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

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2011

OR

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

For the transition period from to

Commission file number 001-34375

CYTORI THERAPEUTICS, INC.

(Exact name of Registrant as Specified in Its Charter)

DELAWARE (State or Other Jurisdiction of Incorporation or Organization)

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

3020 CALLAN ROAD, SAN DIEGO, CALIFORNIA (Address of principal executive offices)

92121 (Zip Code)

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

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

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

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

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 T

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 T 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 T 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. T

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

The aggregate market value of the common stock of the registrant held by non-affiliates of the registrant on June 30, 2011, the last business day of the registrant's most recently completed second fiscal quarter, was \$227,294,414 based on the closing sales price of the registrant's common stock on June 30, 2011 as reported on the Nasdaq Global Market, of \$4.79 per share.

As of February 29, 2012, there were 57,928,606 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 2012 Annual Meeting of Stockholders, within 120 days after the registrant's fiscal year end of December 31, 2011, are incorporated by reference in Part III, Items 10, 11, 12, 13 and 14 of this Form 10-K.

TABLE OF CONTENTS

Item 1.	Business	4
Item 1A.	Risk Factors	10
Item 1B.	Unresolved Staff Comments	18
Item 2.	<u>Properties</u>	18
Item 3.	Legal Proceedings	18
Item 4.	Mine Safety Disclosures	19
	PART II	
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	20
Item 6.	Selected Financial Data	21
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	23
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	38
Item 8.	Financial Statements and Supplementary Data	40
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	74
Item 9A.	Controls and Procedures	74
Item 9B.	Other Information	75
	PART III	
Item 10.	Directors, Executive Officers and Corporate Governance	76
		-
Item 11.	Executive Compensation	76
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	76
Item 13.	Certain Relationships and Related Transactions, and Director Independence	76
Item 14.	Principal Accounting Fees and Services	76
	PART IV	
Item 15.	Exhibits, Financial Statement Schedules	77

PART I

Item 1. Business

General

Cytori Therapeutics, Inc. is developing cell therapies based on autologous adipose-derived stem and regenerative cells (ADRCs) to treat cardiovascular disease and repair soft tissue defects. Our scientific data suggest ADRCs improve blood flow, moderate the immune response and keep tissue at risk of dying alive. As a result, we believe these cells can be applied across multiple "ischemic" conditions. These therapies are made available by our proprietary device, the Celution® System, which automates the extraction and preparation of clinical grade ADRCs at the point-of-care.

Clinical Pipeline: Cardiovascular Disease

The most advanced therapeutic application in our clinical pipeline is for cardiovascular disease. We are pursuing applications for ADRCs in chronic myocardial ischemia (heart failure) and acute myocardial infarction (heart attacks).

We completed our PRECISE clinical trial in patients with chronic myocardial ischemia, a severe form of coronary artery disease. Primary six-month outcomes and longer-term 18-month data showing safety and sustained improvement in cardiac functional capacity (mVO₂) were reported in 2010. Based on this data, in 2011 we applied for approval in Europe to expand the Celution® CE Mark (currently approved for general processing, breast reconstruction and other soft tissue claims) to include patients with no-option chronic myocardial ischemia (CMI). We anticipate a regulatory body decision on that application in 2012.

In December 2011, Cytori filed an Investigational Device Exemption (IDE) application with the Food and Drug Administration (FDA) for the ATHENA U.S. safety and feasibility trial for no-option CMI patients. Subsequent to the end of the year, we received approval to initiate the trial. The ATHENA trial is a multi-center, randomized, double blind, placebo controlled, safety and feasibility trial that will enroll up to 45 patients.

In 2011, we received approval for and initiated ADVANCE, our European trial for acute heart attack patients. ADVANCE is a prospective, randomized, placebo controlled, double-blind clinical trial that will enroll up to 360 patients with myocardial infarction in up to 35 treatment centers, predominately in Europe. It was designed based on the results of our APOLLO safety and feasibility trial for a similar patient population. Long-term, 18-month data from the APOLLO trial demonstrated safety and sustained improvement in infarct size and perfusion.

Commercial Business

Soft Tissue:

Commercial efforts are focused primarily on breast reconstruction. Our RESTORE-2 partial mastectomy reconstruction trial demonstrated high level of patient and physician satisfaction with treatment outcomes at 6-months that were sustained at 12-months. Blinded analysis of MRI images by an independent core laboratory confirmed objective improvements in breast shape and defect shape after treatment.

Our primary focus is to obtain reimbursement for the Celution® System consumable for cell-enriched breast reconstruction. These efforts are most advanced in the UK, while efforts to target other G5 countries are also underway. Additionally we are seeking both approval and reimbursement in Japan. Securing reimbursement will allow us optimal conditions to formally launch our product in the respective countries.

In Europe, the Celution[®] 800 System has CE Mark approval for certain soft tissue procedures including breast reconstruction. The System is currently offered on a pre-launch basis within the EU and select countries in Europe and Asia through a combination of direct sales and distributor-based sales channels.

Research:

We sell our products to researchers at academic centers and hospitals to fulfill the demand for access to stem and regenerative cells at the point-of-care. Certain researchers have chosen to study patient outcomes in specific indications to understand the benefit of these cells under their own independently sponsored studies. Our 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.

Cell & Tissue Banking

We currently sell our StemSource[®] Banking line, encompassing three product configurations, to hospitals, plastic surgery clinics, tissue banks, and stem cell banking companies worldwide (outside the U.S.). Customers can purchase banks that enable 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.

Other Products

Cytori is also commercializing products to meet the demand for best-in-class autologous fat grafting. 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. Puregraft® was cleared for sale in the U.S. and approved for sale in the EU in January and July 2010, respectively, and is currently being sold for and used in fat grafting procedures in both reconstructive and cosmetic procedures.

We offer a range of ancillary products designed to optimize tissue harvest and graft delivery. Among the offerings is the Celbrush®, a surgical instrument for precise delivery of micro droplets that was launched in 2009. Sold separately and in combination with other items, the Celbrush® is sold to reconstructive and cosmetic surgeons worldwide and may be used for both autologous fat grafting and cell-enriched fat grafting procedures. We also offer instrumentation to optimize tissue harvest.

Manufacturing and Raw Materials

The majority of our products are manufactured at the company's headquarters in San Diego, CA. Our internal manufacturing capabilities are expected to enable us to meet anticipated demand in 2012. Exceptions include Celution® One, one of our next-generation devices, which will be used in our cardiovascular disease clinical development and components of our Puregraft® System and ancillary supplies. Celution® One is manufactured through a joint venture arrangement between Cytori and Olympus Corporation (Olympus), a global optics and life science company. The manufacture of our products are, 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.

Raw materials required to manufacture the Celution® System family of products and disposables 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 or devices designed to isolate cells from human tissues. Most efforts involve cell sources such as bone marrow, placental tissue, umbilical cord and peripheral blood, and skeletal muscle. We work exclusively with adult stem and regenerative cells from adipose tissue.

Many companies are working in this field. We compete across several areas, including equity and capital, clinical trial sites, enrollment of patients in clinical trials, corporate partnerships, and eventually anticipate competing for 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 that we are also pursuing.



Some of our competitors work with adipose-derived cells. To the best of our knowledge, none of these companies are currently conducting prospective, controlled human clinical trials nor do any of these companies have regulatory clearance for their product in Europe (under the medical device directive) or in the United States. 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.

Companies researching and developing cell-based therapies for cardiovascular disease include, among others Aastrom, Athersys, Baxter, Capricor, Cytomedix, Mesoblast, NeoStem, and Osiris. 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.

Research and Development

Research and development expenses were \$10,904,000, \$9,687,000 and \$12,231,000 for the years ended December 31, 2011, 2010 and 2009, 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 2011 focused predominantly on the following areas:

- Made preparations for a prospective, multi-center safety and feasibility study (ATHENA Trial) in the US for the treatment of chronic myocardial ischemia. Prepared and filed Investigational Device Exemption (IDE) application with the FDA following a Pre-IDE meeting. In January 2012, Cytori received approval from the FDA to begin the ATHENA trial;
- Initiated the ADVANCE multi-center clinical trial for acute heart attack patients in the EU; identified trial centers, sought hospital and country approvals, and began patient enrollment;
- Prepared and submitted an application to our notified body in the EU to expand our CE Mark claims for the Celution® System to include no-option chronic myocardial ischemia patients and have maintained ongoing dialogue;
- · Continued patient follow-up from the APOLLO heart attack and PRECISE no-options chronic myocardial ischemia trials;
- Reported final outcomes of RESTORE-2 lumpectomy defect reconstruction studies demonstrating high rate of patient and physician satisfaction with treatment results;
- · Obtained CE Mark claims for the next generation Celution® One System;
- 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 optimize and develop the Celution[®] System family of products and next-generation devices, single-use consumables and related instrumentation;

Customers

Cytori has established a network of distributors who offer our Puregraft® System and Celution® System, instrumentation and consumables 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 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, Europe 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 banks are sold directly to customers in the United States.



Sales by Geographic Region

For the years ended December 31, 2011, 2010 and 2009, product revenue came from sales of Puregraft®, the Celution®800/CRS System, related instrumentation and consumables to the European and Asia-Pacific cosmetic and reconstructive surgery markets, as well as from sales of the StemSource® laboratory and banking equipment in the U.S. and Asia.

Planned Capital Expenditures

We expect to spend approximately \$1 million on capital equipment purchases in 2012. These may be paid with our available cash, or financed if appropriate.

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 43 issued patents worldwide. We have 14 issued U.S. patents and 29 issued international patents. Of the 14 issued U.S. patents, 2 were issued in 2011 and 2 were issued in 2012 thus far. Of the 29 issued international patents, 10 were issued in 2011 and none so far in 2012. In addition, we have over 100 patent applications pending worldwide related to our technology. We are seeking additional patents on methods and systems for processing adipose-derived stem and regenerative cells, on the use of adipose-derived stem and regenerative cells for a variety of therapeutic indications, including their mechanisms of actions, on compositions of matter that include adipose-derived stem and regenerative cells, and on other scientific discoveries. We are also the exclusive, worldwide licensee of the Regents of the University of California's rights to a portfolio related to isolated adipose derived stem cells.

We cannot assure that any of our pending patent applications will be issued, that we will develop additional proprietary products that are patentable, that any patents issued to us will provide us with competitive advantages or will not be challenged by any third parties or that the patents of others will not prevent the commercialization of products incorporating our technology. Furthermore, we cannot assure that others will not independently develop similar products, duplicate any of our products or design around our patents. U.S. patent applications are not immediately made public, so we might be surprised by the grant to someone else of a patent on a technology we are actively using.

There is a risk that any patent applications that we file and any patents that we hold or later obtain could be challenged by third parties and declared invalid or infringing of third party claims. A patent interference proceeding may be instituted with the U.S. Patent and Trademark Office (the "USPTO") when more than one person files a patent application covering the same technology, or if someone wishes to challenge the validity of an issued patent. At the completion of the interference proceeding, the USPTO will determine which competing applicant is entitled to the patent, or whether an issued patent is valid. Patent interference proceedings are complex, highly contested legal proceedings, and the USPTO's decision is subject to appeal. This means that if an interference proceeding 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. 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.

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. And in the U.S., we received IDE approval from the FDA and are now commencing a safety and feasibility trial for chronic myocardial ischemia under the device regulations via the PMA pathway.

We continue to pursue additional indications through the 510(k) and humanitarian use device (HUD) pathways for various indications-for-use.

Summary of Celution® System Family Regulatory Status

Regulatory Status	Region	Clinical Applications	Regulatory Status
-------------------	--------	-----------------------	-------------------

Japan	Cell Banking	Approved						
	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 Chronic myocardial ischemia	CE Mark submission for expanded claims under review						
	Acute Heart Attack	In clinical trial						
	Multiple specific surgical claims	Pre-clinical						
	Cell Concentration	CE Mark						
	Celution® One cosmetic and reconstructive surgery claims	CE Mark						
U.S.	No option chronic myocardial ischemia	IDE/PMA safety and feasibility trial approved; to initiate in 2012						

Our Puregraft® family of products and the Celbrush® are cleared in the U.S. and CE Mark approved in Europe we are seeking approval in other countries around the world. These product lines are complementary to our core Celution® and cell therapy business.

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.

Lastly, the FDA is currently considering modifications to the 510(k) and HUD process. The extent and effect of these potential modifications are not currently known. Moreover, the effect these changes may have on our ability to obtain future 510(k) clearances and HUD approvals is also not currently clear. Regardless of the lack of current specificity regarding the potential effect, it is relatively well accepted that these changes to the FDA 510(k) and HUD system will almost certainly result in a more rigorous approval process.

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. Specifically, in regard to our Thin Film product line in Japan (to be distributed by Senko once approved), we have been seeking marketing authorization from the Japanese Ministry of Health, Labour and Welfare (MHLW), but have not obtained approvals yet.

Employees

As of December 31, 2011, we had 128 employees, including part-time and full-time employees. These employees are comprised of 17 employees in manufacturing, 47 employees in research and development, 30 employees in sales and marketing and 34 employees in management, finance and administration. From time to time, we also employ independent contractors to support our operations. Our employees are not represented by any collective bargaining agreements and we have never experienced an organized work stoppage.

Corporate Information and Web Site Access to SEC Filings

We were initially formed as a California general partnership in July 1996, and incorporated in the State of Delaware in May 1997. We were formerly known as MacroPore Biosurgery, Inc., and before that as MacroPore, Inc. Our corporate offices are located at 3020 Callan Road, San Diego, CA 92121. Our telephone number is (858) 458-0900. We maintain an Internet website at www.cytori.com. Through this site, we make available free of charge our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file such material with, or furnish it to, the U.S. Securities and Exchange Commission (SEC). In addition, we publish on our website all reports filed under Section 16(a) of the Securities Exchange Act by our directors, officers and 10% stockholders. These materials are accessible via the Investor Relations section of our website within the "SEC Filings" link. Some of the information is stored directly on our website, while other information can be accessed by selecting the provided link to the section on the SEC website, which contains filings for our company and its insiders.

Item 1A. Risk Factors

In analyzing our company, 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 those discussed below, as well as those discussed above 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. We will likely be required to raise capital from one or more sources in the future 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, and if our cash reserves fall below those minimum requirements, then we could be in default under our 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. There is no guarantee that adequate funds will be available when needed from additional debt or equity financing, arrangements with development and commercialization partners, increased results of operations, or from other sources, or on terms attractive 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, clinical or regulatory activities, which could have a substantial negative effect on our results of operations and financial condition.

Continued turmoil in the economy could harm our business

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

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

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

Our business strategy is high-risk

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

Our joint venture and relationship with Olympus are important to us

Our business depends in part on keeping our business relationship with Olympus Corporation and our joint venture collaboration with them operating smoothly and efficiently. We have given Olympus-Cytori, Inc. an exclusive license to manufacture future generation Celution® System devices. If Olympus-Cytori, Inc. does not successfully develop and manufacture these devices, we may experience disruptions and/or delays of our commercialization of these devices into the market. Any significant disruption of our relationship or our business activity with Olympus could affect our operations and commercialization efforts (clinical, regulatory and/or commercial sales), and be harmful to our business.

We and Olympus must overcome contractual and cultural barriers. Although our relationship is formally measured by a set of complex contracts, many aspects of the relationship will be non-contractual and must be worked out between the parties and the responsible individuals. The joint venture is intended to have a long life, and it is difficult to maintain cooperative relationships over a long period of time in the face of various kinds of change. Cultural differences, including language barrier to some degree, may affect the efficiency of the relationship.

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.

Olympus is entitled to designate the joint venture's chief executive officer and a majority of its board of directors, which means that day-to-day decisions which are not subject to a contractual veto will essentially be controlled by Olympus. In addition, Olympus-Cytori, Inc. may require more money than its current capitalization in order to complete development and production of future generation devices. If we are unable to help provide future financing for Olympus-Cytori, Inc., our relative equity interest in Olympus-Cytori, Inc. may decrease.

Furthermore, under a License/Joint Development Agreement among Olympus-Cytori, Inc., Olympus, and us, Olympus may have a significant role in the development of Olympus-Cytori, Inc.'s next generation devices. Although Olympus has extensive experience in developing medical devices, this arrangement has resulted in a reduction of our control over the development and manufacturing of the next generation devices. Any significant disruption of activity by Olympus in connection with our business relationship and/or the development of Olympus-Cytori's next generation devices and our joint venture could be harmful to our business.

In 2011 Olympus experienced issues which have led to a significant change in the management structure at Olympus. We believe that these changes will continue to develop in 2012 and that it is possible that they could affect our Joint Venture relationship. If the Joint Venture is materially impacted by such changes in a manner that significantly disrupts our operations and commercialization efforts (clinical, regulatory and/or commercial sales), then our business could 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.

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

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

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

Successful development and market acceptance of our products is subject to developmental risks, including failure of inventive imagination, ineffectiveness, lack of safety, unreliability, failure to receive necessary regulatory clearances or approvals, high commercial cost, preclusion or obsolescence resulting from third parties' proprietary rights or superior or equivalent products, competition from copycat products, and general economic conditions affecting purchasing patterns. There is no assurance that we or our partners will successfully develop and commercialize our products, or that our competitors will not develop competing technologies that are less expensive or superior. Failure to successfully develop and market our products would have a substantial negative effect on our results of operations and financial condition.

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

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



Future clinical trial results may differ significantly from our expectations

While we have proceeded incrementally with our clinical trials in an effort to gauge the risks of proceeding with larger and more expensive trials, we cannot guarantee that we will not experience negative results larger and much more expensive clinical trials than we have conducted to date, such as the new ADVANCE acute heart attack trial in Europe. 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.

We have limited manufacturing experience

We have limited experience in manufacturing the Celution® System platform or its consumables at a commercial level. With respect to our Joint Venture, although Olympus is a highly capable and experienced manufacturer of medical devices, there can be no guarantee that the Olympus-Cytori Joint Venture will be able to successfully develop and manufacture the next generation Celution® System 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 the Celution[®] 800 System and the StemSource[®] 900-based Cell Bank since 2008, we cannot assure that we will be able to manufacture sufficient numbers of such products to meet the demand, or that we will be able to overcome unforeseen manufacturing difficulties for these sophisticated medical devices.

In the event that the Olympus-Cytori Joint Venture is not successful in the development and manufacture of the next generation Celution® One System, 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. This makes us significantly dependant on the continued dedication and skill of Olympus for the successful development of future generation Celution® Systems.

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 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. 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. As noted above and in the case of the University of Pittsburgh lawsuit, even patents issued to us or our licensors might be judicially determined to belong in full or in part to third parties.

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.

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.

Our amended regenerative cell technology license agreement with the Regents of the University of California (UC) which includes issued U.S. patent number 7,470,537, contains certain developmental milestones, which if not achieved could result in the loss of exclusivity or loss of the license rights. The loss of such rights could impact our ability to develop certain regenerative cell technology products. Also, our power as licensee to successfully use these rights to exclude competitors from the market is untested.

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 Olympus-Cytori, Inc. joint venture are subject to FDA regulation

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

The regulatory process can be lengthy, expensive, and uncertain. Before any new medical device may be introduced to the U.S. market, the manufacturer generally must obtain FDA clearance or approval through either the 510(k) pre-market notification process or the lengthier pre-market approval application, or PMA, process. It generally takes from three to 12 months from submission to obtain 510(k) pre-market clearance, although it may take longer. Approval of a PMA could take four or more years from the time the process is initiated. The 510(k) and PMA processes can be expensive, uncertain, and lengthy, and there is no guarantee of ultimate clearance or approval. We expect that some of our products under development today or in the future, as well as Olympus-Cytori's, 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. For example, we still have not obtained regulatory approval for our Thin Film products in Japan. 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 do not know if the current FDA proposed changes to the 510(k) system will have any material effect on any of our current or future 510(k) applications. Depending on if and how these proposed changes are ultimately adopted and implemented, our current or future applications for FDA approval for our products may be adversely affected and our business could be harmed as a result.

We may have difficulty obtaining health insurance reimbursement for our products

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

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

We have a significant concentration of sales in Japan, the United States, and Europe given our early stage of commercialization. As a result of this regional concentration of sales, changes in the regulatory environment in these countries, or any other countries in which we have a significant concentration of sales, could adversely impact our sales. If the government of any of these countries significantly curtailed or prohibited the sale of our products, our revenues would be adversely affected. Recently, the earthquake, tsunami and subsequent problems affecting nuclear power plants in Japan have dramatically impacted Japan's manufacturing capacity and business activities. The long-term effect of these issues is still uncertain. While we expect that the situation has stabilized and will improve, if it does not, these circumstances could be harmful to our business since the Celution ® One device is manufactured in Japan, and a substantial portion of our sales have come from Japan.

Our global operations expose us to additional risk and uncertainties.

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.

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

The manufacture of our products are, 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.



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.

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

Our Amended and Restated Certificate of Incorporation and Bylaws contain certain provisions that could prevent or delay the acquisition of Cytori by means of a tender offer, proxy contest, or otherwise. They could discourage a third party from attempting to acquire control of Cytori, even if such events would be beneficial to the interests of our stockholders. Such provisions may have the effect of delaying, deferring, or preventing a change of control of Cytori and consequently could adversely affect the market price of our shares. Also, 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 Cytori, and this prevention or delay adversely affect the market price of our shares.

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.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

We lease 77,585 square feet at 3020 and 3030 Callan Road, San Diego, California that we use for our corporate headquarters. 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 will receive a 50% rent abatement for the additional 17,467 square feet over the next two years, and we will receive a tenant improvement allowance as well. 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 \$156,000 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, 2011, 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

	H	High		Low
2010				
Quarter ended March 31, 2010	\$	9.50	\$	4.40
Quarter ended June 30, 2010	\$	6.12	\$	3.42
Quarter ended September 30, 2010	\$	5.43	\$	3.15
Quarter ended December 31, 2010	\$	6.15	\$	4.07
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

All of our outstanding shares have been deposited with DTCC since December 9, 2005.

Warrants

	Н	High		Low
2010				
Quarter ended March 31, 2010	\$	6.90	\$	2.62
Quarter ended June 30, 2010	\$	4.70	\$	1.94
Quarter ended September 30, 2010	\$	3.64	\$	2.05
Quarter ended December 31, 2010	\$	4.19	\$	2.99
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

As of February 29, 2012, we had approximately 25 record holders of our common stock and 3 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

Number of securities to be issued upon exercise of outstanding options, warrants and rights	01	remaining available for future issuance under equity compensation plans (excluding securities reflected in column(a))
(a)	(b)	(C)
2,226,053	\$ 4.2	8 —
5,557,097 7,783,150	Ψ	
	be issued upon exercise of outstanding options, warrants and rights (a) 2,226,053 5,557,097	be issued upon exercise of outstanding options, warrants and rightsexercise price of outstanding options, warrants and rights(a)(b)2,226,053\$ 4.25,557,097\$ 5.15,557,097\$ 5.1

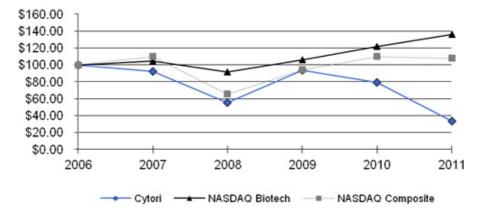
Number of securities

(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, 2006 through December 31, 2011. 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, 2011, are derived from, and should be read in conjunction with, our audited consolidated financial statements. The consolidated balance sheets as of December 31, 2011 and 2010, 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, 2011, 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, 2008 and 2007, and the related consolidated statements of operations and comprehensive loss, stockholders' equity (deficit), and cash flows for the years ended December 31, 2008 and 2007, which were also audited by KPMG LLP, are included with our annual reports previously filed.



Table of Contents

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):

		2011		2010	_	2009		2008		2007
Statements of Operations Data:										
Product revenues:										
Sales to related party	\$		\$	590	\$	591	\$	28	\$	792
Sales to third parties		7,983		7,664		5,246		4,500		_
•		7,983		8,254		5,837		4,528		792
		2 0 2 7		2 000		2 20 4		1.05.4		400
Cost of product revenues		3,837		3,908		3,394	_	1,854		422
Gross profit (loss)		4,146		4,346		2,443	_	2,674		370
Development revenues:										
Development, related party		1,992		2,122		8,840		774		5,158
Other, related party						—		1,500		_
Research grants and other		21		251		53		51		99
		2,013		2,373		8,893		2,325		5,257
Operating expenses:										
Research and development		10,904		9,687		12,231		17,371		20,020
Sales and marketing		13,560		11,040		6,583		4,602		2,673
General and administrative		14,727		12,570		10,415		11,727		14,184
Change in fair value of warrants		(4,360)		(1,285)		4,574				
Change in fair value of option liabilities		740		30		(920)		1,060		100
Total operating expenses		35,571		32,042		32,883		34,760		36,977
Total operating loss		(29,412)		(25,323)		(21,547)		(29,761)		(31,350)
Other income (expense):										
Gain on sale of assets		_								1,858
Interest income		9		9		20		230		1,028
Interest expense		(2,784)		(2,052)		(1,427)		(420)		(155)
Other income (expense), net		(55)		23		(218)		(40)		(46)
Equity loss in investments		(209)		(151)		(44)		(45)	_	(7)
Net loss	\$	(32,451)	\$	(27,494)	\$	(23,216)	\$	(30,036)	\$	(28,672)
Basic and diluted net loss per share	\$	(0.61)	\$	(0.60)	\$	(0.65)	\$	(1.12)	\$	(1.25)
Basic and diluted weighted average common shares		53,504,030	_	45,947,966	_	35,939,260	_	26,882,431	_	22,889,250
Statements of Cash Flows Data:										
Net cash used in operating activities	\$	(35,323)	\$	(23,574)	\$	(23,807)	\$	(33,389)	\$	(29,995)
Net cash provided by (used in) investing activities	Ψ	(560)	Ψ	(1,290)	Ψ	(221)	Ψ	(393)	Ψ	5,982
Net cash provided by financing activities		20,137		64,678		24,271		34,928		26,576
Net increase (decrease) in cash		(15,746)	_	39,814		243	_	1,146	_	2,563
Cash and cash equivalents at beginning of year		52,668		12,854		12,611		11,465		8,902
Cash and cash equivalents at end of year	\$	36,922	\$	52,668	\$	12,854	\$	12,611	\$	11,465
Balance Sheet Data:										
Cash, cash equivalents and short-term investments	\$	36,922	\$	52,668	\$	12,854	\$	12,611	\$	11,465
Working capital		35,516		45,730		9,915		10,090		4,168
Total assets		51,534		66,347		24,749		25,609		21,507
Deferred revenues, related party		3,520		5,512		7,634		16,474		18,748
Deferred revenues		5,244		4,929		2,388		2,445		2,379
Warrant liabilities		627		4,987		6,272		2.060		1 000
Option liabilities Long-term deferred rent		1,910 504		1,170 398		1,140		2,060 168		1,000 473
Long-term deferred rent		21,962		398 13,255		2,790		5,044		473 237
Total stockholders' equity (deficit)	\$	9,946	\$	22,873	\$	(3,658)	\$	(7,717)	\$	(9,400)
1	Ŧ	-,	+	_, 2	*	(-,)	Ŧ	(, , - /)	*	(2,)

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 United States of America 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

Cytori Therapeutics, Inc. is developing cell therapies based on autologous adipose-derived stem and regenerative cells (ADRCs) to treat cardiovascular disease and repair soft tissue defects. Our scientific data suggest ADRCs improve blood flow, moderate the immune response and keep tissue at risk of dying alive. As a result, we believe these cells can be applied across multiple "ischemic" conditions. These therapies are made available by our proprietary device, the Celution® System, which automates the extraction and preparation of clinical grade ADRCs at the point-of-care.

Our goal is to build shareholder value by focusing on novel, 'high-value' cell-based therapeutics to market in core geographies: Europe, Asia, and the Americas. Celution® is a platform technology that we believe could potentially address multiple diseases and conditions. To take advantage of our limited resources, we are committing our internal resources to cardiovascular disease and soft tissue defect repair, offering the technology to customers and/or partners to identify and explore additional potential indications, and are seeking partners to accelerate core or non-core opportunities.

Pipeline

The primary therapeutic area within our clinical development pipeline is cardiovascular disease. We have completed and reported results from three clinical trials, moved from APOLLO to ADVANCE in Europe for heart attacks, have been approved to initiate a feasibility trial in the U.S. for chronic myocardial ischemia, and are seeking approval in Europe for chronic myocardial ischemia.

In the U.S., we received approval to begin our ATHENA feasibility trial in chronic myocardial ischemia, which will be a prospective, double blind, placebo-controlled, multi-center trial in up to 45 patients. Enrollment is expected to begin in the second quarter of 2012 and be completed within 12 to 18 months.

In our ADVANCE trial, we are amending our European clinical protocol to conform to the evolving country-specific regulatory policies for good manufacturing practices for the control of the cell output from our technology. In aggregate, these protocol amendments should help harmonize the current country to country requirements for cell processing and accelerate country approvals, which has been the rate-limiting step in site initiation. In the meantime, we have already qualified 27 sites with an emphasis on sites in the European G5. We have been in discussions with the leading EU competent authorities and we expect to have a revised timeline for the trial by the end of the second quarter of 2012.



Our CE Mark application for the Celution® System in no-option chronic myocardial ischemia patients is currently under review by our notified body. Barring delays or requests for further data, we anticipate a decision in the first half of 2012. Should we receive approval, we would target select hospital customers in the G5 countries and likely implement a patient registry. This registry will allow us to collect further data to support reimbursement and government payors, and help expand market access.

Commercial Business

The 2012 goals for our commercial business are twofold. The first is to expand market access so that we can grow product revenue significantly over time and the second is to achieve a positive contribution margin in the near term. Today, our sales activities remain largely opportunistic and focused on obtaining and maintaining successful early clinical adopters of our products. Looking forward, we intend to target larger market segments and grow therapeutically oriented consumable revenue. To accomplish this goal, we are focusing on driving essential market access elements such as published clinical and health economics data, physician education and indication-specific therapeutic claims, while maintaining a critical eye on expenses. In late 2011, Cytori reduced its sales and marketing headcount. The impact of this reduction along with other sales and marketing costs will result in reduced overall spend in 2012, while maintaining our ability to achieve 2012 growth objectives.

Our most advanced therapeutic indication is breast reconstruction. In Europe, the NHS National Innovation Centre in the UK indicated that our technology may be cost-effective for lumpectomy breast reconstruction. Furthermore, the use of ADRCs was acknowledged by the British Association of Plastic, Reconstructive & Aesthetic Surgeons (BPRAS) in their latest breast surgery guidelines, demonstrating progress in developing market access. In 2012, we intend to seek a technology assessment in the UK specific to our Celution® System for the RESTORE procedure as a way to both improve healthcare and lower the overall costs for women with breast cancer, which will help support our reimbursement efforts in the UK. In a similar fashion to the UK, we are working with other key competent authorities in Europe to expand coverage. In Japan, we are working with the Pharmaceuticals and Medical Devices Agency (PMDA), to leverage our global clinical data for Japanese approval of our technology for breast reconstruction. In other geographic markets, we intend to grow product sales where we are approved to sell.

Corporate

Our corporate priorities are to expand global regulatory approvals, complete strategic development and commercialization partnerships, strengthen the balance sheet and efficiently manage expenses.

One of our top priorities is to establish a strategic partnership, which could accelerate core or non-core opportunities and potentially bring in significant minimally or non-dilutive capital. Completing one or more substantive partnerships is achievable this year. Due to the platform nature of our technology and products, we are able to simultaneously pursue transactions for multiple indications in core areas like cardiovascular disease and other non-core areas such as liver disease for which Astellas Pharma has negotiation rights.

We have been actively streamlining our operations and reducing costs wherever possible, focusing the company and minimizing cash operating costs. Our 2012 budget calls for a reduction of approximately \$6 million in combined Sales & Marketing and General and Administrative expenses for 2012 as compared to 2011. This will support an estimated \$3 million anticipated increase in R&D expenses for 2012, principally to fund our cardiac cell therapy clinical trials.

Regulatory processes are well underway in the US, Canada, the EU, Australia, Japan, Russia and other countries. We expect progress in many of these markets during 2012 that could expand our commercial opportunities. In the US, receiving the IDE approval was a key development for the company that signals a positive and clearer pathway with the FDA. We also feel that the multiple opportunities we have in other countries increase the possibility that one or more meaningful markets could open up for Cytori. Two countries of note where we have made recent progress include Australia and India. We will provide greater detail on these markets as these opportunities mature and grow.

<u>Olympus Partnership</u>

On November 4, 2005, we entered into a strategic development and manufacturing joint venture agreement and other related agreements with Olympus. As part of the terms of these agreements, we formed a joint venture, Olympus-Cytori, Inc. (Joint Venture), to develop and manufacture future generation devices based on our Celution[®] System platform.

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 device technology, including the Celution® System platform and certain related intellectual property, to the Joint Venture for use in future generation devices. These devices will process and purify adult stem and regenerative cells residing in adipose (fat) 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 first generation Celution® System platform in January 2006, we received an additional \$11,000,000 development milestone payment from the Joint Venture.

The Joint Venture currently has exclusive access to our Celution[®] System device technology for the development, manufacture, and supply of such systems to us. Once a 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 agreements and regulatory rights) to sell the Celution[®] System devices for all therapeutic applications of adipose stem and regenerative cells.

We have worked closely with Olympus' team of scientists and engineers to design the future generations of the Celution® System so that it will contain certain product enhancements and that can be manufactured in a streamlined manner.

In August 2007, we entered into a License and Royalty Agreement with the Joint Venture which provides us the ability to commercially launch the Celution® System platform earlier than we could have otherwise done so under the terms of the Joint Venture Agreements. Subsequently, in November 2007, we amended the License/Commercial Agreement to substantially incorporate the terms of the Royalty Agreement (effective on the expiration of the Royalty Agreement) to continue to allow us to manufacture the Cytori-developed Celution® System platform, including the Celution® 800/CRS, until such time as the Joint Venture's products are commercially available for the same market served by the Cytori platform, subject to a reasonable royalty that will be payable to the Joint Venture for all such sales.

Other Related Party Transactions

On February 8, 2008, we agreed to sell 2,000,000 shares of unregistered common stock to Green Hospital Supply, Inc. for \$12,000,000 cash, or \$6.00 per share, in a private stock placement. On February 29, 2008, we closed the first half of the private placement with Green Hospital Supply, Inc. and received \$6,000,000. We closed the second half of the private placement on April 30, 2008 and received the second payment of \$6,000,000.

In August 2008, we received an additional \$6,000,000 from Olympus in a private placement of 1,000,000 unregistered shares of our common stock and a warrant to purchase an additional 500,000 shares of our common stock at an original exercise price of \$8.50 per share. The purchase price was \$6.00 per unit (with each unit consisting of one share and 50% warrant coverage). The warrant is exercisable anytime after February 11, 2009 and will expire on August 11, 2013.



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, 2011, 2010, and 2009:

		Years ended						
		2011	2010			2009		
Related party	\$	_	\$	590,000	\$	591,000		
Third party		7,983,000		7,664,000		5,246,000		
Total product revenues	\$	7,983,000	\$	8,254,000	\$	5,837,000		
% attributable to Olympus	_			0.1%				
% attributable to Green Hospital Supply				7.1%		10.1%		

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 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.

Our product sales in the current year were significantly impacted by the major earthquake, tsunami and the aftermath that occurred in Japan in March. A significant portion of our customer base is located in Japan and thus the natural disaster affected our sales during the year ended December 31, 2011.

The future: We expect to continue to generate product revenues from a mix of Celution (8) and StemSource (8) System and consumables sales as well as Puregraft (8) 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. It is anticipated sales in Japan will improve as the country continues to recover from the natural disaster in March 2011.

Cost of product revenues

Cost of product revenues relate primarily to Celution[®] System products and StemSource[®] Cell Banks and includes material, manufacturing labor, and overhead costs. The following table summarizes the components of our cost of revenues for the years ended December 31, 2011, 2010 and 2009:

	-	Years ended					
	-	2011			2010		2009
Cost of product revenues	4	5	3,772,000	\$	3,852,000	\$	3,340,000
Share-based compensation			65,000		56,000		54,000
Total cost of product revenues	9	5	3,837,000	\$	3,908,000	\$	3,394,000
Total cost of product revenues as % of product revenues	_	48.1% 47.3%		_	58.1%		

Cost of product revenues as a percentage of product revenues was 48.1%, 47.3% and 58.1% for the years ended December 31, 2011, 2010 and 2009, respectively. Fluctuation in this percentage is to be expected due to the product mix as well as mix of distributor and direct sales comprising the revenue for the period.

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, 2011, 2010 and 2009:

	Years ended						
	_	2011	1 2010			2009	
Milestone revenue (Olympus)	\$	1,992,000	\$	2,122,000	\$	8,840,000	
Research grant (NIH)		_		_		49,000	
Grant Revenue				244,000		_	
Regenerative cell storage services		4,000		4,000		4,000	
Other		17,000		3,000		_	
			_				
Total development revenues	\$	2,013,000	\$	2,373,000	\$	8,893,000	

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, 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. During the year ended December 31, 2009, we recognized \$8,840,000 of revenue associated with our arrangement with Olympus as a result of achieving three clinical milestones during the year, which reflected the achievement of the primary goals of safety and feasibility, the completion of the enrollment process for both of our clinical cardiac trials, and completion of a monitoring end point for one cardiac trial.

The research grant revenue related to our agreement with the National Institutes of Health (NIH). Under this arrangement, the NIH reimbursed us for "qualifying expenditures" related to research on Adipose Tissue-Derived Cells for Vascular Cell Therapy. To receive funds under the grant arrangement, we were required to (i) demonstrate that we incurred "qualifying expenses," as defined in the grant agreement between the NIH and us, (ii) maintain a system of controls, whereby we can accurately track and report all expenditures related solely to research on Adipose Tissue-Derived Cells for Vascular Cell Therapy, and (iii) file appropriate forms and follow appropriate protocols established by the NIH. During the year ended December 31, 2009, we incurred \$49,000 in qualified expenditures. We recognized a total of \$49,000 in revenues for the year ended December 31, 2009, which included allowable grant 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 can elect 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 may recognize additional development revenues during 2012, as the anticipated completion for the next milestone of our Joint Venture and other Olympus performance obligations is in 2012. The exact timing of whether additional development revenue will be recognized and when amounts will be reported in revenue will depend on internal factors (for instance, our ability to complete certain contributions and obligations that we have agreed to perform) as well as external considerations, including obtaining certain regulatory clearances and/or approvals related to the Celution® System. However, the cash for these contributions and obligations was received by us when the joint venture agreement was signed and no further related cash payments will be made to us even if we recognize additional development revenue related to Olympus. To date under the contract, of the \$28,311,000 originally deferred, we have recognized a total of \$24,791,000 through December 31, 2011.

We will continue to recognize revenue from the Thin Film development work we are performing on behalf of Senko, based on the relative fair value of the milestones completed as compared to the total efforts expected to be necessary to obtain regulatory clearance from the MHLW. We are still awaiting regulatory clearance from the MHLW in order for initial commercialization to occur. Accordingly, we expect to recognize approximately \$1,129,000 (consisting of \$879,000 in deferred revenues plus a non-refundable payment of \$250,000 to be received upon commercialization) in revenues associated with this milestone arrangement if and when regulatory approval is achieved. Moreover, we expect to recognize \$500,000 per year associated with deferred Senko license fees over a three-year period following commercialization, if achieved, as the refund rights associated with the license payment expire. There can be no assurance given of whether, or when, this regulatory approval might be received to allow us to proceed with commercialization.

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, 2011, 2010 and 2009:

	Years ended					
	2011			2010		2009
Research and development	\$	10,021,000	\$	7,012,000	\$	9,007,000
Development milestone (Joint Venture)		396,000		2,221,000		2,713,000
Research grants (NIH)						49,000
Stock-based compensation		487,000		454,000		462,000
Total research and development expenses	\$	10,904,000	\$	9,687,000	\$	12,231,000

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.

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.

The decrease in research and development expenses for the year ended December 31, 2010 as compared to the same period in 2009 is primarily due to the decrease in clinical and preclinical study expense of \$967,000 and decrease in supplies related expense of \$412,000 primarily due to the decreased research and development experiment supplies usage as well as supplies purchased for prototype work prior to the related product commercialization.

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

The future: We expect research and development expenditures to increase in 2012 as we are scheduled to continue enrollment in the ADVANCE cardiac trial, start enrollment in our US trial ATHENA and seek additional regulatory clearances and potentially seek to initiate additional trials or patient registries during 2012.

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, 2011, 2010 and 2009:

		Y	ears ended	
	 2011		2010	 2009
Sales and marketing	\$ 12,674,000	\$	10,177,000	\$ 6,076,000
Stock-based compensation	886,000		863,000	507,000
Total sales and marketing	\$ 13,560,000	\$	11,040,000	\$ 6,583,000

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, which are due to our emphasis in seeking strategic alliances and/or co-development partners.

The increase in sales and marketing expense for the year ended December 31, 2010 as compared to the same period in 2009 was mainly attributed to the increase in salary and related benefits expense (excluding share-based compensation) of \$2,050,000, an increase in travel related expenses of \$526,000, increased promotional expenses of \$503,000 and an increase in professional services of \$373,000, which are due to our emphasis in seeking strategic alliances and/or co-development partners.

The future. We expect sales and marketing expenditures to decrease in 2012 based on targeted reductions in staff and external costs made prior to year end in 2011 and subsequent reductions made in early 2012.

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, 2011, 2010 and 2009:

		Ŋ	ears ended	
	 2011		2010	 2009
General and administrative	\$ 12,849,000	\$	10,888,000	\$ 8,789,000
Stock-based compensation	 1,878,000		1,682,000	 1,626,000
Total general and administrative expenses	\$ 14,727,000	\$	12,570,000	\$ 10,415,000

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.

For the year ended December 31, 2010 as compared to the same period in 2009, the increase in general and administrative expenses (excluding sharebased compensation) occurred primarily due to an increase in salary and related benefits expense of \$462,000 and an increase in professional services expense of \$1,207,000 primarily related to corporate strategic consulting.

The future. We expect general and administrative expenses to decline in 2012 as compared to 2011 based on cost-containment measures we began implement in the second half of 2011.



Stock-based compensation expenses

Stock-based compensation expenses include charges related to options issued to employees, directors and non-employees. 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, 2011, 2010 and 2009:

	Years ended										
	2011 2010										
Cost of product revenues	\$	65,000	\$	56,000	\$	54,000					
Research and development related		487,000		454,000		462,000					
Sales and marketing related		886,000		863,000		507,000					
General and administrative related		1,878,000		1,682,000		1,626,000					
Total stock-based compensation	\$	3,316,000	\$	3,055,000	\$	2,649,000					

Most of the share-based compensation expenses for the years ended December 31, 2011, 2010 and 2009 related to the vesting of stock option awards to employees.

During the third quarter of 2011, we made a company-wide option grant to our non-executive employees to purchase an aggregate of up to 197,700 shares of our common stock, subject to a four-year vesting schedule. The grant date fair value of the awards was \$2.34 per share. The resulting share-based compensation expense of \$463,000, net of estimated forfeitures, will be recognized as expense over the employees' respective vesting periods.

During the first quarter of 2011, we issued to our directors, executive officers and certain non-executive employees options to purchase an aggregate of up to 692,500 shares of our common stock, with four-year vesting for our officers and employees and two-year vesting for our directors. The grant date fair value of the awards granted to our officers and employees was \$3.46 and to our directors was \$3.15 per share. The resulting share-based compensation expense of \$2,375,000, net of estimated forfeitures, will be recognized as expense over the respective vesting periods.

Additionally, throughout 2011, we issued to our new hires and to employees being promoted options to purchase an aggregate of up to 223,750 shares of our common stock with four-year vesting for our officers and employees and two-year vesting for our directors.

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. The performance goals are weighted based on the following achievements: obtaining certain FDA clearance or approval (40%), achieving a targeted revenue increase for the fiscal year ended December 31, 2011 (20%), and entering into a major collaboration for development and/or commercialization of the Company's products (40%). 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 January 1, 2012. Once earned, the awards will remain unvested until January 1, 2013. Termination of employment prior to vesting will result in the forfeiture of any earned (as well as unearned) awards. Effective January 2012, the outstanding awards ceased vesting based upon decision of Compensation Committee that performance criteria has not been met as of January 1, 2012. No compensation expense was recognized related to these awards during the year ended December 31, 2011. The following table summarizes activity with respect to such awards during the year ended December 31, 2011:

	Options	G	Weighted Average Grant-Date Fair Value
Outstanding at January 1, 2011	0		
Granted	246,225	\$	5.82
Vested	0		
Cancelled/forfeited	0		
Outstanding at December 31, 2011	246,225	\$	5.82
Vested at December 31, 2011	0		

During the first quarter of 2010, we issued to our directors, executive officers and certain non-executive employees options to purchase an aggregate of up to 1,155,000 shares of our common stock, with four-year vesting for our officers and employees and two-year vesting for our directors. The grant date fair value of the awards granted to our officers and employees was \$4.07 and to our directors was \$4.16 per share. The resulting share-based compensation expense of \$4,713,000, net of estimated forfeitures, will be recognized as expense over the respective vesting periods.

During the first quarter of 2009, we made a company-wide option grant to our non-executive employees to purchase up to 249,250 shares of our common stock, subject to a four-year graded vesting schedule. The grant date fair value of the awards was \$2.00 per share. Following the reduction of our workforce at the end of this quarter, 182,100 of these options remained outstanding. The resulting share-based compensation expense of \$364,200, net of estimated forfeitures, is being recognized as expense over the employees' respective expected vesting periods.

During the first quarter of 2009, we issued to our officers and directors options to purchase an aggregate of up to 585,000 shares of our common stock, with four-year graded vesting for our officers and two-year graded vesting for our directors. The grant date fair value of the awards granted to our officers and directors was \$2.70 per share. The resulting share-based compensation expense of \$1,579,500, net of estimated forfeitures, is being recognized as expense over the respective expected vesting periods.

During the second quarter of 2009, we made a company-wide option grant to our non-executive employees to purchase up to 155,580 shares of our common stock, subject to a four-year graded vesting schedule. The grant date fair value of the awards was \$1.18 per share. The resulting share-based compensation expense of \$183,000, net of estimated forfeitures, is being recognized as expense over the employees' respective expected vesting periods.

During the third quarter of 2009, we issued 25,000 shares of restricted common stock to a non-employee consultant. The stock is restricted in that it cannot be sold for a specified period of time. There are no vesting requirements. Because the shares issued are not subject to additional future vesting or service requirements, the stock-based compensation expense of \$92,000 recorded in the third quarter of 2009 constitutes the entire expense related to this grant, and no future period charges will be incurred.

The future. We expect to continue to grant options (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, 2011, the total compensation cost related to non-vested stock options not yet recognized for all our plans is approximately \$5,782,000. These costs are expected to be recognized over a weighted average period of 1.72 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, 2011, 2010 and 2009:

	_	Years er	nded December 31	,		
	_	2011 2010 200				
Change in fair value of warrant liability	\$	(4,360,000) \$	(1,285,000) \$	4,574,000		

Effective January 1, 2009, we changed our method of accounting for certain common stock purchase warrants with exercise price reset features due to the adoption of a new accounting standard. These warrants were issued in connection with our August 2008 private placement of 2,825,517 unregistered shares of common stock and 1,412,758 common stock warrants. The warrants had an original exercise price of \$8.50 and expire in August 2013. Under the new standard, these warrants previously recognized in stockholders' equity (deficit) are now accounted for as fair value liabilities, with changes in fair value included in net earnings (loss).

The cumulative effect of the adoption is to present these warrants as liabilities on the date of the adoption as if they had been accounted for as liabilities since the warrants were issued. As a result on January 1, 2009, we recognized a \$1.7 million long-term warrant liability, a \$2.9 million decrease in accumulated deficit and a corresponding decrease in additional paid-in capital of \$4.6 million. The fair value of these warrants increased to \$6.3 million as of December 31, 2009, as a result of a \$4.6 million loss from the change in fair value of warrants for the year then ended. The fair value of these warrants for the year then ended. The fair value of these warrants for the year then ended. The fair value of these warrants decreased to \$0.6 million as of December 31, 2011, as a result of a \$4.4 million gain from the change in fair value of warrants for the year then ended.

Table of Contents

Since these warrants do not qualify for hedge accounting, all future changes in the fair value of the warrants will be recognized currently in earnings until such time as the warrants are exercised or expire. These warrants are not traded in an active securities market, and as such, we estimated the fair value of these warrants using option pricing model using the following assumptions:

	As	of		As of
	December	31, 2011	Dec	ember 31, 2010
Expected term	1	1.61 years		2.61 years
Common stock market price	\$	2.20	\$	5.19
Risk-free interest rate		0.19%)	0.82%
Expected volatility		69.98%)	86.03%
Resulting fair value (per warrant)	\$	0.32	\$	2.50

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 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.

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.

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, 2011, 2010 and 2009:

			Y	ears ended		
	2011 2010				2009	
Change in fair value of option liability	\$	740,000	\$	30,000	\$	(920,000)

In reference to the Joint Venture, 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 right 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 us at the higher of (a) \$22,000,000 or (b) the Put's fair value. The Put has been classified as a liability.

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.

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

	Dece	mber 31, 2011	De	cember 31, 2010	De	cember 31, 2009
Expected volatility of Cytori		76.07%		73.00%		72.00%
Expected volatility of the Joint Venture		76.07%		73.00%		72.00%
Bankruptcy recovery rate for Cytori		28.00%		28.00%		19.00%
Bankruptcy threshold for Cytori	\$	8,594,000	\$	5,842,000	\$	11,308,000
Probability of a change of control event for Cytori		3.33%		3.43%		2.95%
Expected correlation between fair values of Cytori and the Joint						
Venture in the future		99.00%		99.00%		99.00%
Risk free interest rate		1.89%		3.30%		3.85%

Table of Contents

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, 2011, 2010 and 2009:

			Y	ears ended		
	2011 2010 2009					
Interest income	\$	9,000	\$	9,000	\$	20,000
Interest expense		(2,784,000)		(2,052,000)		(1,427,000)
Other income (expense), net		(55,000)		23,000		(218,000)
Total	\$	(2,830,000)	\$	(2,020,000)	\$	(1,625,000)

- Interest income remained comparable for the year ended December 31, 2011 as compared to the same period in 2010. Interest income decreased for the year December 31, 2010 as compared to the same period in 2009 and 2008 primarily due to a decrease in interest rates.
- Interest expense increased for the year ended December 31, 2011 as compared to the same period in 2010 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. Interest expense increased in 2010 as compared to 2009 due to cash interest and non-cash amortization of debt issuance costs and debt discount for the \$20.0 million term loan. During the second quarter of 2010, we entered into an Amended and Restated Loan and Security Agreement, pursuant to which the lenders funded a term loan in the amount of \$20.0 million on June 14, 2010, and which refinanced the remaining balance of the term loan from 2008.
- The changes in other income (expense) in 2011, 2010 and 2009 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 increase as we continue to pay interest on the \$25.0 million term loan that funded 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, 2011, 2010 and 2009:

			Y	ears ended	
	2011 2010				 2009
Equity loss from investment in joint venture	\$	(209,000)	\$	(151,000)	\$ (44,000)

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. Over the next one to two years, the Joint Venture is expected to incur labor costs related to the development of our second generation commercial system as well as general and administrative expenses, offset by royalty and product revenue expected to be generated by our current Celution® 800/CRS and future generation devices. Though we have no obligation to do so, we plan to contribute funding to the Joint Venture to cover any costs should the Joint Venture deplete its cash balance.

Liquidity and Capital Resources

Short-term and long-term liquidity

The following is a summary of our key liquidity measures at December 31, 2011 and 2010:

	As of Dec	ember 31,
	2011	2010
Cash and cash equivalents	\$ 36,922,000	\$ 52,668,000
Current assets Current liabilities	\$ 43,337,000 7,821,000	\$ 58,953,000 13,223,000
Working capital	\$ 35,516,000	\$ 45,730,000

We incurred net losses of \$32,451,000, \$27,494,000 and \$23,216,000 for the years ended December 31, 2011, 2010 and 2009, respectively. We have an accumulated deficit of \$242,449,000 as of December 31, 2011. Additionally, we have used net cash of \$35,323,000, \$23,574,000 and \$23,807,000 to fund our operating activities for years ended December 31, 2011, 2010 and 2009, respectively. To date these operating losses have been funded primarily from outside sources of invested capital.

Management recognizes the need to generate positive cash flows in future periods and/or to obtain additional capital from various sources. In the continued absence of 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.

During 2011 and 2010, we expanded our commercialization activities while simultaneously pursuing available financing sources to support operations and growth. We have had, and will likely continue to have, an ongoing need to raise additional cash from outside sources to fund our operations for 2012 and beyond. If we cannot do so when required, we would need to reduce our research, development, and administrative operations, including reductions of our employee base, in order to offset lack of available funding. We continue to evaluate available strategic and financing opportunities as part of our normal course of business.

From January 1, 2009 to December 31, 2011, we have financed our operations primarily by:

- Receiving 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 with an exercise price of \$2.59 per share in March 2009,
- Receiving approximately \$4,252,000 in gross proceeds from a private placement of 1,864,783 unregistered shares of common stock and 3,263,380 common stock warrants (with an exercise price of \$2.62 per share) to a syndicate of investors in May 2009,
- 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 will equal 90.25% of our common stock's volume-weighted average trading prices during the ten-day trading period immediately prior to each subsequent closing date. We raised an aggregate of approximately \$13,286,000 in gross proceeds from the sale of 4,076,262 shares in our scheduled closings through December 31, 2011.
- 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.

The following summarizes our contractual obligations and other commitments at December 31, 2011, and the effect such obligations could have on our liquidity and cash flow in future periods:

	Payments due by period									
			Ι	less than 1					I	More than
Contractual Obligations		Total		year		1 – 3 years	3	– 5 years		5 years
Long-term obligations	\$	26,296,000	\$	2,693,000	\$	19,848,000	\$	3,755,000	\$	
Interest commitment on long-term obligations	Ф	5,103,000	¢	2,093,000	Ф	2,561,000	Ф	44,000	Ф	_
Operating lease obligations		10,836,000		1,879,000		3,679,000		3,688,000		1,590,000
Minimum purchase requirements		2,191,000		1,341,000		850,000				_
Pre-clinical research study obligations		60,000		60,000		_				_
Clinical research study obligations		13,800,000		3,250,000		8,650,000		1,900,000		_
Total	\$	58,286,000	\$	11,721,000	\$	35,588,000	\$	9,387,000	\$	1,590,000

Net cash (used in) provided by operating, investing and financing activities for the years ended December 31, 2011, 2010 and 2009 is summarized as follows:

	-	Years Ended				
	-	2011		2010		2009
Net cash used in operating activities	\$	(35,323,000)	\$	(23,574,000)	\$	(23,807,000)
Net cash used in investing activities		(560,000)		(1,290,000)		(221,000)
Net cash provided by financing activities		20,137,000		64,678,000		24,271,000

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 \$32,451,000 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.

Research and development efforts and other operational activities, offset in part by product sales, generated a \$23,216,000 net loss for the year ended December 31, 2009. The cash impact of this loss was \$23,807,000, after adjusting for the recognition of \$8,840,000 of deferred revenue, for which cash was received in earlier years, the consideration of non-cash share-based compensation of \$2,649,000, other adjustments for material non-cash activities, such as depreciation and amortization of \$1,681,000, change in fair value of option liabilities of \$920,000 and warrants of \$4,574,000, non-cash amortization of deferred financing costs and debt discount along with other changes in working capital due to timing of product shipments (accounts receivable) and payment of liabilities.

Investing activities

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.

Net cash used by investing activities for the year ended December 31, 2011 and 2009 resulted primarily from purchases of property and equipment.

Financing Activities

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.

The net cash provided by financing activities for the year ended December 31, 2009 related primarily to a March 2009 equity offering of approximately \$10,000,000 in gross proceeds to institutional investors for 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; the May 2009 private placement of approximately \$4,252,000 in gross proceeds to a syndicate of investors for a total of 1,864,783 unregistered shares of common stock and 3,263,380 common stock warrants; and the sale of 3,850,000 shares for approximately \$12,859,000 in gross proceeds in connection with common stock purchase agreement with Seaside entered into on June 19, 2009.

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 Liability

Effective January 1, 2009, we changed our method of accounting for certain common stock purchase warrants with exercise price reset features due to the adoption of a new accounting standard. These warrants were issued in connection with our August 2008 private placement of 2,825,517 unregistered shares of common stock and 1,412,758 common stock warrants. The warrants had an original exercise price of \$8.50 and expire in August 2013. Under the new standard, these warrants previously recognized in stockholders' equity (deficit) are now accounted for as fair value liabilities, with changes in fair value included in net earnings (loss). The fair value of these warrants decreased to \$5.0 million as of December 31, 2010, as a result of a \$1.3 million gain from the change in fair value of warrants for the year then ended. The fair value of these warrants decreased to \$0.6 million as of December 31, 2011, as a result of a \$4.4 million gain from the change in fair value of warrants for the year then ended.

Since these warrants do not qualify for hedge accounting, all future changes in the fair value of the warrants will be recognized currently in earnings until such time as the warrants are exercised or expire. 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. The significant drivers of the increase/decrease are related to changes in stock price and potential future stock issuances.

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 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.

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.

Beginning in 2011, 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 and proprietary knowledge, 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 services, installation and training services concurrent with the installation of the cell bank. Web hosting and technical and maintenance services are generally provided for a period of up to one year subsequent to the date of sale. The FASB guidance of the Codification 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 also eliminates the residual method of allocation and requires that arrangement consideration 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 competitor's products or services considered largely interchangeable with our own or management best estimate. A substantial amount of consulting services are provided to customers before the equipment installation and training has been completed, and therefore we treat this as a separate unit of accounting. The equipment with installation and initial training activities are treated as separate units of accounting. Also of standalone value to customers is the transfer of the proprietary knowledge, most notably in the form of standard operating procedures, and any license or exclusivity rights associated with the agreements. Revenue for the various deliverables is calculated and recognized based on the relative selling prices of each deliverable. Future services such as web hosting and ongoing maintenance are deferred and recognized into income during the year following the installation. There would have been no material impact to our financial statements in 2010 had we applied this guidance retrospectively.



Table of Contents

Concentration of Significant Customers

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 for the year ended December 31, 2011. Our Asia-Pacific and North America region sales accounted for 67% of our product revenue recognized for the year ended December 31, 2011. Additionally, two direct customers accounted for 27% of total outstanding accounts receivable as of December 31, 2011.

Our Asia-Pacific and North America region sales accounted for 79% of our product revenue recognized for the year ended December 31, 2010. Additionally, two customers accounted for 26% of total outstanding accounts receivable as of December 31, 2010.

Research and Development

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 methodolog for the years ended December 31, 2011, 2010 and 2009, respectively. All related development revenues of \$1,992,000, \$2,122,000, and \$8,840,000 for the years ended December 31, 2011, 2010 and 2009, respectively. 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 \$24,791,000 through December 31, 2011.

See Notes to Consolidated Financial Statements included elsewhere herein for disclosure and a discussion of critical accounting policies and significant estimates.

Recent Accounting Pronouncements

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

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

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

Interest Rate Exposure

We are not subject to market risk due to fluctuations in interest rates on our long-term obligations as they bear a fixed rate of interest. Our exposure relates primarily to short-term investments, including funds classified as cash equivalents. As of December 31, 2011, 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 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, 2011, 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.

Under our Japanese Thin Film agreement with Senko, we would receive payments in the nature of royalties based on Senko's net sales, which would be Yen denominated.



Table of Contents

Item 8. Financial Statements and Supplementary Data	
Reports of Independent Registered Public Accounting Firm	41
Consolidated Balance Sheets as of December 31, 2011 and 2010	43
Consolidated Statements of Operations and Comprehensive Loss for the years ended December 31, 2011, 2010 and 2009	44
Consolidated Statements of Stockholders' Equity (Deficit) for the years ended December 31, 2011, 2010 and 2009	45
Consolidated Statements of Cash Flows for the years ended December 31, 2011, 2010 and 2009	47
Notes to Consolidated Financial Statements	49

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. (the Company) and subsidiaries as of December 31, 2011 and 2010, 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, 2011. 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, 2011 and 2010, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2011, 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.'s internal control over financial reporting as of December 31, 2011, 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 12, 2012 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

San Diego, California March 12, 2012

Report of Independent Registered Public Accounting Firm

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

We have audited Cytori Therapeutics, Inc.'s internal control over financial reporting as of December 31, 2011, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Cytori Therapeutics, Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting (Item 9A). Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Cytori Therapeutics, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on criteria established in *Internal Control – Integrated Framework* issued by COSO.

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, 2011 and 2010, 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, 2011, and our report dated March 12, 2012 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

San Diego, California March 12, 2012

CYTORI THERAPEUTICS, INC. CONSOLIDATED BALANCE SHEETS

		As of Dec	oer 31,	
	_	2011		2010
Assets				
Current assets:				
Cash and cash equivalents	\$	36,922,000	\$	52,668,000
Accounts receivable, net of reserves of \$474,000 and of \$306,000 in 2011 and 2010, respectively	Ψ	2,260,000	Ψ	2,073,000
Inventories, net		3,318,000		3,378,000
Other current assets		837,000		834,000
		007,000		001,000
Total current assets		43,337,000		58,953,000
Property and equipment, net		1,711,000		1,684,000
Restricted cash and cash equivalents		350,000		350,000
Investment in joint venture		250,000		459,000
Other assets		1,772,000		566,000
Intangibles, net		192,000		413,000
Goodwill		3,922,000		3,922,000
	¢	51 534 000	¢	66.247.000
Total assets	\$	51,534,000	\$	66,347,000
Liabilities and Stockholders' Equity (Deficit)				
Current liabilities:				
Accounts payable and accrued expenses	\$	5,334,000	\$	6,770,000
Current portion of long-term obligations	-	2,487,000	-	6,453,000
	_	_,,		-,,
Total current liabilities		7,821,000		13,223,000
		,,021,000		10,220,000
Deferred revenues, related party		3,520,000		5,512,000
Deferred revenues		5,244,000		4,929,000
Warrant liability		627,000		4,987,000
Option liability		1,910,000		1,170,000
Long-term deferred rent		504,000		398,000
Long-term obligations, net of discount, less current portion		21,962,000	_	13,255,000
Total liabilities		41,588,000		43,474,000
Commitments and contingencies				
Stockholders' equity (deficit):				
Preferred stock, \$0.001 par value; 5,000,000 shares authorized; -0- shares issued and outstanding in 2011 and 2010				_
Common stock, \$0.001 par value; 95,000,000 shares authorized; 56,594,683 and 51,955,265 shares issued and				
56,594,683 and 51,955,265 shares outstanding in 2011 and 2010, respectively		57,000		52,000
Additional paid-in capital		252,338,000		232,819,000
Accumulated deficit		(242,449,000)		(209,998,000)
Tatal stackholders' aquity		0.046.000		22 022 000
Total stockholders' equity		9,946,000		22,873,000
Total liabilities and stockholders' equity	\$	51,534,000	\$	66,347,000
	=	<u> </u>	_	

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

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

	For the 3	For the Years Ended December 31,			
	2011	2010	2009		
Product revenues:					
Related party	\$ —	\$ 590,000	\$ 591,000		
Third party	7,983,000	7,664,000	5,246,000		
	7,983,000	8,254,000	5,837,000		
Cost of product revenues	3,837,000	3,908,000	3,394,000		
Gross profit	4,146,000	4,346,000	2,443,000		
Development revenues:					
Development, related party	1,992,000	2,122,000	8,840,000		
Research grants and other	21,000	251,000	53,000		
	2,013,000	2,373,000	8,893,000		
Operating expenses:					
Research and development	10,904,000	9,687,000	12,231,000		
Sales and marketing	13,560,000	11,040,000	6,583,000		
General and administrative	14,727,000	12,570,000	10,415,000		
Change in fair value of warrants	(4,360,000)	(1,285,000)	4,574,000		
Change in fair value of option liability	740,000	30,000	(920,000)		
Total operating expenses	35,571,000	32,042,000	32,883,000		
Operating loss	(29,412,000)	(25,323,000)	(21,547,000)		
Other income (expense):					
Interest income	9,000	9,000	20,000		
Interest expense	(2,784,000)	(2,052,000)	(1,427,000)		
Other income (expense), net	(55,000)	23,000	(218,000)		
Equity loss from investment in joint venture	(209,000)	(151,000)	(44,000)		
Total other income (expense)	(3,039,000)	(2,171,000)	(1,669,000)		
Net loss	(32,451,000)	(27,494,000)	(23,216,000)		
Basic and diluted net loss per common share	\$ (0.61)	\$ (0.60)	\$ (0.65)		
Basic and diluted weighted average common shares	53,504,030	45,947,966	35,939,260		

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, 2011, 2010 AND 2009

	Commo Shares	n Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Treasur Shares	y Stock Amount	Accumulated Other Comprehensive Income (Loss)	Amount due From Exercises of Stock Options	Total
Balance at December 31, 2008	31,176,275	\$ 31,000	\$ 161,214,000	\$ (162,168,000)	1,872,834	\$ (6,794,000)	_		\$ (7,717,000)
Cumulative effect of change in accounting for certain warrants	_	_	(4,578,000)	2,880,000	_	_	_	_	(1,698,000)
Stock-based compensation expense	_	_	2,649,000	_	_	_	_	_	2,649,000
Issuance of common stock under stock option plan	203,707	_	410,000	_	_	_	_	_	410,000
Issuance of common stock under stock warrant agreement	46,154		121,000	_	_		_	_	121,000
Sale of common stock, net	8,613,123	9,000	21,851,000	_	_	_	_	_	21,860,000
Sale of treasury stock	—	—	(2,861,000)	_	(1,872,834)	6,794,000	—	—	3,933,000
Net loss for the year ended December 31, 2009				(23,216,000)					(23,216,000)
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

Table of Contents

	Commo Shares	n Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Treasu Shares	ry Stock Amount	Accumulated Other Comprehensive Income (Loss)	Amount due From Exercises of Stock Options	Total
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	<u>\$ (242,449,000)</u>		<u>\$ </u>	<u>\$ </u>	<u>\$ </u>	\$ 9,946,000

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

CYTORI THERAPEUTICS, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,				
	2011		2010		2009
Cash flows from operating activities:					
Net loss	\$ (32,451,000)	\$	(27,494,000)	\$	(23,216,000)
Adjustments to reconcile net loss to net cash used in operating activities:					
Depreciation and amortization	855,000		931,000		1,681,000
Amortization of deferred financing costs and debt discount	711,000		703,000		709,000
Warranty provision (reversal)	_		_		(23,000)
Increase (reduction) in allowance for doubtful accounts	483,000		460,000		663,000
Change in fair value of warrants	(4,360,000)		(1,285,000)		4,574,000
Change in fair value of option liability	740,000		30,000		(920,000)
Stock-based compensation	3,316,000		3,055,000		2,649,000
Equity loss from investment in joint venture	209,000		151,000		44,000
Increases (decreases) in cash caused by changes in operating assets and liabilities:	200,000		101,000		11,000
Accounts receivable	(670,000)		(902,000)		(986,000)
Inventories	60,000		(777,000)		(446,000)
Other current assets	(3,000)		36,000		41,000
Other assets	(1,206,000)		(110,000)		75,000
Accounts payable and accrued expenses	(1,436,000)		811,000		413,000
Deferred revenues, related party	(1,992,000)		(2,122,000)		(8,840,000)
Deferred revenues	315,000		2,541,000		(57,000)
Long-term deferred rent	106,000		398,000		(168,000)
Net cash used in operating activities	(35,323,000)		(23,574,000)		(23,807,000)
Cash flows from investing activities:					
Purchases of property and equipment	(560,000)		(610,000)		(221,000)
Cash invested in restricted cash	(500,000)		(350,000)		(==1,000)
Investment in joint venture	_		(330,000)		_
			(550,000)	_	
Net cash used in investing activities	(560,000)		(1,290,000)		(221,000)
Cash flows from financing activities:					
Principal payments on long-term obligations	(4,529,000)		(5,454,000)		(2,053,000)
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	2,849,000		7,128,000		531,000
Proceeds from sale of common stock	13,286,000		45,486,000		23,196,000
Costs from sale of common stock	(194,000)		(1,923,000)		(1,336,000)
Proceeds from sale of treasury stock				_	3,933,000
Net cash provided by financing activities	20,137,000	_	64,678,000		24,271,000
Net (decrease) increase in cash and cash equivalents	(15,746,000)		39,814,000	_	243,000
Cash and cash equivalents at beginning of year	52,668,000		12,854,000		12,611,000
	,,000	_	,,	_	,,
Cash and cash equivalents at end of year	\$ 36,922,000	\$	52,668,000	\$	12,854,000

	For the Years Ended December 31,						
	2011		2010		2010		
Supplemental disclosure of cash flows information: Cash paid during period for:							
Interest	\$	2,031,000	\$	1,226,000	\$	739,000	
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, 2011

1. Organization and Operations

The Company

Cytori Therapeutics, Inc. is developing cell therapies based on autologous adipose-derived stem and regenerative cells (ADRCs) to treat cardiovascular disease and repair soft tissue defects. Our scientific data suggest ADRCs improve blood flow, moderate the immune response and keep tissue at risk of dying alive. As a result, we believe these cells can be applied across multiple "ischemic" conditions. These therapies are made available by our proprietary device, the Celution® System, which automates the extraction and preparation of clinical grade ADRCs at the point-of-care.

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

Principles of Consolidation

The 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).

Certain Risks and Uncertainties

We have a limited operating history and 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 \$32,451,000, \$27,494,000 and, \$23,216,000 for the years ended December 31, 2011, 2010 and 2009, respectively. We have an accumulated deficit of \$242,449,000 as of December 31, 2011. Additionally, we have used net cash of \$35,323,000, \$23,574,000 and \$23,807,000 to fund our operating activities for years ended December 31, 2011, 2010 and 2009, respectively. To date, these operating losses have been funded primarily from outside sources of invested capital.

Management recognizes the need to generate positive cash flows in future periods and/or to obtain additional capital from various sources. In the continued absence of 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.

During 2011 and 2010, 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 operations for 2012 and beyond. If we cannot do so when required, we would need to reduce our research, development, and administrative operations, including reductions of our employee base, in order to offset lack of available funding. We continue to evaluate available financing opportunities as part of our normal course of business.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America 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, evaluating goodwill for impairment, valuing our put option arrangement with Olympus Corporation, valuing warrants, determining the assumptions used in measuring share-based compensation expense, valuing our deferred tax assets, assessing how to report our investment in Olympus-Cytori, Inc., and valuing allowances for doubtful accounts and inventories.

Actual results could differ from these estimates. Current economic conditions, including illiquid credit markets and volatile equity markets, contribute to the inherent uncertainty of such 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 \$30,646,000 and \$39,807,000 as of December 31, 2011 and 2010, 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, 2011 and December 31, 2010.

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, provided that the amount of the letter of credit can be reduced to \$262,500 in July 2013, and to \$175,000 in July of 2014.

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 not amortized but instead is tested annually for impairment at the reporting unit level, 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, 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, 2011, and concluded that no impairment existed.

Separable intangible assets that have finite useful lives will 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, are being amortized on a straight-line basis over their expected lives of ten years.



The changes in the carrying amounts of other indefinite and finite-life intangible assets and goodwill for the years ended December 31, 2011 and 2010 are as follows:

Decen	nber 31, 2011
\$	413,000
	(221,000)
	192,000
	3,922,000
	3,922,000
\$	4,114,000
\$	2,024,000
	\$

December 31, 2010

Other intangibles, net:	
Beginning balance	\$ 635,000
Amortization	 (222,000)
Ending balance	413,000
Goodwill, net:	
Beginning balance	3,922,000
Increase (decrease)	
Ending balance	 3,922,000
Total goodwill and other intangibles, net	\$ 4,335,000
Cumulative amortization of other intangible assets	\$ 1,803,000

As of December 31, 2011, future estimated amortization expense for these other intangible assets is expected to be as follows:

2012	\$ 192,000
	\$ 192,000

Warrant Liability

.....

Effective January 1, 2009, we changed our method of accounting for certain common stock purchase warrants with exercise price reset features due to the adoption of a new accounting standard. These warrants were issued in connection with our August 2008 private placement of 2,825,517 unregistered shares of common stock and 1,412,758 common stock warrants. The warrants had an original exercise price of \$8.50 and expire in August 2013. Under the new standard, these warrants previously recognized in stockholders' equity (deficit) are now accounted for as fair value liabilities, with changes in fair value included in net earnings (loss).

The cumulative effect of the adoption is to present these warrants as liabilities on the date of the adoption as if they had been accounted for as liabilities since the warrants were issued. As a result on January 1, 2009, we recognized a \$1.7 million long-term warrant liability, a \$2.9 million decrease in accumulated deficit and a corresponding decrease in additional paid-in capital of \$4.6 million. The fair value of these warrants increased to \$6.3 million as of December 31, 2009, as a result of a \$4.6 million loss from the change in fair value of warrants for the year ended December 31, 2009. The fair value of these warrants decreased to \$5.0 million as of December 31, 2010, as a result of a \$1.3 million gain from the change in fair value of warrants for the year then ended. The fair value of these warrants decreased to \$0.6 million as of December 31, 2011, as a result of a \$4.4 million gain from the change in fair value of warrants for the year then ended.

Since these warrants do not qualify for hedge accounting, all future changes in the fair value of the warrants will be recognized currently in earnings until such time as the warrants are exercised or expire. 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 using the following assumptions:

	As of		As of
	December 31, 2011	Dee	cember 31, 2010
Expected term	1.61 years		2.61 years
Common stock market price	\$ 2.20	\$	5.19
Risk-free interest rate	0.199	6	0.82%
Expected volatility	69.98	6	86.03%
Resulting fair value (per warrant)	\$ 0.32	\$	2.50

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 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.

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 prior to January 1, 2011 that included multiple deliverables, we allocated revenue based on the relative fair values of the individual components. When more than one element such as product maintenance or technical support services were included in an arrangement, we allocated revenue between the elements based on each element's relative fair value, provided that each element met the criteria for treatment as a separate unit of accounting (an item is considered a separate unit of accounting if it has value to the customer on a standalone basis and there is objective and reliable evidence of the fair value of the undelivered element, we allocated revenue first to the fair value of the undelivered elements and allocated the residual revenue to the delivered elements. Fair values for undelivered elements were determined based on vendor-specific objective evidence as well as market participant quotes for similar services. In the absence of fair value for an undelivered element, the arrangement was accounted for as a single unit of accounting, resulting in a deferral of revenue recognition for delivered elements until all undelivered elements have been fulfilled. Deferred service revenue is recognized ratably over the period the services are provided.

Beginning in 2011, 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 and proprietary knowledge, 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 services, installation and training services concurrent with the installation of the cell bank. Web hosting and technical and maintenance services are generally provided for a period of up to one year subsequent to the date of sale. The FASB guidance of the Codification 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 also eliminates the residual method of allocation and requires that arrangement consideration 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 best estimate. A substantial amount of consulting services are provided to customers before the equipment installation and training has been completed, and therefore we treat this as a separate unit of accounting. The equipment with installation and initial training activities are treated as separate units of accounting. Also of standalone value to customers is the transfer of the proprietary knowledge, most notably in the form of standard operating procedures, and any license or exclusivity rights associated with the agreements. Revenue for the various deliverables is calculated and recognized based on the relative selling prices of each deliverable. Future services such as web hosting and ongoing maintenance are deferred and recognized into income during the year following the installation. There would have been no material impact to our financial statements in 2010 had we applied this guidance retrospectively.

Concentration of Significant Customers

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 for the year ended December 31, 2011. Our Asia-Pacific and North America region sales accounted for 67% of our product revenue recognized for the year ended December 31, 2011. Additionally, two direct customers accounted for 27% of total outstanding accounts receivable as of December 31, 2011.

Our Asia-Pacific and North America region sales accounted for 79% of our product revenue recognized for the year ended December 31, 2010. Additionally, two customers accounted for 26% of total outstanding accounts receivable as of December 31, 2010.

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 National Institutes of Health ("NIH"). 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 grants are recorded as research grant and other within development revenues. Research grant 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.

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 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 methodol of the years encled. Of the amounts received and deferred, we recognized development revenue sof \$1,992,000, \$2,122,000, and \$8,840,000 for the years ended December 31, 2011, 2010 and 2009, respectively. 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 \$24,791,000 through December 31, 2011.

Under a Distribution Agreement with Senko, we granted to Senko an exclusive license to sell and distribute certain Thin Film products in Japan. We have also earned or will be entitled to earn additional payments under the Distribution Agreement based on achieving certain defined and substantive research and development milestones. There was no development revenue recognized related to this agreement during the years ended December 31, 2011, 2010 or 2009, respectively.

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, 2011, 2010 and 2009.

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 research grant 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, 2011, 2010 and 2009, costs associated with the development of the device were \$396,000, \$2,221,000 and \$2,713,000.

Our agreement with the NIH entitled us to qualifying expenditures of up to \$250,000 related to research on Adipose Tissue-Derived Cells for Vascular Cell Therapy, which expired in August 2009. We incurred \$49,000 of direct expenses for the year ended December 31, 2009. 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 granted after January 1, 2006, 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, 2011, 2010 and 2009, 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, 2011, 2010, and 2009, as their inclusion would be antidilutive. Potentially dilutive common shares excluded from the calculations of diluted loss per share were 19,476,425, 18,926,093 and 20,123,889 for the years ended December 31, 2011, 2010 and 2009, respectively.

Recently Adopted Accounting Pronouncements

In October 2009, the FASB issued an update to the revenue recognition topic of the Codification. The update addresses the accounting for multipledeliverable arrangements to enable vendors to account for products or services (deliverables) separately rather than as a combined unit. This guidance establishes a selling price hierarchy for determining the selling price of a deliverable, which is based on: (a) vendor-specific objective evidence; (b) thirdparty evidence; or (c) estimates. This guidance also eliminates the residual method of allocation and requires that arrangement consideration be allocated at the inception of the arrangement to all deliverables using the relative selling price method. In addition, this guidance significantly expands required disclosures related to a vendor's multiple-deliverable revenue arrangements. The update 2009-13 is effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010 and early adoption is permitted. The adoption of this standard did not have a material impact on our consolidated financial statements.

In April 2010, the FASB issued additional guidance for revenue recognition to provide criteria that should be met for determining whether the milestone method of revenue recognition is appropriate. A vendor can recognize as revenue, in its entirety, consideration that is contingent upon achievement of a milestone in the period in which the milestone is achieved only if the milestone meets all criteria to be considered substantive. The guidance for the milestone method of revenue recognition is effective on a prospective basis for milestones achieved in fiscal years, and interim periods within those years, beginning on or after June 15, 2010. The adoption of this standard did not have a material impact on our consolidated financial statements.

In January 2010, the FASB issued an update which provides guidance to improve disclosures about fair value measurements. This guidance amends previous guidance on fair value measurements to add new requirements for disclosures about transfers into and out of Levels 1 and 2 and separate disclosures about purchases, sales, issuances, and settlements relating to Level 3 measurement on a gross basis rather than on a net basis as previously required. This update also clarifies existing fair value disclosures about the level of disaggregation and about inputs and valuation techniques used to measure fair value. This guidance is effective for annual and interim periods beginning after December 15, 2009, except for the requirement to provide the Level 3 activities of purchases, sales, issuances, and settlements on a gross basis, which will be effective for annual and interim periods beginning after December 15, 2010. Early application is permitted and, in the period of initial adoption, entities are not required to provide the amended disclosures for any previous periods presented for comparative purposes. This update did not have a material impact on our consolidated financial statements.



In March 2010, the FASB issued an update to clarify that an employee share-based payment award with an exercise price denominated in the currency of a market in which a substantial portion of the equity securities trades should not be considered to contain a condition that is not a market, performance, or service condition. Therefore, an entity would not classify an award with such a feature as a liability if it otherwise qualifies as equity. Affected entities are required to record a cumulative catch-up adjustment for all awards outstanding as of the beginning of the annual period in which the guidance is adopted. This update did not have a material impact on our consolidated financial statements.

In September 2011, the FASB issued an update that allows companies to assess qualitative factors to determine whether they need to perform the twostep quantitative goodwill impairment test. Under the option, an entity no longer would be required to calculate the fair value of a reporting unit unless it determines, based on that qualitative assessment, that it is more likely than not that its fair value is less than its carrying amount. The guidance is effective for interim and annual goodwill impairment tests performed for fiscal years beginning after December 15, 2011 although early adoption is permitted. As of December 31, 2011, we elected for early adoption and this update did not have a material impact on our consolidated financial statements.

Recent 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. We do not expect the adoption of this guidance to 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).

In a separate agreement entered into on February 23, 2006, we granted Olympus an exclusive right to negotiate a commercialization collaboration for the use of adipose regenerative cells for a specific therapeutic area outside of cardiovascular disease. In exchange for this right, we received a \$1,500,000 payment from Olympus, which was non-refundable but could be applied towards a definitive commercial collaboration in the future. As part of this agreement, Olympus would conduct market research and pilot clinical studies in collaboration with us for the therapeutic area up to December 31, 2008 when this exclusive right expired. The \$1,500,000 payment was received in the second quarter of 2006 and recorded as deferred revenues, related party. Accordingly, on December 31, 2008, we recognized \$1,500,000 as other development revenue and reduced our deferred revenues, related party balance for the same amount.

In August 2006, we received an additional \$11,000,000 from Olympus for the issuance of approximately 1,900,000 shares of our common stock at \$5.75 per share under the shelf registration statement filed in May 2006. The purchase price was determined by our closing price on August 9, 2006.

On August 11, 2008, we raised approximately \$17,000,000 in gross proceeds from a private placement of 2,825,517 unregistered shares of common stock and 1,412,758 common stock warrants (with an original exercise price of \$8.50 per share) to a syndicate of investors including Olympus Corporation, who acquired 1,000,000 unregistered shares and 500,000 common stock warrants in exchange for \$6,000,000 of the total proceeds raised.

As of December 31, 2011, Olympus holds approximately 7.09% (unaudited) of our issued and outstanding shares. Additionally, Olympus has a right, which it has not yet exercised, to designate a director to serve on our Board of Directors.

Formation of the Olympus-Cytori Joint Venture

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

Under the Joint Venture Agreements:

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

We have determined that the Joint Venture is a variable interest entity (VIE), but that Cytori is not the VIE's primary beneficiary. Accordingly, we have accounted for our interests in the Joint Venture using the equity method of accounting, since we can have significant influence over the Joint Venture's operations. At December 31, 2011, the carrying value of our investment in the Joint Venture is \$250,000.

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 2011 and 2009.

Put/Calls and Guarantees

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, 2011 and 2010, the fair value of the Put was \$1,910,000 and \$1,170,000, 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.



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

Decem	ber 31, 2011	Decer	nber 31, 2010	No	vember 4, 2005
	76.07%		73.00%		63.20%
	76.07%		73.00%		69.10%
	28.00%		28.00%		21.00%
\$	8,594,000	\$	5,842,000	\$	10,780,000
	3.33%		3.43%		3.04%
	99.00%		99.00%		99.00%
	1.89%		3.30%		4.66%
		76.07% 28.00% \$ 8,594,000 3.33% 99.00%	76.07% 76.07% 28.00%	76.07% 73.00% 76.07% 73.00% 28.00% 28.00% \$ 8,594,000 \$ 5,842,000 3.33% 3.43% 99.00% 99.00%	76.07% 73.00% 76.07% 73.00% 28.00% 28.00% \$ 8,594,000 \$ 5,842,000 3.33% 3.43% 99.00% 99.00%

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.

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.

As part of the various agreements with Olympus, we will be required, following commercialization of the Joint Venture's Celution® System or Systems, to provide monthly forecasts to the Joint Venture specifying the quantities of each category of devices that we intend to purchase over a rolling six-month period. Although we are not subject to any minimum purchase requirements, we are obliged to buy a minimum percentage of the products forecasted by us in such reports. Since we can effectively control the number of devices we will agree to purchase, we estimate that the fair value of this guarantee is de minimis as of December 31, 2011.

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, 2011, 2010 and 2009, in connection with our sales of our Celution® 800/CRS System products to the European and Asia-Pacific reconstructive surgery market, we incurred approximately \$166,000, \$253,000 and \$242,000, 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) are for use in an upcoming clinical trial.

Deferred revenues, related party

As of December 31, 2011, 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

A summary of the unaudited condensed financial information for the Joint Venture as of December 31, 2011 and 2010 and for the years ended December 31, 2011, 2010 and 2009 and reconciliation of net income (loss) of the joint venture to Cytori's equity loss from investment in joint venture is as follows:

	mber 31, 2011 Unaudited)	-	mber 31, 2010 Unaudited)
Balance Sheets			
Assets:			
Cash	\$ 69,000	\$	183,000
Amounts due from related party	104,000		632,000
Prepaid insurance	19,000		16,000
Computer equipment and software, net	797,000		995,000
Total assets	\$ 989,000	\$	1,826,000
Liabilities and Stockholders' Equity:			
Accrued expenses	\$ 48,000	\$	77,000
Amounts due to related party	95,000		509,000
Stockholders' equity	846,000		1,240,000
Total liabilities and stockholders' equity	\$ 989,000	\$	1,826,000

	Years ended December 31,					
		2011	2010			2009
Statements of Operations	(U	naudited)	(U	Inaudited)	(U	(naudited)
Product revenue	\$	90,000	\$	458,000	\$	—
Cost of product revenue		87,000		458,000		
Gross profit		3,000		—		—
Royalty revenue		166,000		253,000		242,000
Operating expenses:						
Research and development				14,000		_
General and administrative:						
Accounting and other corporate services		164,000		88,000		75,000
Quality system services		145,000		135,000		63,000
Depreciation expense for tooling equipment		230,000		130,000		
Other		23,000		33,000		26,000
Operating expenses		562,000		400,000		164,000
Operating income (loss)		(393,000)		(147,000)		78,000
Other income (expense):						
Interest income				1,000		1,000
Net income (loss)	\$	(393,000)	\$	(146,000)	\$	79,000
Reconciliation of net income (loss) to equity loss from investment in joint venture						
Net income (loss)	\$	(393,000)	\$	(146,000)	\$	79,000
Intercompany eliminations		25,000		156,000		167,000
Net loss after intercompany eliminations		(418,000)		(302,000)		(88,000)
Cytori's percentage of interest in joint venture		50%		50%		50%
Cytori's equity loss from investment in joint venture	\$	(209,000)	\$	(151,000)	\$	(44,000)

4. Fair Value Measurements

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

 $\cdot\,$ 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:

	Ва	alance as of	Basis of Fair Value Measuremen			ments		
	Dece	mber 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)
	Ba	alance as of		Basis of Fair Value Measuremen		ments		

						-	
Dece	mber 31, 2010		Level 1		Level 2		Level 3
\$	39,807,000	\$	39,807,000	\$		\$	
\$	(1, 170, 000)	\$		\$		\$	(1,170,000)
\$	(4,987,000)	\$		\$	—	\$	(4,987,000)
	\$	\$ (1,170,000)	\$ 39,807,000 \$ \$ (1,170,000) \$	\$ 39,807,000 \$ 39,807,000 \$ (1,170,000) \$	\$ 39,807,000 \$ 39,807,000 \$ \$ (1,170,000) \$ — \$	\$ 39,807,000 \$ 39,807,000 \$ \$ (1,170,000) \$ \$	\$ 39,807,000 \$ 39,807,000 \$ — \$ \$ (1,170,000) \$ — \$ — \$

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). Assumptions are made 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. 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 put option liability is classified as Level 3 in the fair value hierarchy.

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

Put option liability	Year ended December 31, 2011		-	Year ended ember 31, 2010
Beginning balance	\$	(1,170,000)	\$	(1,140,000)
Decrease (increase) in fair value recognized in operating expenses		(740,000)		(30,000)
Ending balance	\$	(1,910,000)	\$	(1,170,000)

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

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

Warrant liability	-	Year ended December 31, 2011		Year ended cember 31, 2010
Beginning balance	\$	(4,987,000)	\$	(6,272,000)
Decrease (increase) in fair value recognized in operating expenses		4,360,000		1,285,000
Ending balance	\$	(627,000)	\$	(4,987,000)

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, 2011.

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, 2011 and 2010, 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, 2011 and 2010, the aggregate fair value and the carrying value of the Company's fixed rate long-term debt were as follows:

	Decemb	December 31, 2011			Decemb	oer 31, 2010		
	Fair Value	Car	rying Value]	Fair Value	Ca	rrying Value	
Fixed rate long-term debt	\$ 24,211,000	\$	24,341,000	\$	19,782,000	\$	19,679,000	

Carrying value is net of debt discount of \$1,847,000 and \$1,321,000 as of December 31, 2011 and 2010, 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, 2011. 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 market place participant assumptions. No triggering events occurred during the year ended December 31, 2011.

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. Specifically, the license covers Thin Film products with the following indications:

- · Anti-adhesion,
- Soft tissue support, and
- · Minimization of the attachment of soft tissues throughout the body.

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, 2011 commercialization has not yet occurred. Following commercialization, the Distribution Agreement has a duration of five years and is renewable for an additional five years after reaching mutually agreed minimum purchase guarantees.

The Distribution Agreement also provides for us to supply certain products to Senko at fixed prices over the life of the agreement once we have received approval to market these products in Japan. In addition to the product price, Senko will also be obligated to make royalty payments to us of 5% of the sales value of any products Senko sells to its customers during the first three years post-commercialization. We are currently pursuing the required regulatory clearance in order to initiate commercialization.

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 have also earned or will be entitled to earn additional payments under the Distribution Agreement based on achieving the defined research and development milestones. We recognized no development revenue recognized during the years ended December 31, 2011, 2010 and 2009 under this agreement.

7. Composition of Certain Financial Statement Captions

Inventories, net

As of December 31, 2011 and 2010, inventories, net, were comprised of the following:

		December 31,			
		2011		2010	
	¢	1 502 000	¢	2 211 000	
Raw materials	\$	1,503,000	\$	2,311,000	
Work in process		790,000		410,000	
Finished goods		1,025,000		657,000	
	\$	3,318,000	\$	3,378,000	

Other Current Assets

As of December 31, 2011 and 2010, other current assets were comprised of the following:

	December 31,			
	 2011		2010	
Prepaid insurance	\$ 234,000	\$	230,000	
Prepaid other	372,000		477,000	
Other receivables	231,000		127,000	
	\$ 837,000	\$	834,000	

Property and Equipment, net

As of December 31, 2011 and 2010, property and equipment, net, were comprised of the following:

		December 31,		
		2011		2010
	.	1000.000	<i>•</i>	
Manufacturing and development equipment	\$	4,268,000	\$	4,035,000
Office and computer equipment		2,177,000		2,137,000
Leasehold improvements		3,255,000		3,125,000
		9,700,000		9,297,000
Less accumulated depreciation and amortization		(7,989,000)		(7,613,000)
	\$	1,711,000	\$	1,684,000

Depreciation expense totaled \$618,000, \$710,000 and \$1,458,000 for the years ended December 31, 2011, 2010, and 2009, respectively.

Accounts Payable and Accrued Expenses

As of December 31, 2011 and 2010, accounts payable and accrued expenses were comprised of the following:

	D	December 31,		
	2011		2010	
Accrued legal fees	\$ 829.	000 \$	646,000	
Accrued R&D studies	534,		1,227,000	
Accounts payable	272,	000	601,000	
Accrued vacation	908,	000	760,000	
Accrued bonus	866,	000	1,045,000	
Accrued expenses	1,572,	000	2,077,000	
Deferred rent	37,	000	17,000	
Accrued accounting fees	90,	000	135,000	
Accrued payroll	226,	000	262,000	
	\$ 5,334,	000 \$	6,770,000	

8. Commitments and Contingencies

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

Years Ending December 31,	Operating Leases
2012	\$ 1,879,000
2013	1,913,000
2014	1,766,000
2015	1,821,000
2016	1,867,000
2017	1,590,000
Total	\$ 10,836,000

Rent expense, which includes common area maintenance, for the years ended December 31, 2011, 2010 and 2009 was \$2,524,000, \$2,186,000 and \$2,198,000, 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, 2011, we have pre-clinical research study obligations of \$60,000 (all of which are expected to be complete within a year) and clinical research study obligations of \$13,800,000 (\$3,250,000 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, 2011, we have minimum purchase obligations of \$2,191,000 (\$1,341,000 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) and one (1) final principal payment of \$825,000 on March 1, 2015. In addition, the maturity date of the Term Loan has been extended until March 1, 2015, and at maturity of the Term Loan, the Company will make a final payment fee equal to 5% (\$1,250,000) of the Term Loan. We may incur additional fees if we elect to prepay the Term Loan. In connection with the Term Loan, on September 9, 2011, we issued to the Lenders warrants to purchase up to an aggregate of 132,891 shares of our common stock at an exercise price of \$3.01 per share. These warrants are immediately exercisable and will expire on September 9, 2018.

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

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



We allocated the aggregate proceeds of the Term Loan between the warrants and the debt obligations based on their relative fair values. The fair value of the warrants issued to the Lenders is calculated utilizing the Black-Scholes option pricing model. We are amortizing the relative fair value of the warrants as a discount of \$267,000 over the term of the loan using the effective interest method, with an effective interest rate of 13.63%. If the maturity of the debt is accelerated due to an event of default, then the amortization would be accelerated. The Term Loan is collateralized by the tangible assets of the company, including a security interest in substantially all of its existing and after-acquired assets, excluding its intellectual property assets; provided however, that if the Company does not maintain certain cash ratios, the security interest automatically will be deemed to include the Company's intellectual property assets. As of December 31, 2011, we were in compliance with our financial and non-financial covenants.

Additional details relating to the above term loan that is outstanding as of December 31, 2011, are presented in the following table:

Origination Date	0	riginal Loan Amount	Interest Rate	N	Current Aonthly ayment*	Term	Remaining Principal Face Value)
September 2011	\$	25,000,000	9.87%	\$	225,622	42 Months	\$ 24,938,000

* Current monthly payment is inclusive of interest and principal

As of December 31, 2011, the future contractual principal and final fee payments on all of our debt and lease obligations are as follows:

Years Ending December 31,

2012	\$ 2,693,000
2013	9,927,000
2014	9,921,000
2015	3,749,000
2016	6,000
Total	\$ 26,296,000

Reconciliation of Face Value to Book Value as of December 31, 2011

Total debt and lease obligations, including final payment fee (Face Value)	\$ 26,296,000
Less: Debt discount	 (1,847,000)
Total:	 24,449,000
Less: Current portion	 (2,487,000)
Long-term obligation	\$ 21,962,000

Our interest expense for the years ended December 31, 2011, 2010 and 2009 (most of which related to the loan entered into September 2011, June 2010 and October 2008 was \$2,784,000, \$2,052,000 and \$1,427,000, respectively. Interest expense is calculated using the effective interest method, therefore it is inclusive of non-cash amortization in the amount of \$711,000, \$703,000 and \$709,000, 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, 2011, 2010 and 2009, 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, 2011, 2010 and 2009.

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, 2011, 2010 and 2009 is as follows:

	2011	2010	2009
Income tax expense (benefit) at federal statutory rate	(34.00) %	(34.00) %	(34.00) %
Income tax expense (benefit) at state statutory rate	(3.36) %	(2.62) %	(2.61) %
Mark to market permanent adjustment	(5.02) %	(1.71) %	7.21%
Change in federal valuation allowance	45.72%	40.47%	8.16%
Change in State Rate	(3.29) %	0.00%	24.55%
Deferred revenue	(2.09) %	(2.82) %	(0.28) %
Other, net	2.04%	0.68%	(3.03) %
	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, 2011 and 2010 are as follows:

		2011		2010
Deferred tax assets:				
Allowances and reserves	\$	292,000	\$	217,000
Accrued expenses		587,000		540,000
Deferred revenue		3,276,000		3,164,000
Stock based compensation		4,886,000		3,860,000
Net operating loss carryforwards	7	73,774,000		61,398,000
Income tax credit carryforwards		5,569,000		5,242,000
Property and equipment, principally due to differences in depreciation		707,000		821,000
Other		181,000		0
	5	39,272,000		75,242,000
Valuation allowance	(8	39,200,000)		(74,994,000)
			_	
Total deferred tax assets, net of allowance		72,000	_	248,000
Deferred tax liabilities:				
Intangibles		(72,000)		(151,000)
Capitalized Assets and other		0		(97,000)
Total deferred tax liability		(72,000)		(248,000)
	_			<u> </u>
Net deferred tax assets (liability)	\$		\$	

We have established a valuation allowance against our net deferred tax assets due to the uncertainty surrounding the realization of such assets. We periodically evaluate the recoverability of the deferred tax assets. At such time as it is determined that it is more likely than not that deferred assets are realizable, the valuation allowance will be reduced. We have recorded a valuation allowance of \$89,200,000 as of December 31, 2011 to reflect the estimated amount of deferred tax assets that may not be realized. We increased our valuation allowance by approximately \$14,206,000 during the year ended December 31, 2011. 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, 2011, we had federal, California, and Massachusetts tax loss carryforwards of approximately \$193,511,000, \$127,557,000, and \$164,000 respectively. The federal and state net operating loss carryforwards begin to expire in 2019 and 2012 respectively, if unused. At December 31, 2011, we had federal and state tax credit carryforwards of approximately \$3,808,000 and \$3,594,000 respectively. The federal credits will begin to expire in 2017, if unused, and the state credits carry forward indefinitely. In addition, we had a foreign tax loss carryforward of \$10,694,000 in Japan, \$1,226,000 in Italy, \$1,295,000 in Switzerland, and \$51,000 in India.

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, 2011, deferred tax assets do not include \$1,225,000 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, 2011, 2010 and 2009:

	 2011	2010	2009
Unrecognized Tax Benefits – Beginning	\$ 1,166,000	\$ 1,115,000	\$ 952,000
Gross increases – tax positions in prior period		—	4,000
Gross decreases – tax positions in prior period		(49,000)	—
Gross increase – current-period tax positions	138,000	100,000	159,000
Settlements	—	—	—
Lapse of statute of limitations	 	—	_
Unrecognized Tax Benefits – Ending	\$ 1,304,000	\$ 1,166,000	\$ 1,115,000

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, 2011.

The Company's material tax jurisdictions are United States and California. 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 2011, 2010 and 2009.

12. Stockholders' Equity (Deficit)

Preferred Stock

We have authorized 5,000,000 shares of \$.001 par value preferred stock, with no shares outstanding as of December 31, 2011 and 2010. 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 will not be exercisable until six months after the date of issuance and will expire five years after the date the warrants are first exercisable. The warrants will have an exercise price of \$2.59 per share, which was the consolidated closing bid price of the Company's common stock on March 9, 2009, as reported by NASDAQ. The shares and the warrants are immediately separable and will be issued separately. We have accounted for the warrants as a component of stockholders' deficit. The warrants must be settled through a cash exercise whereby the warrant holder exchanges cash for shares of Cytori common stock, unless the exercise occurs when the related registration statement is not effective, in which case the warrantholder 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 will 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' deficit.

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 is 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. The recognition of this deferred amount is expected to occur upon the earlier of the expiration of the two year period or the termination of the agreement.

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 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 will equal 90.25% of our common stock's volume-weighted average trading period immediately prior to each subsequent closing date. We raised approximately \$13,286,000 in gross proceeds from the sale of 4,076,262 shares in our scheduled closings through December 31, 2011.



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 through December 31, 2011, our October 2010 offering of 4,600,000 shares of our common stock and our December 2010 sale of 1,428,571 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, 2011, the common stock warrants issued on August 11, 2008 are currently exercisable for 1,990,282 shares of our common stock at an exercise price of \$5.82 per share.

Treasury Stock

As part of our equity offering on March 10, 2009, we sold our remaining 1,872,834 shares of common stock from our treasury for \$3,933,000 cash, or \$2.10 per share. The cost basis of the treasury stock sold was at a weighted average purchase price, or \$3.63 per share, resulting in a loss of \$1.53 per share, or \$2,861,000 in aggregate, and was accounted for as a reduction of additional paid-in capital.

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, 2011, there are 1,050,036 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 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, 20011, there were no stock issuances under this plan and no stock-based compensation was recorded for this plan 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, 2011 is as follows:

		Weight Averag	
	Options	Exercise l	Price
Balance as of January 1, 2011	7,050,689	\$	5.19
Granted	1,113,950	\$	5.20
Exercised	(200,755)	\$	3.82
Expired	(397,496)	\$	7.12
Cancelled/forfeited	(109,204)	\$	4.65
Balance as of December 31, 2011	7,457,184	\$	5.13

		Weighted Average	Weighted Average Remaining Contractual	Aggregate
	Options	Exercise Price	Term (years)	Intrinsic Value
Balance as of December 31, 2011	7,457,184	\$ 5.13	5.53	\$ 34,450
Vested and expected to vest at December 31, 2011	7,417,443	\$ 5.13	5.52	\$ 34,271
Exercisable at December 31, 2011	5,636,839	\$ 5.02	4.57	\$ 22,181

The total intrinsic value of stock options exercised was \$541,000, \$1,529,000 and \$682,000 for the years ended December 31, 2011, 2010 and 2009, respectively.

The fair value of each option awarded during the year ended December 31, 2011, 2010 and 2009 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,				
	 2011		2010		2009
Expected term	5.5 years		5 years		5 years
Risk-free interest rate	1.95%		2.22%		1.94%
Volatility	72.36%		72.81%		66.80%
Dividends					_
Resulting weighted average grant date fair value	\$ 3.24	\$	4.02	\$	2.34

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, 2011 is as follows:

		Weighte	d
	Restricted	Average G	ant
	Stock Awards	Date Fair V	alue
Balance as of January 1, 2011	40,269	\$	4.88
Granted	61,000	\$	5.74
Exercised/Released	(21,528)	\$	4.71
Balance as of December 31, 2011	79,741	\$	5.59

			Weighted Average	
		Weighted Average	Remaining Contractual	Aggregate
	Options	Exercise Price	Term (years)	Intrinsic Value
Balance as of December 31, 2011	79,741	\$ 5.59	9.0	\$ 175,430
Vested and expected to vest at December 31, 2011	79,741	\$ 5.59	9.0	\$ 175,430
Exercisable at December 31, 2011	48,241	\$ 4.94	8.9	\$ 106,130

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. The performance goals are weighted based on the following achievements: obtaining certain FDA clearance or approval (40%), achieving a targeted revenue increase for the fiscal year ended December 31, 2011 (20%), and entering into a major collaboration for development and/or commercialization of the Company's products (40%). 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 January 1, 2012. Once earned, the awards will remain unvested until January 1, 2013. Termination of employment prior to vesting will result in the forfeiture of any earned (as well as unearned) awards. Effective January 2012, the outstanding awards ceased vesting based upon decision of the Compensation Committee that performance criteria has not been met as of January 1, 2012. No compensation expense was recognized related to these awards during the year ended December 31, 2011. The following table summarizes activity with respect to such awards during the year ended December 31, 2011:

	Restricted Stock Awards	Weighted Average Grant- Date Fair Value
Outstanding at January 1, 2011	0	
Granted	246,225	\$ 5.82
Vested	0	
Cancelled/forfeited	0	
Outstanding at December 31, 2011	246,225	\$ 5.82
Vested at December 31, 2011	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,					
	2011 2010			2009			
Total compensation cost for share-based payment arrangements recognized in the							
statement of operations (net of tax of \$0)	\$	3,316,000	\$	3,055,000	\$	2,649,000	

As of December 31, 2011, the total unamortized compensation cost related to outstanding unvested stock options and restricted stock awards for all of our plans is approximately \$5,782,000. These costs are expected to be recognized over a weighted average period of 1.72 years.

Cash received from stock option and warrant exercises for the years ended December 31, 2011, 2010 and 2009 was approximately \$2,849,000, \$7,128,000 and \$531,000, 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, 2011, we have an aggregate of 24,462,062 shares authorized and available to satisfy option exercises under our plans.

Non-Employee Stock Based Compensation

During the third quarter of 2009, we issued 25,000 shares of restricted common stock to a non-employee consultant. The stock is restricted in that it cannot be sold for a specified period of time. There are no vesting requirements. Because the shares issued are not subject to additional future vesting or service requirements, the stock-based compensation expense of \$92,000 recorded in the third quarter of 2009 constitutes the entire expense related to this grant, and no future period charges will be incurred.

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. During the first quarter of 2009, we sold a StemSource® Cell Bank in Japan through our distribution partner, Green Hospital Supply, Inc. for \$600,000. The sale was completed pursuant to our Master Cell Banking and Cryopreservation Agreement, effective August 13, 2007, with Green Hospital Supply, Inc. No similar sales occurred during the year ended December 31, 2011. As of December 31, 2011, 2010 and 2009, 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, 2011, 2010 and 2009, we incurred approximately \$166,000, \$253,000 and \$242,000 in royalty costs in connection with our sales of our Celution® 800/CRS System products to the European and Asia-Pacific reconstructive surgery market, pursuant to our License and Royalty Agreement and the Amended License/Commercial Agreement with the Olympus-Cytori, Inc. joint venture, respectively. As of December 31, 2011, 2010 and 2009, 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, 2011 and up to the date we filed this report.

Subsequent to the quarter ended December 31, 2011, we completed four scheduled closings with Seaside 88, LP during the period of January 1, 2012 through our filing date raising in aggregate approximately \$3,740,000 in gross proceeds from the sale of 1,250,000 shares of our common stock in connection with the agreement we entered into with Seaside 88, LP on July 11, 2011.

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, 2011		June 30, 2011	September 30, 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)	

	For the three months ended							
	1	March 31, 2010		June 30, 2010	September 30, 2010		D	ecember 31, 2010
Product revenues	\$	2,266,000	\$	2,091,000	\$	1,519,000	\$	2,378,000
Gross profit		1,336,000		1,208,000		599,000		1,203,000
Development revenues		2,143,000		7,000		65,000		158,000
Operating expenses		5,555,000		6,257,000		10,255,000		9,975,000
Other income (expense)		(371,000)		(335,000)		(826,000)		(639,000)
Net loss	\$	(2,447,000)	\$	(5,377,000)	\$	(10,417,000)	\$	(9,253,000)
Basic and diluted net loss per share	\$	(0.06)	\$	(0.12)	\$	(0.23)	\$	(0.19)

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

Not applicable.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports filed or furnished pursuant to the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management necessarily is required to apply its judgment in evaluating the 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 of 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, 2011 based on COSO criteria. KPMG LLP, an independent registered public accounting firm, who audited our consolidated financial statements included in this Form 10-K, has issued 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, 2011 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.



PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information called for by Item 10 is incorporated herein by reference to the material under the captions "Election of Directors" and "Directors, Executive Officers and Corporate Governance" in our Definitive Proxy Statement for our 2012 Annual Meeting of Stocholders, to be filed with SEC on or before April 30, 2012 (the 2012 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 2012 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 2012 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 2012 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 2012 Proxy Statement.

76

Item 15. Exhibits, Financial Statement Schedules

(a) (1) Financial Statements

Reports of KPMG LLP, Independent Registered Public Accounting Firm	41
Consolidated Balance Sheets as of December 31, 2011 and 2010	43
Consolidated Balance Sheets as of December 51, 2011 and 2010	43
Consolidated Statements of Operations and Comprehensive Loss for the years ended December 31, 2011, 2010 and 2009	44
Consolidated Statements of Stockholders' Equity (Deficit) for the years ended December 31, 2011, 2010 and 2009	45
Consolitatical Statements of Stockholders' Equity (Denerg) for the years chaca Determore 51, 2011, 2010 and 2005	43
Consolidated Statements of Cash Flows for the years ended December 31, 2011, 2010 and 2009	47
Notes to Consolidated Financial Statements	49
Notes to Consolidated 1 manetal statements	75

(a) (2) Financial Statement Schedules

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

For the years ended December 31, 2011, 2010 and 2009 (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, 2011	\$ 306	\$ 483	<u>\$ (256)</u>	<u>\$ (59)</u>	\$ 474
Year ended December 31, 2010	\$ 751	\$ 460	\$ (1,014)	\$ 109	\$ 306
Year ended December 31, 2009	\$ 122	\$ 663	\$ (34)	\$	\$ 751

(A) Includes increases to allowances for doubtful accounts, net of any equipment recovered

(B) Includes write off of uncollectible accounts receivable, net of any equipment recovered

(C) Includes collections fees incurred and product sales amounts deferred that do not meet revenue recognition criteria, net of cash received

(a)(3) Exhibits

CYTORI THERAPEUTICS, INC. EXHIBIT INDEX

Exhibit		Filed with this Form	Inco	rporated by Refe	rence
Number 1.1	Exhibit Title Underwriting Agreement, dated October 8, 2010, between Cytori Therapeutics, Inc. and Jefferies & Company.	10-K	Form 8-K	File No. 001-34375 Exhibit 1.1	Date Filed 10/08/2010
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
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
10.2+	Development and Supply Agreement, made and entered into as of January 5, 2000, by and between the Company and Medtronic.		10	000-32501 Exhibit 10.4	06/01/2001
10.3+	Amendment No. 1 to Development and Supply Agreement, effective as of December 22, 2000, by and between the Company and Medtronic, Inc		10	000-32501 Exhibit 10.5	06/01/2001
10.5+	Amendment No. 2 to Development and Supply Agreement, effective as of September 30, 2002, by and between the Company and Medtronic, Inc.		8-K	000-32501 Exhibit 2.4	10/23/2002
10.7	Amended Master Security Agreement between the Company and General Electric Corporation, September, 2003.		10-Q	000-32501 Exhibit 10.1	11/12/2003
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

	-			
10.11	Exclusive Distribution Agreement, effective July 16, 2004 by and between the Company and Senko Medical Trading Co.	10-Q	000-32501 Exhibit 10.25	11/15/2004
10.12#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Nonstatutory).	10-Q	000-32501 Exhibit 10.19	11/15/2004
10.13#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Nonstatutory) with Cliff.	10-Q	000-32501 Exhibit 10.20	11/15/2004
10.14#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Incentive).	10-Q	000-32501 Exhibit 10.21	11/15/2004
10.15#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Incentive) with Cliff.	10-Q	000-32501 Exhibit 10.22	11/15/2004
10.16#	Form of Options Exercise and Stock Purchase Agreement Relating to the 2004 Equity Incentive Plan.	10-Q	000-32501 Exhibit 10.23	11/15/2004
10.17#	Form of Notice of Stock Options Grant Relating to the 2004 Equity Incentive Plan.	10-Q	000-32501 Exhibit 10.24	11/15/2004
10.22	Common Stock Purchase Agreement dated April 28, 2005, between Olympus Corporation and the Company.	10-Q	000-32501 Exhibit 10.21	08/15/2005
10.23	Sublease Agreement dated May 24, 2005, between Biogen Idec, Inc. and the Company.	10-Q	000-32501 Exhibit 10.21	08/15/2005
10.27+	Joint Venture Agreement dated November 4, 2005, between Olympus Corporation and the Company.	10-K	000-32501 Exhibit 10.27	03/30/2006
10.28+	License/ Commercial Agreement dated November 4, 2005, between Olympus- 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
10.34	Placement Agency Agreement, dated August 9, 2006, between Cytori Therapeutics, Inc. and Piper Jaffray & Co.	8-K	000-32501 Exhibit 10.34	08/15/2006
10.39+	Exclusive License Agreement between us and the Regents of the University of California dated October 16, 2001.	10-K	000-32501 Exhibit 10.10	03/31/2003
10.39.1 +	Amended and Restated Exclusive License Agreement, effective September 26, 2006, by and between The Regents of the University of California and Cytori Therapeutics, Inc.	10-Q	000-32501 Exhibit 10.39	11/14/2006
10.42	Placement Agency Agreement, dated February 23, 2007, between Cytori Therapeutics, Inc. and Piper Jaffray & Co.	8-K	000-32501 Exhibit 10.1	02/26/2007
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
10.44	Form of Subscription Agreement, dated February 23, 2007.	8-K	000-32501 Exhibit 10.3	02/26/2007



10.45	Form of Warrant to be dated February 28, 2007.	8-K	000-32501 Exhibit 10.4	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
10.50	General Release Agreement, dated August 13, 2007, between John Ransom 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
10.57	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
10.58	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
10.59	Loan and Security Agreement, dated October 14, 2008, by and among the Company, General Electric Capital Corporation, and the other lenders signatory thereto.	10-K	000-32501 Exhibit 10.59	03/06/2009
10.60	Promissory Note issued by the Company in favor of General Electric Capital Corporation or any subsequent holder thereof, pursuant to the Loan and Security Agreement dated October 14, 2008.	10-K	000-32501 Exhibit 10.60	03/06/2009
10.61	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
10.62	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

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
10.66	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
10.67	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
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
10.73	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
10.74	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
10.75	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
10.76	Common Stock Purchase Agreement, dated December 6, 2010, by and among Cytori Therapeutics, Inc. and Astellas Pharma Inc.	8-K	001-34375 Exhibit 10.76	12/09/2010
10.77	Form of Notice and Restricted Stock Award Agreement for grants of performance-based restricted stock awards under the 2004 Equity Incentive Plan.	8-K	001-34375 Exhibit 10.1	03/04/2011
10.78	Form of Common Stock Purchase Agreement by and between Cytori Therapeutics, Inc. and Seaside 88, LP, dated July 11, 2011	8-K	001-34375 Exhibit 10.78	07/12/2011
10.79	First Amendment to Amended and Restated Loan and Security Agreement, dated June 23, 2011, by and among the Company, Oxford Finance LLC, the other lenders party hereto and General Electric Capital Corporation.	10-Q	001-34375 Exhibit 10.79	08/09/2011
10.80	Second Amendment to the Amended and Restated Loan and Security Agreement, dated September 9, 2011, by and among the Company, General Electric Capital Corporation, and the other lenders signatory thereto.	8-K	001-34375 Exhibit 10.80	09/15/2011
10.81	Promissory Note issued by the Company in favor of General Electric Capital Corporation or any subsequent holder thereof, pursuant to the Loan and Security Agreement dated September 9, 2011.	8-K	001-34375 Exhibit 10.81	09/15/2011
10.82	Promissory Note issued by the Company in favor of Silicon Valley Bank or any subsequent holder thereof, pursuant to the Loan and Security Agreement dated September 9, 2011.	8-K	001-34375 Exhibit 10.82	09/15/2011

/					
10.83	Promissory Note issued by the Company in favor of Oxford Financial Corporation or any subsequent holder thereof, pursuant to the Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.83	09/15/2011
10.84	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
10.85	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
10.86	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
10.87	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
10.88	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
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 (filed herewith).	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 (filed herewith).	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 (filed herewith).	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 (filed herewith).	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			
101.PRE	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.

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 13, 2012

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 13, 2012
/s/ Christopher J. Calhoun Christopher J. Calhoun	Chief Executive Officer, Vice-Chairman, Director (Principal Executive Officer)	March 13, 2012
/s/ Marc H. Hedrick, MD Marc H. Hedrick, MD	President, Director	March 13, 2012
/s/ Mark E. Saad Mark E. Saad	Chief Financial Officer (Principal Financial Officer)	March 13, 2012
/s/ John W. Townsend John W. Townsend	Chief Accounting Officer	March 13, 2012
/s/ Richard J. Hawkins Richard J. Hawkins	Director	March 13, 2012
/s/ Paul W. Hawran Paul W. Hawran	Director	March 13, 2012
/s/ Ronald D. Henriksen Ronald D. Henriksen	Director	March 13, 2012
/s/ E. Carmack Holmes, MD E. Carmack Holmes, MD	Director	March 13, 2012
/s/ David M. Rickey David M. Rickey	Director	March 13, 2012
/s/ Tommy G. Thompson Tommy G. Thompson	Director	March 13, 2012

83

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. 333-82074 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 12, 2012, with respect to the consolidated balance sheets of Cytori Therapeutics, Inc. and subsidiaries as of December 31, 2011 and 2010, 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, 2011, 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, 2011, 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, 2011, annual report on Form 10-K of Cytori Therapeutics, Inc.

/s/ KPMG LLP

San Diego, California March 12, 2012

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 and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or 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 13, 2012 /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 and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or 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 13, 2012 /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, 2010 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 13, 2012

By: /s/ Christopher J. Calhoun

Christopher J. Calhoun Chief Executive Officer

By: /s/ Mark E. Saad

Mark E. Saad Chief Financial Officer

Dated: March 13, 2012