock Subject to Options/Warrants Exercisable Within 60 Days [3]	Total Number of Shares of Common Stock Beneficially Owned [4]	Percent Ownership
Olympus Corporation Shinjuku Monolith, 3-1 Nishi-Shinjuku 2-Chome, Shinjuku-ku, Tokyo 163-0914, Japan	4,013,043	787,037	4,800,080	7.1%
BlackRock, Inc.[5] 40 East 52nd Street New York, NY 10022	**3,801,494**		**3,801,494**	**5.7%**
Christopher J. Calhoun	154,975	847,602	1,002,577	1.5%
Marc H. Hedrick, MD	**500,338**	**621,664**	**1,122,002**	**1.7%**
Mark E. Saad	119,000	668,748	787,748	1.2%
Seijiro N. Shirahama	**30,200**	**465,259**	**495,459**	*
Clyde W. Shores	20,000	80,989	100,989	*
David M. Rickey	**311,569**	**143,654**	**455,223**	*
E. Carmack Holmes, MD	37,401	203,654	241,055	*
Paul W. Hawran	**81,610**	**193,654**	**275,264**	*
Richard J. Hawkins	20,085	118,654	138,739	*
Lloyd H. Dean	**71,000**	**39,654**	**110,654**	*
Tommy Thompson	3,050	65,654	68,704	*
All executive officers and directors as a group (11)	**1,349,228**	**3,449,186**	**4,798,414**	**6.8%**

* Represents beneficial ownership of less than one percent (1%) of the outstanding shares as of June 30, 2013.

(1) Unless otherwise indicated, the address of each of the named individuals is c/o Cytori Therapeutics, Inc., 3020 Callan Road, San Diego, CA 92121.

(2) Unless otherwise indicated, represents shares of outstanding common stock owned by the named parties as of June 30, 2013.

(3) Shares of common stock subject to stock options or warrants currently exercisable or exercisable within 60 days of June 30, 2013 are deemed to be outstanding for computing the percentage ownership of the person holding such options and the percentage ownership of any group of which the holder is a member, but are not deemed outstanding for computing the percentage of any other person.

(4) The amounts and percentages of common stock beneficially owned are reported on the basis of regulations of the Securities and Exchange Commission governing the determination of beneficial ownership of securities. Under the rules of the Commission, a person is deemed to be a "beneficial owner" of a security if that person has or shares "voting power," which includes the power to vote or to direct the voting of such security, or "investment power," which includes the power to dispose of or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities for which that person has a right to acquire beneficial ownership within 60 days.

(5) Information reported is based on a Schedule 13G/A as filed with the Securities and Exchange Commission on February 08, 2013. According to the Schedule 13G/A, BlackRock, Inc. has (i) sole power to vote or to direct the vote of 3,801,494 shares; and (ii) sole power to dispose or to direct the disposition of 3,801,494 shares.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

During the year ended December 31, 2012, there has not been any transaction or series of similar transactions to which we were or are a party in which the amount involved exceeded or exceeds $120,000 and in which any of our directors or executive officers, any holder of more than 5% of any class of our voting securities or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than the compensation arrangements described herein and as otherwise set forth below.

Related Person Transactions

During the year ended December 31, 2012, we incurred approximately $232,000 in royalty costs in connection with our sales of our Celution® 800/CRS System products to the European and Asia-Pacific reconstructive surgery market, pursuant to our License and Royalty Agreement and the Amended License/Commercial Agreement with the Olympus-Cytori, Inc. joint venture. Additionally, in February 2012, we purchased second generation Celution® Systems and consumable sets from the Olympus-Cytori, Inc. joint venture, at a formula-based transfer price aggregating to $1,048,000. As of December 31, 2012, Olympus Corporation was a beneficial owner of more than five percent of our outstanding shares of common stock.

Procedures for Approval of Related Person Transactions

The Governance and Nominating Committee of the Board of Directors is responsible for reviewing and approving most material transactions with related persons, as such term is defined under Item 404 of Regulations S-K. However, in certain cases, transactions have been approved by the full Board of Directors, the Audit Committee, or some other committee consisting of all independent directors, as the case may be. In general, transactions with holders of our securities covered by Item 403(a) of Regulation S-K will be reviewed and approved by our full Board of Directors, so long as none of our directors or executive officers or their family members have a material interest in such transaction. Related parties include any of our directors or executive officers, certain of our stockholders and their immediate family members. This obligation is set forth in writing in our Governance and Nominating Committee Charter. A copy of the Governance and Nominating Committee Charter is available at www.cytori.com under Investor Relations – Corporate Governance.

To identify related person transactions, each year we submit and require our directors and officers to complete Director and Officer Questionnaires identifying any transactions with us in which the officer or director or their family members have an interest. We review related person transactions due to the potential for a conflict of interest. A conflict of interest occurs when an individual's private interest interferes, or appears to interfere, in any way with the interests of the Company. Our Code of Business Conduct and Ethics requires all directors, officers and employees who may have a potential or apparent conflict of interest, or become aware of a potential or apparent conflict of interest, to immediately notify our Compliance Officer or the Chairman of the Audit Committee.

We expect our directors, officers and employees to act and make decisions that are in the Company's best interests and encourage them to avoid situations which present an actual or perceived conflict between our interests and their own personal interests. Exceptions are only permitted in the reasonable discretion of the Board of Directors or the Corporate Governance and Nominating Committee, consistent with the best interests of the Company. In addition, we are strictly prohibited from extending personal loans to, or guaranteeing the personal obligations of, any director or officer.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934 requires our directors, executive officers, and persons or entities who own more than ten percent of our common stock, to file with the SEC reports of beneficial ownership and changes in beneficial ownership of our common stock. Those directors, officers, and stockholders are required by regulations to furnish us with copies of all forms they file under Section 16(a). Based solely upon a review of the copies of such reports furnished to us and written representations from such directors, officers, and stockholders, we believe that all such reports required to be filed during 2012 or prior fiscal years were filed on a timely basis.

EXECUTIVE OFFICERS

Biographical Information

The following table sets forth biographical information regarding our named executive officers as of June 30, 2013 (the ages shown are as of August 28, 2013).

Name	Age	Position(s)
Christopher J. Calhoun	47	Chief Executive Officer
Marc H. Hedrick, MD	51	President
Mark E. Saad	43	Chief Financial Officer
Seijiro N. Shirahama	59	President, Asia Pacific
Clyde W. Shores	53	Executive Vice President, Marketing and Sales

See "Proposal No. 1 Election of Directors" for biographical information regarding Mr. Calhoun and Dr. Hedrick.

Mark E. Saad joined Cytori Therapeutics as Chief Financial Officer in June 2004. Previously, Mr. Saad served as Chief Operating Officer of UBS, Healthcare Investment Banking, New York, where he was responsible for global investment banking operations. Upon joining UBS in 1999, Mr. Saad served as Director/Executive Director covering life sciences sectors - biotechnology and medical devices. Prior to joining UBS, he held the position of Financial Analyst/Associate with Salomon, Smith Barney, Healthcare Investment Banking, New York, where he managed public and private transactions. Mr. Saad holds a B.A. from Villanova University, Philadelphia, PA.

Seijiro N. Shirahama was appointed President – Asia Pacific in November 2007. Mr. Shirahama had served as Senior Vice President – Asia Pacific since November 2006, and as Vice President – Asia Pacific, from September 2002 to November 2006. Prior to that, from May 1999 to August 2002, Mr. Shirahama was President of Touchmetrics K.K., a diagnostic ultrasound firm. He held executive positions with Bristol-Myers Squibb K.K. from April 1997 to October 1998, and from March 1995 until March 1997, was the General Manager for Baxter Biotech Group in Tokyo, Japan. Mr. Shirahama holds a B.A. from Kanagawa University in Yokohama, Japan and an M.A. from the University of San Francisco.

Clyde W. Shores was appointed Executive Vice President, Marketing and Sales in May 2011. Mr. Shores has 28 years marketing and sales experience in pharmaceuticals, biologics, devices, and diagnostics. Prior to joining Cytori Therapeutics, Mr. Shores served as Vice President of Global Marketing for Baxter International's $2 billion Renal Division. Prior to Baxter, Mr. Shores held various senior marketing and sales positions at Amgen, Abbott Laboratories, Prometheus Laboratories and deCODE Genetics. Mr. Shores joined Amgen in 1990 and held a number of leadership positions during the company's rapid expansion in the 1990's. During his tenure at Amgen, Mr. Shores led multiple innovative marketing initiatives for Amgen's blockbuster oncology and stem cell therapy drugs Neupogen® and Neulasta® which have grown to more than $5 billion in annual revenues. Mr. Shores earned a B.S. degree from the Anderson School of Management at the University of New Mexico. Mr. Shores' cumulative experience has provided him with a fundamental understanding of the cell and regenerative medicine industry, the commercialization of innovative products and therapies and the marketing and sales capabilities required to achieve significant revenue growth in global markets.

Compensation Discussion and Analysis

This Compensation Discussion and Analysis is designed to provide stockholders with an understanding of our compensation philosophy and objectives as well as the analysis that we performed in setting executive compensation. It discusses the Compensation Committee's determination of how and why, in addition to what, compensation actions were taken during the last fiscal year for each person serving as our chief executive officer and our chief financial officer during 2012, and the three other most highly compensated executive officers who were serving as such at the end of 2012.

Our named executive officers for fiscal year 2012 were Christopher J. Calhoun, our Chief Executive Officer; Marc H. Hedrick, our President; Mark E. Saad, our Chief Financial Officer; Seijiro N. Shirahama, our President – Asia Pacific; and Clyde W. Shores, our Executive Vice President Marketing & Sales.

These individuals are collectively referred to in this discussion as the "named executive officers" because they are named in the compensation tables included in this proxy statement. Investors are encouraged to read this discussion in conjunction with the compensation tables and related notes, which include more detailed information about the compensation of the named executive officers for 2012 as well as prior years.

Compensation Philosophy for the Named Executive Officers

The Company's compensation programs for our officers are established by the Compensation Committee of the Board of Directors. The Committee believes that our compensation policy should align the financial interests of our executives with those of our stockholders. A key to creating this alignment is placing a substantial amount of executive compensation at risk based upon both the short-term and long-term performance of the Company, while discouraging any short-sighted risk-taking behavior. The Committee also seeks to maintain compensation programs that will retain the executives we have, and attract the executives we may need.

Executive Compensation

In the process of determining compensation for our named executive officers ("NEO's"), the Compensation Committee considers the current financial position of the Company, the strategic goals of the Company and the performance of our executives. The Committee also benchmarks the various components (described below) of our compensation program for executives to compensation paid by other public companies in our defined stem cell and biotechnology peer groups, compensation data from Radford Global Life Sciences Survey, historical review of all executive officer compensation and recommendations from our CEO (other than for his own salary). From time to time the Committee engages the services of outside compensation consultants. The Committee has the sole authority to select, compensate and terminate its external advisors.

The Committee utilizes the following components of compensation (described further below) to strike an appropriate balance between promoting sustainable and excellent performance and discouraging any inappropriate short-sighted risk-taking behavior:

- Base Salary;
- Annual short-term performance–based cash incentives (The Executive Management Incentive Compensation Plan);
- Long-term equity compensation in the form of Stock Options;
- Short-term equity compensation in the form of time and performance vested restricted stock awards;
- Personal benefits and perquisites; and
- Change in control and severance agreements.

Base Salary

In determining base salary for our executives the Committee considers the factors mentioned above, but base salaries are also designed to account for internal equity, length and depth of experience, the complexity and importance of roles and responsibilities, and reporting relationships.

In October 2011, the Committee benchmarked each executive's base salary and target bonus to the comparable positions in the 2011 Radford Global Life Sciences Survey, generally targeting the 50th – 60th percentile. The Committee also reviewed each executive's performance in relation to the 2011 Executive Management Incentive Compensation Plan (see further discussion below),the salary history for each of the executives, and Mr. Calhoun's recommendations for compensation for each of the officers of the Company below the level of the top three executives (CEO, President, CFO). Based on the Committee's review of the various factors mentioned above, the Committee adjusted the base salary of the executives as follows: Mr. Calhoun was increased from $454,272 to $467,900; Dr. Hedrick was increased from $394,784 to $406,628; Mr. Saad was increased from $378,560 to $389,917; Mr. Shores was increased from $325,000 to $329,469 (prorated for his start date in May 2011); and Mr. Shirahama was increased from $455,157 to $457,972. Mr. Shirahama's salary is set at the level considered appropriate by the Committee based upon the review and benchmarking noted above, but is subject to fluctuation as a result of the Company's recognition of any foreign currency gain or loss. (See Summary Compensation Table below for Mr. Shirahama's 2012 actual compensation as recognized by the Company.)

In October 2012, the Committee reviewed benchmarking data on compensation for executives from the 2012 Radford Global Life Sciences Survey and the most recent proxy information for selected market cap and industry peer group companies. The first peer group selected consisted of US public companies with particular emphasis on companies of similar to larger market capitalization in the biotechnology sector. Those companies consisted of:

Company	**Market Capitalization as of October 10, 2012**
BioMimetic Therapeutics	$122.18 Million
BioCryst Pharmaceuticals, Inc.	$207.53 Million
Dyax Corp	$235.60 Million
Immunomedics	$265.45 Million
Novavax, Inc.	$286.65 Million
Osiris Therapeutics	$313.89 Million
Ligand Pharmaceuticals	$343.90 Million
AVEO Pharma	$377.33 Million
QLT Inc	$389.94 Million
Alkermes	$2.52 Billion
Medicus Pharma	$2.51 Billion

The second peer group selected consisted of stem cell peers or other companies in the biotechnology sector at a similar stage in technology development and commercialization. Those companies consisted of:

Company	**Market Capitalization as of October 10, 2012**
Athersys	$34.7 Million
Neuralstem	$60.59 Million
Stemcells Inc.	$62.04 Million
Cell Therapeutics	$62.73 Million
Aastrom Biosciences	$63.15 Million
MELA Sciences	$94.61 Million
Hansen Medical	$110.47 Million
Neostem	$112.75 Million
Solta Medical, Inc.	$183.36 Million
Pain Therapeutics, Inc.	$247.22 Million
Sangamo Biosciences, Inc.	$307.5 Million
Neurocrine Bioscience	$520.65 Million
Dendreon	$627.76 Million
Isis Corporation	$1.24 Billion
Arena Pharmaceuticals	$2 Billion
Telik, Inc.	$3 Million

After review of the benchmark data, discussion of each executive's performance, with input from Mr. Calhoun (except for his own performance), the Committee decided to make no adjustments to base salaries or target bonus percentages.

	2011/2012 Base Salary	2012/2013 Base Salary	Target Bonus %
Mr. Calhoun	$467,900	$467,900	50%
Dr. Hedrick	$406,628	$406,628	40%
Mr. Saad	$389,917	$389,917	35%
Mr. Shirahama [1]	$455,157	$457, 972	25%
Mr. Shores	$329,469	$329,469	30%

(1) Mr. Shirahama's salary is set at the level considered appropriate by the Committee based upon the review and benchmarking noted above, but is subject to fluctuation as a result of the Company's recognition of any foreign currency gain or loss. (See Summary Compensation Table below for Mr. Shirahama's 2012 actual compensation as recognized by the Company.)

Executive Management Incentive Compensation Plan

Our Compensation Committee adopted the Cytori Therapeutics Executive Management Incentive Compensation Plan (EMIC) to increase the performance-based component of our executives' compensation by linking their bonus payments to achievement of shorter term performance goals. Target bonuses are reviewed annually and established as a percentage of the executive's base salary, generally based upon seniority of the officer and targeted at or near the median of the peer group and survey data described above. Each year the Committee establishes corporate and individual objectives and respective target percentages, taking into account recommendations from Mr. Calhoun as it relates to executive positions other than CEO. Objectives for Mr. Calhoun, Dr. Hedrick, and Mr. Saad were set by the Committee in 2012 to align with the overall corporate objectives. After fiscal year-end Mr. Calhoun provides the Committee with a written evaluation showing actual performance as compared to the objectives, and the Committee uses that information, along with the overall corporate performance, to determine what percentage of each executive's bonus target will be paid out as a bonus for that year. Overall, we attempt to set the corporate and individual functional goals to be highly challenging yet attainable. Our corporate financial objectives are intended to be more difficult to achieve than our actual expected results, such that their attainment would require exceptional performance and dedication from our management team.

For 2012, the general corporate objectives were determined by the Committee to account for 100% of the objectives for Mr. Calhoun, Dr. Hedrick, and Mr. Saad, and weight of 50% of the overall target bonus amounts for each of our other named executive officers. The general Company objectives were as follows:

- Business Development Objectives
  - Establish Strategic Partnership with target value objective in following potential areas:
    - Regional or Global therapeutic indication
    - Development milestones/ trial funding
    - Government contracting
- Regulatory and Clinical Objectives
  - ATHENA Clinical Trial
    - Approved Investigational Device Exemption (IDE)
    - Initiate (with active enrollment) 4 of 5 centers by end of year
  - ADVANCE Clinical Trial
    - Clarify EU regulatory path & solve regulatory issues
    - Receive country approvals for trial initiation in G-5 & Canada
  - BSI Approval for expansion of indications for No Option Chronic Myocardial Ischemia and/or expand wound indications
  - Canadian Celution System CE Mark / Approval
  - Win US 510(k) / Circuit Court Appeal on Banking Device and/or Diagnostic Device
- Financial Objectives
  - Accelerate global revenue growth to specified targets
  - Reduce global net operating loss to specified targets

- Achieve end of year cash position at specified target
- Operations Objectives
  - Achieve overall gross profit objective
    - Complete defined next generation device development milestones

The individual following named executive officers' objectives expanded upon their particular function in the overall corporate objectives and were to be weighted as 50% of their respective target bonus amounts.

Mr. Shirahama's individual objectives included:

- Achieve Asia Pacific target revenue objective
- Establish strategic partnership in Asia Pacific with target value objective

Mr. Shores' individual objectives included:

- Achieve overall gross margin objectives
- Accelerate revenue growth to specified targets
- Achieve business development and market access strategic objectives

The 2012 target bonus as a percentage of annual base salary for each named executive officer was: 50% for Mr. Calhoun; 40% for Dr. Hedrick; 35% for Mr. Saad, 30% for Mr. Shores and 25% for Mr. Shirahama.

The Compensation Committee, in its January 2013 meeting, evaluated our progress in 2012 as compared to overall the corporate objectives in the 2012 EMIC Plan described above. The Committee evaluated the overall results and then evaluated the progress of each executive officer towards their own functional objectives and the results are tabulated in the table below:

Officer and Position	Target Bonus as a % of Salary	% of Target Bonus Awarded	Bonus Awarded as a % of Salary	Amount of 2012 Bonus Paid in 2013
Christopher J. Calhoun, Chief Executive Officer	50%	47%	23.5%	$109,956
Marc H. Hedrick, President	40%	47%	18.8%	$76,446
Mark Saad, Chief Financial Officer	35%	47%	16.5%	$64,141
Seijiro N. Shirahama, President – Asia Pacific	25%	78.5%	19.6%	$89,877 (1)
Clyde Shores, Executive Vice President Marketing & Sales	30%	65%	19.5%	$65,276

(1) Mr. Shirahama's bonus was determined by the Committee as 19.6% of his base salary in US dollars as set by the Committee. The amount above reflects foreign currency exchange loss incurred at time of payment.

Long-Term Equity Compensation

We designed our long-term equity grant program to further align the interests of our executives with those of our stockholders and to reward the executives' longer-term performance. Historically, the Committee has granted individual option grant awards. In 2011, to further increase the emphasis on compensation tied to performance, awards of restricted stock with time and performance based vesting were added as a component of our equity compensation for executives. The Committee grants stock options or restricted stock based on its judgment as to whether the complete compensation packages to our executives, including prior equity awards, are sufficient to retain and incentivize the executives and whether the grants balance long-term vs. short-term compensation. The Committee also considers our overall performance as well as the individual performance of each NEO, and the potential dilutive effect of restricted stock awards, and the

dilutive and overhang effect of the option grant awards, and recommendations from Mr. Calhoun (other than with respect to his own option grants or restricted stock awards).

Our customary practice is to grant long-term equity compensation to the executives at the regularly-scheduled Compensation Committee meeting in the first quarter of the year, or as executive new hires are made or promotions granted. All stock options are granted with an exercise price equal to the fair market value of our Common Stock on the date of grant and restricted stock is awarded at the fair market value on the date of award. The Compensation Committee meeting dates are not related to dates for release of Company information.

After the annual review in January 2012, the Compensation Committee granted 230,000 stock options to Mr. Calhoun; 115,000 to Dr. Hedrick; 40,000 to Mr. Saad; 40,000 to Mr. Shirahama; and 40,000 to Mr. Shores. These grants represented an increase over 2011 grants, reflecting our increased focus on performance-based compensation. You can find more information regarding these grants by referring to our Grants of Plan-Based Awards table on page 28.

Short-Term Equity Compensation

To further tie compensation to near term performance, we also grant short-term performance-based and time-based restricted stock awards to our executives. In February 2012, the Compensation Committee granted 50,250 restricted stock to Mr. Calhoun; 36,850 to Dr. Hedrick; 33,500 to Mr. Saad; and 31,825 to Mr. Shirahama, and 31,825 to Mr. Shores, subject to achievement of the following conditions on or before December 31, 2012 for the percent of the grant as indicated:

1. 40% of the Restricted Stock grant will be conditioned on the Company achieving a major collaboration.
2. 25% of the Restricted Stock grant will be conditioned on the Company obtaining a US FDA approval for, and initiation of, the ATHENA clinical trial for chronic myocardial ischemia.
3. 15% of the Restricted Stock grant will be conditioned on the Company achieving a CE mark for Celution in Europe for the no-option chronic myocardial ischemia indication.
4. 15% of the Restricted Stock grant will be conditioned on the Company obtaining FDA approval of a 510(k) pathway for at least one therapeutic claim.
5. 5% of the Restricted Stock grant will be conditioned on the Company achieving its target revenue growth for the calendar year ended December 31, 2012 compared to the year ended December 31, 2011.

To the extent that any of the performance goals were partially achieved, the Compensation Committee maintained the discretion to continue the vesting of all or a portion of the awards following January 1, 2013. Once earned, the awards would remain unvested until January 10, 2014. After its annual review in January 2013, the Compensation Committee reviewed the performance-based conditions for 2012, and determined that the specified performance objectives had been partially met, and that the awarded results are tabulated in the tables below:

2012 Performance Based RSA Condition	**2012 Performance Based RSA Result**
40% of the Restricted Stock grant will be conditioned on the Company achieving a major collaboration	15%
25% of the Restricted Stock grant will be conditioned on the Company obtaining a US FDA approval for, and initiation of, the ATHENA clinical trial for chronic myocardial ischemia	25%

30% of the Restricted Stock grant will be conditioned on the Company achieving certain regulatory objectives below: - **15%** of the Restricted Stock grant will be conditioned on the Company achieving a CE mark for Celution One in Europe for the no-option chronic myocardial ischemia indication - **15%** of the Restricted Stock grant will be conditioned on the Company obtaining FDA approval of a 510(k) pathway for at least one therapeutic claim	15%
5% of the Restricted Stock grant will be conditioned on the Company achieving revenue growth of 25% for the calendar year ended December 31, 2012 compared to the year ended December 31, 2011.	3%
Total	58%

Accordingly, the Committee determined that the following number of performance based restricted stock awards for each NEO (granted on January 26, 2012) would continue time vesting through January 10, 2014 subject to each NEO's continued employment by the Company.

Officer	**Title**	**Performance-Vested Restricted Stock**
Christopher Calhoun	CEO	29,145
Marc Hedrick	President	21,373
Mark Saad	CFO	19,430
Seijiro Shirahama	President Asia-Pacific	18,458
Clyde Shores	Executive VP Marketing & Sales	18,458

Personal Benefits and Perquisites

All of our executives are eligible to participate in our employee benefit plans, including medical, dental, vision, life insurance, short-term and long-term disability insurance, flexible spending accounts, and 401(k). These plans are available to all full-time employees. In keeping with our philosophy to provide total compensation that is competitive within our industry we do offer limited personal benefits and perquisites to executive officers that include supplemental long-term disability insurance. We also provide a supplemental life insurance policy for Mr. Calhoun. You can find more information on the amounts paid for these perquisites in our 2012 Summary Compensation Table.

Company Acquisition / Post-Termination Compensation

The Company has entered into individual change of control agreements (the "CIC Agreements") with Mr. Calhoun, Dr. Hedrick, Mr. Saad, Mr. Shirahama and Mr. Shores. The CIC Agreements will provide for certain severance benefits to be paid to each of these executives in the event of his involuntary termination without cause, or due to the executive's resignation for good reason (including the Company's material breach of its obligations, material reduction in duties, responsibilities, compensation or benefits, or relocation by more than 30 miles without prior consent), provided such termination or resignation occurs in connection with an acquisition of the Company. Upon such termination or resignation in the event of an acquisition, Mr. Calhoun would receive a lump sum payment of 18 times his monthly base salary, and 18 times his monthly COBRA payments, and Dr. Hedrick, Mr. Saad, Mr. Shirahama and Mr. Shores would each receive a lump sum payment of 12 times their monthly base salary, and 12 times their monthly COBRA payments. Notwithstanding the foregoing, these executives' employment may be terminated for cause (including extended disability, repudiation of the CIC Agreement, conviction of a plea of no contest to certain crimes or misdemeanors, negligence that

materially harms the company, failure to perform material duties without cure, drug or alcohol use that materially interferes with performance, and chronic unpermitted absence) without triggering an obligation for the Company to pay severance benefits under the CIC Agreements.

In addition, under the CIC Agreements, any unvested stock options granted to each of the above named executive officers would vest in full upon (1) the date of the executive's termination under the circumstances described above following entry into an acquisition agreement (subject to the actual consummation of the acquisition) or (2) consummation of an acquisition.

In all events, each executive's entitlement to the benefits described above is expressly conditioned upon his execution and delivery to the Company of a CIC Agreement and General Release of claims, in the form to be attached to the CIC Agreement.

The executives may voluntarily terminate their employment with the Company at any time. If they voluntarily terminate their employment, they will receive payment for any earned and unpaid base salary as of the date of such termination; accrued but unused vacation time; and benefits they are entitled to receive under benefit plans of the Company, less standard withholdings for tax and social security purposes, through the termination date.

2012 Summary Compensation Table

The following table sets forth information concerning compensation earned for services rendered to us by the NEOs.

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Name and Principal Position	Year	Salary	Stock Awards[1]	Option Awards[2]	Non-Equity Incentive Plan Comp.[3]	All Other Compensation	Total
Christopher J. Calhoun, Chief Executive Officer (PEO)	2012	$ 467,900	$ 293,260 [10]	$ 483,996	$ 109,956	— [5]	$ 1,355,112[8]
	2011	$ 456,543	$ 292,455 [9]	$ 252,855	$ 140,370	$ 10,230 [4]	$ 1,152,453[8]
	2010	$ 439,713		$ 610,980	$ 172,623	— [5]	$ 1,223,316
Marc H. Hedrick, President	2012	$ 406,627	$ 212,764 [10]	$ 241,998	$ 76,446	— [5]	$ 937,835 [8]
	2011	$ 396,758	$ 214,467 [9]	$ 185,427	$ 97,591	— [5]	$ 894,243 [8]
	2010	$ 382,131	—	$ 448,052	$ 115,277	— [5]	$ 945,460
Mark E. Saad, Chief Financial Officer (PFO)	2012	$ 389,917	$ 184,040 [10]	$ 84,173	$ 64,141	— [5]	$ 722,271 [8]
	2011	$ 380,453	$ 194,970 [9]	$ 168,570	$ 81,883	— [5]	$ 825,876 [8]
	2010	$ 366,428	—	$ 407,320	$ 109,972	— [5]	$ 883,720
Seijiro N. Shirahama, President – Asia Pacific	2012	$ 454,432 [7]	$ 178,278 [10]	$ 84,173	$ 82,843	— [5]	$ 799,726 [8]
	2011	$ 441,900 [7]	$ 185,221 [9]	$ 160,142	$ 69,308	— [5]	$ 856,571 [8]
	2010	$ 381,931 [7]	—	$ 386,954	$ 87,892	— [5]	$ 856,777
Clyde W. Shores, Executive Vice President Marketing & Sales	2012	$ 329,469	$ 178,278 [10]	$ 84,173	$ 65,276	$ 44,400 [6]	$ 701,596
	2011	$ 203,870	——	$ 269,222	$ 37,370	$ 152,136 [6]	$ 662,598
	2010	—	—	—	—	—	—

(1) This column represents the dollar amount of the aggregate grant date fair value of stock awards, computed in accordance with FASB ASC Topic 718. For information relating to the assumptions made by us in valuing the stock awards made to our named executive officers in 2012, refer to Note 14 to our audited consolidated financial statements included in our annual report on Form 10-K for the year ended December 31, 2012

(2) This column represents the dollar amount of the aggregate grant date fair value of awards, computed in accordance with FASB ASC Topic 718. For information relating to the assumptions made by us in valuing the option awards made to our named executive officers in 2012, refer to Note 14 to our audited consolidated financial statements included in our annual report on Form 10-K for the year ended December 31, 2012

(3) The amounts in column (f) reflect the cash awards under our EMIC Plan, which is discussed in further detail in the CD&A under the heading "2011 NEO Compensation – *Executive Management Incentive Compensation Plan*."

(4) All Other Compensation for Mr. Calhoun for 2011 consists of supplemental long-term disability insurance premiums.

(5) Dollar value of the Named Executive Officer's perquisites and other personal benefits was less than $10,000 for the year reported.

(6) All Other Compensation for Mr. Shores who was hired 5/16/2011 includes a relocation allowance ($148,486) and supplemental long-term disability insurance premiums (3,650) for 2011 and a relocation allowance ($44,400) for 2012.

(7) We pay Mr. Shirahama in Japanese Yen. During 2010, 2011, and 2012 his salary was recorded at the average exchange rate over the year.

(8) Includes the value of RSA grants that did not vest in the timeframe required by the grants and therefore terminated in their entirety.

(9) Performance based RSAs granted on 2/28/2011 with performance vesting requirement. In 2012, the Compensation Committee determined that none of the performance milestones were achieved, thus none of the shares vested, and the grant therefore terminated in its entirety.

(10) January 26, 2012, Compensation Committee granted Restricted Stock Awards as well as Performance based RSAs with performance vesting requirement. In 2013, the Compensation Committee determined that one of the performance milestones was achieved and authorized to continue vesting the shares allocated to this milestone. Compensation Committee used its discretion to continue portion of the awards allocated to the milestones that were not achieved by December 31, 2012.

2012 Grants of Plan-Based Awards

The following table sets forth information regarding grants of stock and option awards made to our Named Executive Officers during fiscal 2012:

(a)	(b)	(c-e)			(f)	(g)	(h)	(i)	(j)
		Potential 2012 Payouts Under Non-Equity Incentive Plan Awards			All Other Stock Awards: Number of Shares of Stock or Units	All Other Option Awards: Number of Securities Underlying Options	Exercise or Base Price of Option Awards	Market Price on Date of Grant	Full Grant Date Fair Value of Stock and Option Awards
Named Officers	Grant Date	Thre-shold ($)	Target ($)	Maxi-mum ($)	(#)	(#)	($/Sh)	($/Sh)	($)[1]
Christopher J. Calhoun, Chief Executive Officer	1/26/2012	–	$233,950	–	85,250	230,000	$3.44	$3.44	$777,256
Marc H. Hedrick, President	1/26/2012		$162,651	–	61,850	115,000	$3.44	$3.44	$454,762
Mark E. Saad, Chief Financial Officer	1/26/2012	–	$136,471	–	53,500	40,000	$3.44	$3.44	$268,213
Seijiro N. Shirahama, President – Asia Pacific	1/26/2012	–	$113,789 [2]	–	51,825	40,000	$3.44	$3.44	$262,451
Clyde W. Shores, Executive Vice President Marketing & Sales	1/26/2012	–	$98,841	–	51,825	40,000	$3.44	$3.44	$262,451

(1) Computed in accordance with FASB ASC Topic 718. See note 14 of the financial statements in our Annual Report on Form 10-K, as filed with the SEC on March 15, 2013 regarding assumptions underlying valuation of equity awards.

(2) Represents target bonus amount prior to foreign currency rates in effect at time of payment.

(3) The restricted stock awards were granted on 1/26/2012 and were subject to performance based and time based vesting. In 2013, the Compensation Committee determined that one of the performance milestones was achieved and authorized to continue vesting the shares allocated to this milestone. The Compensation Committee used its discretion to continue portions of the awards allocated to the milestones that were not fully achieved by December 31, 2012. For more information see Note 3 in the Outstanding Equity Awards at Fiscal Year-End Table.

Narrative Disclosure to Summary Compensation Table and Grants of Plan-Based Awards Table

The stock options granted to the NEOs during 2012 have an exercise price of $3.44 for the options granted on 1/26/2012. Exercise price for the options granted in 2012 is determined by the closing sale price of the Company's common stock on NASDAQ on the date of grant. The option awards have a contractual term of ten years and vest in equal monthly installments over a period of four years, subject to the NEO's continued service to the Company.

Option awards granted to Clyde W. Shores, were issued during his first year of service and vest over a period of four years with 25% vesting after one year of service, followed with equal monthly installments over the remaining 36 months.

Outstanding Equity Awards at December 31, 2012

The following table sets forth information regarding outstanding equity awards held by our Named Executive Officers as of December 31, 2012.

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
		Option Awards				Stock Awards	
Name	Option Grant Date [1]	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Un-Exercisable [2]	Option Exercise Price ($)	Option Ex-piration Date	Number of Shares or Units of Stock That Have Not Vested (#)[3]	Market Value of Shares or Units of Stock That Have Not Vested ($)
Christopher J. Calhoun, Chief Executive Officer	1/28/2003	200,000	—	$4.40	1/28/2013	—	—
	6/2/2004	75,000	—	$4.16	6/2/2014	—	—
	2/2/2005	100,000	—	$3.12	2/2/2015	—	—
	1/24/2006	100,000	—	$7.04	1/24/2016	—	—
	2/26/2007	70,000	—	$5.44	2/26/2017	—	—
	1/31/2008	85,000	—	$5.14	1/31/2018	—	—
	1/29/2009	97,915	2,085	$4.80	1/29/2019	—	—
	2/5/2010	106,248	43,752	$6.71	2/5/2020	—	—
	1/27/2011	35,937	39,063	$5.57	1/27/2021	—	—
	1/26/2012	52,708	177,292	$3.44	1/26/2022	85,250	$293,260
Marc H. Hedrick, President	1/28/2003	25,000	—	$4.40	1/28/2013	—	—
	6/2/2004	50,000	—	$4.16	6/2/2014	—	—
	2/2/2005	70,000	—	$3.12	2/2/2015	—	—
	1/24/2006	70,000	—	$7.04	1/24/2016	—	—
	2/26/2007	50,000	—	$5.44	2/26/2017	—	—
	1/31/2008	60,000	—	$5.14	1/31/2018	—	—
	1/29/2009	73,436	1,564	$4.80	1/29/2019	—	—
	2/5/2010	77,915	32,085	$6.71	2/5/2020	—	—
	1/27/2011	26,354	28,646	$5.57	1/27/2021	—	—
	1/26/2012	26,354	88,646	$3.44	1/26/2022	61,850	$212,764
Mark E. Saad, Chief Financial Officer	6/21/2004	190,000	—	$4.12	6/21/2014	—	—
	2/2/2005	70,000	—	$3.12	2/2/2015	—	—
	1/24/2006	70,000	—	$7.04	1/24/2016	—	—
	2/26/2007	50,000	—	$5.44	2/26/2017	—	—
	1/31/2008	55,000	—	$5.14	1/31/2018	—	—
	1/29/2009	68,541	1,459	$4.80	1/29/2019	—	—
	2/5/2010	70,832	29,168	$6.71	2/5/2020	—	—
	1/27/2011	23,958	26,042	$5.57	1/27/2021	—	—
	1/26/2012	9,167	30,883	$3.44	1/26/2022	53,500	$184,040
Seijiro N. Shirahama, President – Asia Pacific	6/2/2004	25,000	—	$4.16	6/2/2014	—	—
	2/2/2005	35,000	—	$3.12	2/2/2015	—	—
	12/8/2005	50,000	—	$6.86	12/8/2015	—	—
	1/24/2006	35,000	—	$7.04	1/24/2016	—	—
	2/26/2007	30,000	—	$5.44	2/26/2017	—	—
	11/15/2007	25,000	—	$5.35	11/15/2017	—	—
	1/31/2008	55,000	—	$5.14	1/31/2018	—	—
	1/29/2009	63,645	1,355	$4.80	1/29/2019	—	—
	2/5/2010	67,291	27,709	$6.71	2/5/2020	—	—
	1/27/2011	22,760	24,740	$5.57	1/27/2021	—	—
	1/26/2012	9,167	30,883	$3.44	1/26/2022	51,825	$178,278
Clyde W. Shores, Executive Vice President Marketing & Sales	5/19/2011	32,656	49,844	$5.37	5/19/2021	—	—
	1/26/2012	—	40,000	$3.44	1/26/2022	51,825	$178,278

(1) For a better understanding of this table, we have included an additional column showing the grant date of the stock options.

(2) Generally, awards issued under the 1997 or 2004 plans are subject to four-year vesting, and have a contractual term of 10 years. Awards presented in this table contain one of the following two vesting provisions:

- 25% of a granted award vests after one year of service, while an additional 1/48 of the award vests at the end of each month thereafter for 36 months, or
- 1/48 of the award vests at the end of each month over a four-year period.

(3) January 26, 2012, Compensation Committee granted Restricted Stock Awards as well as Performance based RSAs with performance vesting requirement. In 2013, the Compensation Committee determined that one of the performance milestones was achieved and

authorized to continue vesting the shares allocated to this milestone. Compensation Committee used its discretion to continue portion of the awards allocated to the milestones that were not achieved by December 31, 2012.

Option Exercises and Stock Vested during 2012

The following table sets forth information regarding options exercised and shares of common stock acquired upon vesting by our Named Executive Officers during the fiscal ended December 31, 2012:

(a)	(b)	(c)	(d)	(e)
	Option Awards		Stock Awards	
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise ($)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting ($)
Christopher J. Calhoun, Chief Executive Officer	205,000[1]	$187,477	—	—
Marc H. Hedrick, President	—	—	—	—
Mark E. Saad, Chief Financial Officer	—	—	—	—
Seijiro N. Shirahama, President – Asia Pacific	—	—	—	—
Clyde W. Shores, Executive Vice President Marketing & Sales	—	—	—	—

(1) Represents an exercise of shares through Mr. Calhoun's 10b5-1 plan, which would have expired if not exercised.

Pension Benefits

We did not have a pension plan nor did we provide pension benefits to our NEOs (or any other employees) during fiscal 2012.

Nonqualified Deferred Compensation

We did not permit compensation deferral by our NEO's (or any other employees) during fiscal 2012.

Potential Payments Upon Termination or Change In Control

On January 31, 2008, we entered into individual change of control agreements (the "Agreements") with Mr. Calhoun, Dr. Hedrick, and Mr. Saad (filed as Exhibits 10.52, 10.53, and 10.54 to our Annual Report on Form 10-K, as filed with the SEC on March 14, 2008). On October 29, 2009 and April 16, 2012, respectively we entered into individual change of control agreements with Mr. Shirahama and on Mr. Shores. The terms of the Agreements are described in detail in the section above titled, Compensation Discussion & Analysis - *Company Acquisition / Post-Termination Compensation*.

The following table describes the potential payments upon termination and/or a change in control of the Company for Mr. Calhoun, our CEO:

	Change in Control[2]	Termination Following Change in Control[3]
PAYMENTS DUE UPON ACQUISITION / TERMINATION[1]:		
Cash Severance		
Base Salary[4]	$ —	$ 701,850
Benefits		
COBRA Premiums	—	$ 31,700
Long-Term Incentives		
Value of Accelerated Stock Options[5]	$ —	$
TOTAL VALUE	$ —	**$ 733,550**

The following table describes the potential payments upon termination and/or a change in control of the Company for Dr. Hedrick, our President:

	Change in Control [2]	Termination Following Change in Control [3]
PAYMENTS DUE UPON ACQUISITION / TERMINATION[1]:		
Cash Severance		
Base Salary[4]	$ —	$ 406,628
Benefits		
COBRA Premiums	—	$ 21,200
Long-Term Incentives		
Value of Accelerated Stock Options[5]	$ —	$ —
TOTAL VALUE	$ —	**$ 427,828**

The following table describes the potential payments upon termination and/or a change in control of the Company for Mr. Saad, our CFO:

	Change in Control [2]	Termination Following Change in Control [3]
PAYMENTS DUE UPON ACQUISITION / TERMINATION[1]:		
Cash Severance		
Base Salary[4]	$ —	$ 389,917
Benefits		
COBRA Premiums	—	$ 21,200
Long-Term Incentives		
Value of Accelerated Stock Options[5]	$ —	$ —
TOTAL VALUE	$ —	**$ 411,117**

The following table describes the potential payments upon termination and/or a change in control of the Company for Mr. Shirahama, our President – Asia Pacific.

	Change in Control [2]	Termination Following Change in Control [3]
PAYMENTS DUE UPON ACQUISITION / TERMINATION[1]:		
Cash Severance		
Base Salary[4]	$ —	$ 454,432
Benefits		
COBRA Premiums	—	$ 21,200
Long-Term Incentives		
Value of Accelerated Stock Options[5]	$ —	$ —
TOTAL VALUE	$ —	**$ 475,632**

The following table describes the potential payments upon termination and/or a change in control of the Company for Mr. Shores, our Executive Vice President – Marketing and Sales.

	Change in Control [2]	Termination Following Change in Control [3]
PAYMENTS DUE UPON ACQUISITION / TERMINATION[1]:		
Cash Severance		
Base Salary[4]	$ —	$ 329,469
Benefits		
COBRA Premiums	—	$ 21,200
Long-Term Incentives		
Value of Accelerated Stock Options[5]	$ —	$ —
TOTAL VALUE	$ —	**$ 350,669**

(1) Assumes a triggering event occurred on December 31, 2012.

(2) Based on the occurrence of a **change in control** of the Company, provided that the executive is at that time still in the service of the Company.

(3) Based on the occurrence of either actual or constructive termination without good cause in the context of a change in control of the Company as described in detail in the section above titled, *Company Acquisition/Post-Termination Compensation*.

(4) Based on the executive's annual base salary on December 31, 2012, which was $467,900 for Mr. Calhoun; $406,628 for Dr. Hedrick; $389,917 for Mr. Saad, $454,432 (as recorded by the Company in 2012) for Mr. Shirahama and $329,469 for Mr. Shores.

(5) Based on the difference between the aggregate exercise price of all accelerated in-the-money stock options and the aggregate market value of the underlying shares, calculated based on the per-share closing market price of our common stock on December 31, 2012, $2.80.

Director Compensation

Generally, our Board believes that the level of director compensation should be based on time spent carrying out Board and committee responsibilities and be competitive with comparable companies. In addition, the Board believes that a significant portion of director compensation should align director interests with the long-term interests of shareholders. The Board makes changes in its director compensation practices only upon the recommendation of the Compensation and Governance & Nominating Committees, and following discussion and approval by the Board.

The following table summarizes director compensation during fiscal year 2012

(a)	(b)	(c)	(d)	(e)
Director Name[1]	Fees Earned or Paid in Cash[2] ($)	Stock Awards[3] ($)	Option Awards[4][5] ($)	Total ($)
Lloyd H. Dean, Chairman	$69,000	$22,000	$20,233	$111,233
Richard J. Hawkins	$59,500	$22,000	$20,233	$101,733
Paul W. Hawran	$72,000	$22,000	$20,233	$114,233
Ronald D. Henriksen [6]	$56,000	$22,000	$20,233	$98,233
E. Carmack Holmes, MD	$41,000	$22,000	$20,233	$83,233
David M. Rickey	$65,000	$22,000	$20,233	$107,233
Tommy Thompson	$40,000	$22,000	$20,233	$82,233

(1) Mr. Calhoun and Dr. Hedrick are not included in this table as they are employees of the Company and receive no extra compensation for their services as a Director. The compensation received by Mr. Calhoun and Dr. Hedrick as employees of the Company is shown in the 2012 Summary Compensation Table and the three equity-related tables above.

(2) In fiscal year 2012, each non-employee director's compensation included a $6,250 quarterly retainer, a fee of $2,000 per quarterly meeting attended, and a fee of $2,000 per special meeting attended in person. Attendance of telephonic meetings was compensated at $1,000 per meeting. Compensation Committee, Governance and Nominating Committee and Audit Committee members received $1,000 per meeting attended. Executive Committee members were exempt from receiving committee fees. The Chairman of the Board received an additional annual stipend of $25,000, the Chairman of the Audit Committee received an additional annual stipend of $15,000, and the Chairmen of the Compensation Committee and the Governance and Nominating Committee each received an additional annual stipend of $10,000 and $7,500, respectively.

(3) Each non-employee director was granted 10,000 shares of restricted stock, effective on January 1, 2012 with shares cliff vesting on December 31, 2012.

(4) Each non-employee director was granted 15,000 option shares, effective on January 1, 2012. Column (d) represents the grant date fair value of the option awards, computed in accordance with FASB ASC Topic 718. For additional information on the valuation assumptions with respect to the 2012 grants, refer to note 14 of the financial statements in our Annual Report on Form 10-K, as filed with the SEC on March 15, 2013.

(5) As of December 31, 2012, the following directors held options to purchase the respective number of shares of our common stock: Richard J. Hawkins 120,000; Paul W. Hawran 195,000; Ronald D. Henriksen 271,250; E. Carmack Holmes 245,000; David M. Rickey 170,000, Lloyd H. Dean 41,000, and Tommy Thompson 36,000.

(6) Effective December 31, 2012, Mr. Henriksen retired from our Board of Directors.

Narrative Disclosure to Summary Compensation Table and Grants of Plan-Base Awards Table

Each non-employee director was granted 15,000 option shares, effective on January 1, 2012. The stock options granted to the non-employee directors during 2012 have an exercise price of $2.20. The exercise prices of these grants were equal to the closing sale price of the Company's common stock on NASDAQ on the date of grant. The option awards have a contractual term of 10 years and vest in equal monthly installments over a period of two years, subject to the director's continued service to the Company. To align Board compensation with that of our peer group companies, each of our non-employee directors was also granted 10,000 shares of restricted stock, effective on January 1, 2012 with shares cliff vesting on December 31, 2012.

Equity Compensation Paid to Directors for Fiscal Year 2012

(a)	(b)	(c)	(d)		(e)	(f)		(g)
Director Name	**Grant Date**	**Option Awards (#)**	**Grant Date Fair Value of Option Awards ($)**		**Stock Awards (#)**	**Grant Date Fair Value of Stock Awards ($)**		**Total Value of Equity Awards for 2012 ($)**
Lloyd H. Dean, Chairman	**1/1/2012**	**15,000**	**$ 20,233**	**(1)**	**10,000**	**$ 22,000**	**(2)**	**$ 42,233**
Richard J. Hawkins	1/1/2012	15,000	$ 20,233	(1)	10,000	$ 22,000	(2)	$ 42,233
Paul W. Hawran	**1/1/2012**	**15,000**	**$ 20,233**	**(1)**	**10,000**	**$ 22,000**	**(2)**	**$ 42,233**
Ronald D. Henriksen	1/1/2011	15,000	$ 20,233	(1)	10,000	$ 22,000	(2)	$ 42,233
E. Carmack Holmes, MD	**1/1/2012**	**15,000**	**$ 20,233**	**(1)**	**10,000**	**$ 22,000**	**(2)**	**$ 42,233**
David M. Rickey	1/1/2011	15,000	$ 20,233	(1)	10,000	$ 22,000	(2)	$ 42,233
Tommy Thompson	**1/1/2012**	**15,000**	**$ 20,233**	**(1)**	**10,000**	**$ 22,000**	**(2)**	**$ 42,233**

(1) The grant date fair value of the option award granted to Directors other was $1.35 per share.

(2) The grant date fair value of the restricted stock awarded to Directors was $2.20 per share.

REPORT OF THE COMPENSATION COMMITTEE

The Compensation Committee provided the following statement:

"The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management. Based on these reviews and discussions, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in the Company's Annual Report on Form 10-K and in the Annual Meeting proxy statement on Schedule 14A.

Respectfully submitted,

Compensation Committee of the Board of Directors
David M. Rickey, Chair
Paul W. Hawran
Richard J. Hawkins

April 25, 2013"

Notwithstanding anything to the contrary set forth in any of the Company's previous filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, that incorporate future filings, including this Proxy Statement, in whole or in part, the foregoing Compensation Committee Report and the following Audit Committee Report and the Comparative Stock Performance Graph shall not be incorporated by reference into any such filings.

AUDIT MATTERS

Report of the Audit Committee

The duties and responsibilities of the Audit Committee are set forth in its written charter, a copy which is available on the Company's website. Under the guidance of a written charter adopted by the Board of Directors, the purpose of the Audit Committee is to oversee the accounting and financial reporting processes of the Company and audits of its financial statements. The responsibilities of the Audit Committee include appointing and providing for the compensation of the Company's registered public accounting firm. Each of the members of the Audit Committee meets the independence requirements of NASDAQ.

Management has primary responsibility for the system of internal controls over financial reporting, disclosure controls and procedures, and for preparing the Company's consolidated financial statements. The independent registered public accounting firm has the responsibility to express an opinion on the financial statements based on an audit conducted in accordance with generally accepted auditing standards.

In this context and in connection with the audited financial statements contained in the Company's Annual Report on Form 10-K, the Audit Committee provided the following report:

The Audit Committee has reviewed and discussed the Company's audited financial statements for the year ended December 31, 2012 with the Company's management and the Company's independent registered public accounting firm, KPMG LLP ("KPMG"). The Audit Committee has discussed with KPMG the matters required to be discussed by the 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. The Audit Committee has received the written disclosures and the letter from KPMG required by the applicable requirements of the Public Company Accounting Oversight Board Rule 3526, Communication with Audit Committees Concerning Independence regarding KPMG's communications with the Audit Committee concerning independence, discussed with KPMG their independence, and concluded that the non-audit services performed by KPMG are compatible with maintaining their independence. KPMG advised the audit committee that KPMG was and continues to be independent accountants with respect to the Company. Based upon the Audit Committee's review and discussions as noted above, the Audit Committee recommended to the Board of Directors that the Company's audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2012 for filing with the Securities and Exchange Commission.

Respectfully submitted,

Audit Committee of the Board of Directors
Paul W. Hawran, Chair
David M. Rickey
Tommy G. Thompson

April 25, 2013

Principal Accountant Fees and Services

The Audit Committee has appointed KPMG LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2012. The Audit Committee reviews and must pre-approve all audit and non-audit services performed by KPMG LLP as well as the fees charged by KPMG LLP for such services. No fees were approved under the Regulation S-X Rule 2.01(c)(7)(i)(C) exception to the pre-approval requirement. In its review of non-audit service fees, the Audit Committee considers, among other things, the possible impact of the performance of such services on the accounting firm's independence.

The following table shows the aggregate fees paid or accrued by the Company for the audit and other services provided by KPMG LLP for fiscal years ended December 31, 2012 and 2011.

	2012	2011
Audit fees [1]	$ 547,568	$ 530,734
Audit related fees [2]	$88,800	40,000
Tax Fees [3]	71,524	191,204
All other fees [4]	—	—
Total	$ 707,892	$ 761,938

(1) Audit fees consist of fees for professional services performed by KPMG LLP for the integrated audit of our annual financial statements (and internal control over financial reporting) included in our Form 10-K filing and review of financial statements included in our quarterly Form 10-Q filings, reviews of registration statements and issuances of consents, and services that are normally provided in connection with statutory and regulatory filings or engagements.

(2) Audit related fees consist of fees for assurance and related services, such as comfort letters, performed by KPMG LLP that are reasonably related to the performance of the audit or review of our financial statements.

(3) Tax fees consist of fees for professional services performed by KPMG LLP with respect to tax compliance, tax advice, tax consulting and tax planning.

(4) All other fees consist of fees for other permissible work performed by KPMG LLP that does not meet with the above category descriptions. No such fees were incurred in 2012 or 2011.

OTHER MATTERS

Stockholders Sharing the Same Address

In accordance with notices previously sent to many stockholders who hold their shares through a bank, broker or other holder of record (a "street-name stockholder") and share a single address, only one Notice of Availability of Proxy Materials is being delivered to that address unless contrary instructions from any stockholder at that address were received. This practice, known as "householding," is intended to reduce the Company's printing and postage costs. However, any such street-name stockholder residing at the same address who wishes to receive a separate copy of this Proxy Statement or accompanying Annual Report to Stockholders may request a copy by contacting the bank, broker or other holder of record, or the Company by telephone at: (858) 458-0900. The voting instruction sent to a street-name stockholder should provide information on how to request (1) householding of future Company materials or (2) separate materials if only one set of documents is being sent to a household. If it does not, a stockholder who would like to make one of these requests should contact the Company as indicated above.

Stockholder Proposals for the 2014 Meeting

Stockholders interested in submitting a proposal for consideration at our 2014 Annual Meeting must do so by sending such proposal to our Corporate Secretary at Cytori Therapeutics, Inc., 3020 Callan Road, San Diego, CA 92121, Attention: Corporate Secretary. Under the SEC's proxy rules, the deadline for submission of proposals to be included in our proxy materials for the 2014 Annual Meeting is March 21, 2014. Accordingly, in order for a stockholder proposal to be considered for inclusion in our proxy materials for the 2014 Annual Meeting, any such stockholder proposal must be received by our Corporate Secretary on or before April 30, 2014 and comply with the procedures and requirements set forth in Rule 14a-8 under the Securities Exchange Act of 1934, as well as the applicable requirements of our by-laws. Any stockholder proposal received after April 30, 2014 will be considered untimely, and will not be included in our proxy materials.

In addition, stockholders interested in submitting a proposal outside of Rule 14a-8 must properly submit such a proposal in accordance with our by-laws. Our by-laws require advance notice of business to be brought before a stockholders' meeting, including nominations of persons for election as directors. To be timely, notice to our Corporate Secretary must be received at our principal executive offices not less than 120 days prior to the anniversary date of the preceding year's Annual Meeting and must contain specified information concerning the matters to be brought before such meeting and concerning the stockholder proposing such matters. Therefore, to be presented at our 2014 Annual Meeting, such a proposal must be received by the Company no later than April 30, 2014; provided, however, that in the event we hold the 2014 Annual Meeting of stockholders more than 30 days before or after the one-year anniversary date of the 2013 Annual Meeting, a proposal must be received by the Company a reasonable time before the proxy solicitation is made.

MISCELLANEOUS

Our Board of Directors knows of no other business to be presented at our Annual Meeting. If other matters properly come before our Annual Meeting, it is intended that the proxies in the accompanying form will be voted thereon in accordance with the judgment of the person or persons holding such proxies.

By Order of the Board of Directors,

CHRISTOPHER J. CALHOUN
Chief Executive Officer

[BALLOT]

C/O COMPUTERSHARE
250 ROYALL STREET
CANTON, MA 02021

VOTE BY INTERNET
Before the meeting - Go to **www.proxyvote.com**
Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 P.M. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

VOTE BY PHONE - 1-800-690-6903
Use any touch-tone telephone to transmit your voting instructions up until 11:59 P.M. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL
Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

KEEP THIS PORTION FOR YOUR RECORDS

DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

CYTORI THERAPEUTICS, INC. **The Board of Directors recommends that you vote FOR the following:**	For All	Withhold All	For All Except	To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below.
	☐	☐	☐	_____

1. Election of Directors
Nominees

01) David M. Rickey	06) Marc H. Hedrick, MD
02) Christopher J. Calhoun	07) E. Carmack Holmes, MD
03) Lloyd H. Dean	08) Tommy G. Thompson
04) Richard J. Hawkins	
05) Paul W. Hawran	

The Board of Directors recommends you vote FOR the following proposals 2 and 3:

		For	Against	Abstain
2.	To ratify the selection of KPMG LLP as the independent registered public accounting firm of Cytori for the fiscal year ending December 31, 2013.	☐	☐	☐
3.	To approve an amendment to Cytori's Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 95,000,000 shares to 145,000,000 shares	☐	☐	☐

NOTE: Such other business as may properly come before the meeting or any adjournment thereof.

Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.

Signature [PLEASE SIGN WITHIN BOX] Date:

Signature (Joint Owners) Date:

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The Combined Document is available at www.proxyvote.com .

CYTORI THERAPEUTICS, INC.
PROXY SOLICITED BY THE BOARD OF DIRECTORS
FOR THE ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON AUGUST 28, 2013

The undersigned hereby appoints Christopher J. Calhoun and Marc H. Hedrick, MD, or either of them, as proxy holders each with full power of substitution, to appear on behalf and to vote all shares of common stock of Cytori Therapeutics, Inc. (the "Company") that the undersigned is entitled to vote at the Annual Meeting of Stockholders of the Company to be held on August 28, 2013, and at any postponement thereof.

When properly executed, this proxy will be voted as directed. If properly executed and no instructions are specified, this proxy will be voted FOR the election of the listed Nominees as Directors under Proposal 1, FOR Proposal 2 and 3 and at the discretion of the proxies with respect to such other business as may properly come before the meeting.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Director's recommendations.

PLEASE COMPLETE, DATE AND SIGN THIS PROXY AND RETURN IT IN THE ACCOMPANYING ENVELOPE.

Continued and to be signed on reverse side

CORPORATE OFFICERS

CHRISTOPHER J. CALHOUN
Chief Executive Officer

MARC H. HEDRICK, M.D.
President

MARK E. SAAD
Chief Financial Officer

SEIJIRO N. SHIRAHAMA
President, Asia Pacific

STEVEN KESTEN, M.D.
Executive Vice President and Chief Medical Officer

CLYDE W. SHORES
Executive Vice President of Marketing and Sales

BOARD OF DIRECTORS

DAVID M. RICKEY [A, B, D]
Chairman of the Board

CHRISTOPHER J. CALHOUN [D]
Chief Executive Officer, Vice-Chairman and Director

LLOYD H. DEAN [C]
Director

RICHARD J. HAWKINS [B, C, D]
Director

PAUL W. HAWRAN [A, B, D]
Director

MARC H. HEDRICK, M.D.
President and Director

E. CARMACK HOLMES, M.D. [C]
Director

TOMMY G. THOMPSON [A, C]
Director

[A] Member of the Audit Committee
[B] Member of the Compensation Committee
[C] Member of the Governance and Nominating Committee
[D] Member of the Executive Committee

CORPORATE HEADQUARTERS

Cytori Therapeutics, Inc.
3020 Callan Road
San Diego, CA 92121
United States
Tel: +1.858.458.0900
cytori.com

Cytori GmbH
Untermüli 9
6300 Zug
Switzerland
Tel: +41.41.375.375.0

Cytori Therapeutics K.K.
Fuji Building 2F 3-2-3 Marunouchi,
Chiyoda-ku, Tokyo 100-0005
Japan
Tel: +81.3.5223.6500

STOCKHOLDER INFORMATION

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tbaker@cytori.com

OUTSIDE CORPORATE COUNSEL
DLA Piper US LLP

INDEPENDENT ACCOUNTANTS
KPMG LLP / San Diego, CA

TRANSFER AGENT
Computershare
250 Royall Street
Canton, MA 02021
Tel: +1.800.962.4284

NOTICE OF ANNUAL MEETING
August 28, 2013, 9 AM PT
Hilton San Diego / Del Mar
15575 Jimmy Durante Blvd.
Del Mar, CA 92014

NASDAQ: CYTX