# 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 X

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

Commission file number 001-34375

# **CYTORI THERAPEUTICS, INC.**

(Exact name of Registrant as Specified in Its Charter)

DELAWARE (State or Other Jurisdiction of Incorporation or Organization)

to

33-0827593 (I.R.S. Employer Identification No.)

3020 CALLAN ROAD, SAN DIEGO, CALIFORNIA

(Address of principal executive offices)

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 o 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 o 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 o

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 o

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). Non-Accelerated Filer o Accelerated Filer ⊠ Large Accelerated Filer o Smaller reporting company o (Do not check if a smaller reporting company)

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

92121

(Zip Code)

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<sub>2</sub> 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<sup>®</sup>, a reagent designed to be used with Cytori's Celution<sup>®</sup> System for preparing safe and optimized adipose-derived stem and regenerative cells (ADRCs) for intravascular delivery into the same patient. Intravase<sup>®</sup> 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, 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 indications 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<sup>®</sup> 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 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
	-	
	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
Europe	Celution® 800: Cryptoglandular fistula, tissue ischemia and other soft tissue procedures	CE Mark
Lutope	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 Risk Factors 1A.

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:

# We will likely need to raise more cash in the future

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 shortterm 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,

### 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 800 System and the StemSource<sup>®</sup> 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 timeconsuming. 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<sup>®</sup> System family of products, Puregraft <sup>®</sup> family of products and components of the Stemsource<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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;
- $\cdot$  ~ 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.

<u>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>

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 preferredstock, 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;



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- 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 Unresolved Staff Comments 1B.

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**

	E	ligh	 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

	H	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	Weighted-average exercise price of outstanding options, warrants and rights	available for future issuance under equity compensation plans (excluding securities reflected in column(a))
	(a)	(b)	(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

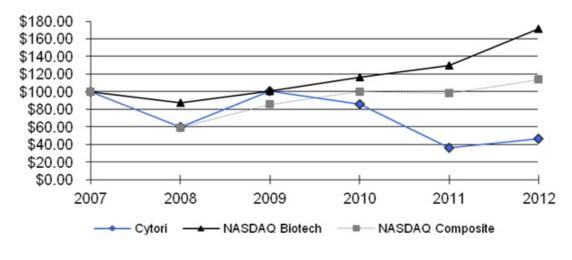
Number of securities remaining

(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, 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.

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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		0 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
1		8,709		7,983		8,254		5,837		4,528
		0,700		1,000		0,201		5,557		.,5=0
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	Ψ	(1,204)	Ψ	(560)	Ψ	(1,290)	Ψ	(221)	Ψ	(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
	Ψ	23,717	Ψ	50,522	Ψ	52,000	Ψ	12,034	Ψ	12,011
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<sup>®</sup>, a reagent intended to be used with Cytori's Celution<sup>®</sup> 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<sup>®</sup> 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<sub>2</sub> 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				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<sup>®</sup> 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<sup>®</sup> System products and StemSource<sup>®</sup> 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%	ó	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.

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*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 sharebased 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 en	ded December 3	1,
	 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:

			Y	ears ended	
	_	2012		2011	 2010
n 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.



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*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:

		J	lears 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:

			Ŋ	lears 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 Dec	emt	oer 31,
	 2012		2011
Cash and cash equivalents	\$ 25,717,000	\$	36,922,000
Current assets Current liabilities	\$ 33,979,000 17,613,000	\$	43,337,000 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 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	Ι	less than 1 vear		1 – 3 years	3	– 5 years	]	More than 5 years
Contractum Congations		Iotui		yeur	_	i bycuib		5 years		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:

	-		Ŋ	lears 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 Quantitative and Qualitative Disclosures About Market Risk 7A.

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.



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## 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 (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 Decem			ıber 31,	
	_	2012		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	Ф	3,926,000	Ф	2,260,000	
Inventories, net		3,175,000		3,318,000	
Other current assets		1,161,000		837,000	
		1,101,000		037,000	
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	
	¢	12 250 000	¢	51 53 4 000	
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 stochholders' equily	_	0,-133,000	-	5,5-0,000	
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 S	For the Years Ended Decembe				
	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	<u>\$ (0.55)</u>	<u>\$ (0.61)</u>	\$ (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

	Comm	on S	tock	Additional Paid-in	Accumulated		
	Shares	011 0	Amount	Capital	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					r 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 Y	lears	Ended Dece	mbei	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

## CYTORI THERAPEUTICS, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS DECEMBER 31, 2012

## 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:	December 31, 2011
Other intangibles, net: Beginning balance	December 31, 2011           \$ 413,000
Beginning balance	\$ 413,000
Beginning balance Amortization	\$ 413,000 (221,000)
Beginning balance Amortization	\$ 413,000 (221,000)
Beginning balance Amortization Ending balance Goodwill, net: Beginning balance	\$ 413,000 (221,000)
Beginning balance Amortization Ending balance Goodwill, net:	\$ 413,000 (221,000) 192,000
Beginning balance Amortization Ending balance Goodwill, net: Beginning balance	\$ 413,000 (221,000) 192,000
Beginning balance Amortization Ending balance Goodwill, net: Beginning balance Increase (decrease)	\$ 413,000 (221,000) 192,000 3,922,000
Beginning balance Amortization Ending balance Goodwill, net: Beginning balance Increase (decrease)	\$ 413,000 (221,000) 192,000 3,922,000
Beginning balance Amortization Ending balance Goodwill, net: Beginning balance Increase (decrease) Ending balance	\$ 413,000 (221,000) 192,000 3,922,000 — 3,922,000
Beginning balance Amortization Ending balance Goodwill, net: Beginning balance Increase (decrease) Ending balance	\$ 413,000 (221,000) 192,000 3,922,000 — 3,922,000

## 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 0.61 years		Dec	As of ember 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:

						Year	s ended					
	2012				2011				2010			
		oduct venues	% of Total			oduct evenues	% of Total			oduct venues	% 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<sup>®</sup> 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<sup>®</sup> 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:

	Dece	December 31, 2012 December 31, 2		er 31, 2011	Nov	vember 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	ē					
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:

Assets: Cash Amounts due from related party Prepaid insurance Computer equipment and software, net	Dece	mber 31, 2012	December 31, 2011		
	ן)	(Unaudited)		(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	

		Yea	rs end	ed December	r 31,	
		2012	2011			2010
Statements of Operations	J)	Inaudited)	(L	Inaudited)	(U	(naudited)
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	Ψ	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)



## . 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:

	Bala	nce as of	<b>Basis of</b>	Faiı	Value Meas	uren	nents
	Decemb	er 31, 2012	 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)
	Bala	nce as of	 Basis of	Fair Value Measurements			nents
	Decemb	oer 31, 2011	 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	ear ended mber 31, 2012	Year ended ember 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:

Varrant liability		'ear ended mber 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			2011
	F	air 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:

	De	December 31,			
	2012		2011		
Days motorials	¢ 1.204.0	00 ¢	1 502 000		
Raw materials	\$ 1,384,0		1,503,000		
Work in process	404,0	00	790,000		
Finished goods	1,387,0	00	1,025,000		
	\$ 3,175,0	00 \$	3,318,000		

## **Other Current Assets**

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

	December 31,			
	 2012		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		2011	
Manufacturing and development equipment	\$	5,250,000	\$	4,268,000	
Office and computer equipment	Ψ	2,266,000	Ψ	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		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		2011	
Accrued legal fees	\$	826.000	\$	829,000	
Accrued R&D studies	Ŷ	896,000	Ψ	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,	C	perating 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. 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:

			Current		Remaining
	Original Loan	Interest	Monthly		Principal
Origination Date	Amount	Rate	Payment*	Term	(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)
		i
Total deferred tax liability	(10,000)	(72,000)
Net deferred tax assets (liability)	<u>\$                                    </u>	<u> </u>

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 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 right 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 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	Av	eighted /erage cise 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 Weighted Remaining Average Contractual Exercise Price Term (years)				ggregate insic 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 Gr Date Fair Va	ant
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	Average	ghted e Grant- air 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							
	1	March 31, 2012		June 30, 2012	Se	ptember 30, 2012	D	ecember 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	Sej	ptember 30, 2011	D	ecember 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 Controls and Procedures

## 9A.

## 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 costbenefit 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 Other Information 9B.

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	Page
	Reports of KPMG LLP, Independent Registered Public Accounting Firm	38
	Consolidated Balance Sheets as of December 31, 2012 and 2011	40
	Consolidated Statements of Operations and Comprehensive Loss for the years ended December 31, 2012, 2011 and 2010	41
	Consolidated Statements of Stockholders' Equity for the years ended December 31, 2012, 2011 and 2010	42
	Consolidated Statements of Cash Flows for the years ended December 31, 2012, 2011 and 2010	44
	Notes to Consolidated Financial Statements	46

## (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

	EXHIBIT INDEX	T.1. J	τ.		
Exhibit Number		Filed with this Form 10-	In	corporated by Ref	erence
	Exhibit Title	K	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

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10.28+	License/ Commercial Agreement dated November 4, 2005, between Olympus- Cytori, Inc. and the Company	10-K	000-32501 Exhibit 10.28	03/30/2006
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-К	000-32501 Exhibit 10.60	03/06/2009

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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
0.77	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
0.83	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
<u>23.1</u>	Consent of KPMG LLP, Independent Registered Public Accounting Firm	Х			
<u>31.1</u>	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	Х			
<u>31.2</u>	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	Х			
<u>32.1</u>	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	Х			
101.INS*	XBRL Instance Document	Х			
101.SCH*	XBRL Schema Document	Х			
101.CAL*	XBRL Calculation Linkbase Document	Х			
101.DEF*	XBRL Definition Linkbase Document	Х			
101.LAB*	XBRL Label Linkbase Document	Х			
*	XBRL Presentation Linkbase Document	Х			

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

# Indicates management contract or compensatory plan or arrangement.

<sup>\*</sup> 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

## **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

## 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

## 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.

Dated: March 15, 2013

By: /s/ Christopher J. Calhoun

Christopher J. Calhoun Chief Executive Officer

By: /s/ Mark E. Saad

Mark E. Saad Chief Financial Officer

Dated: March 15, 2013