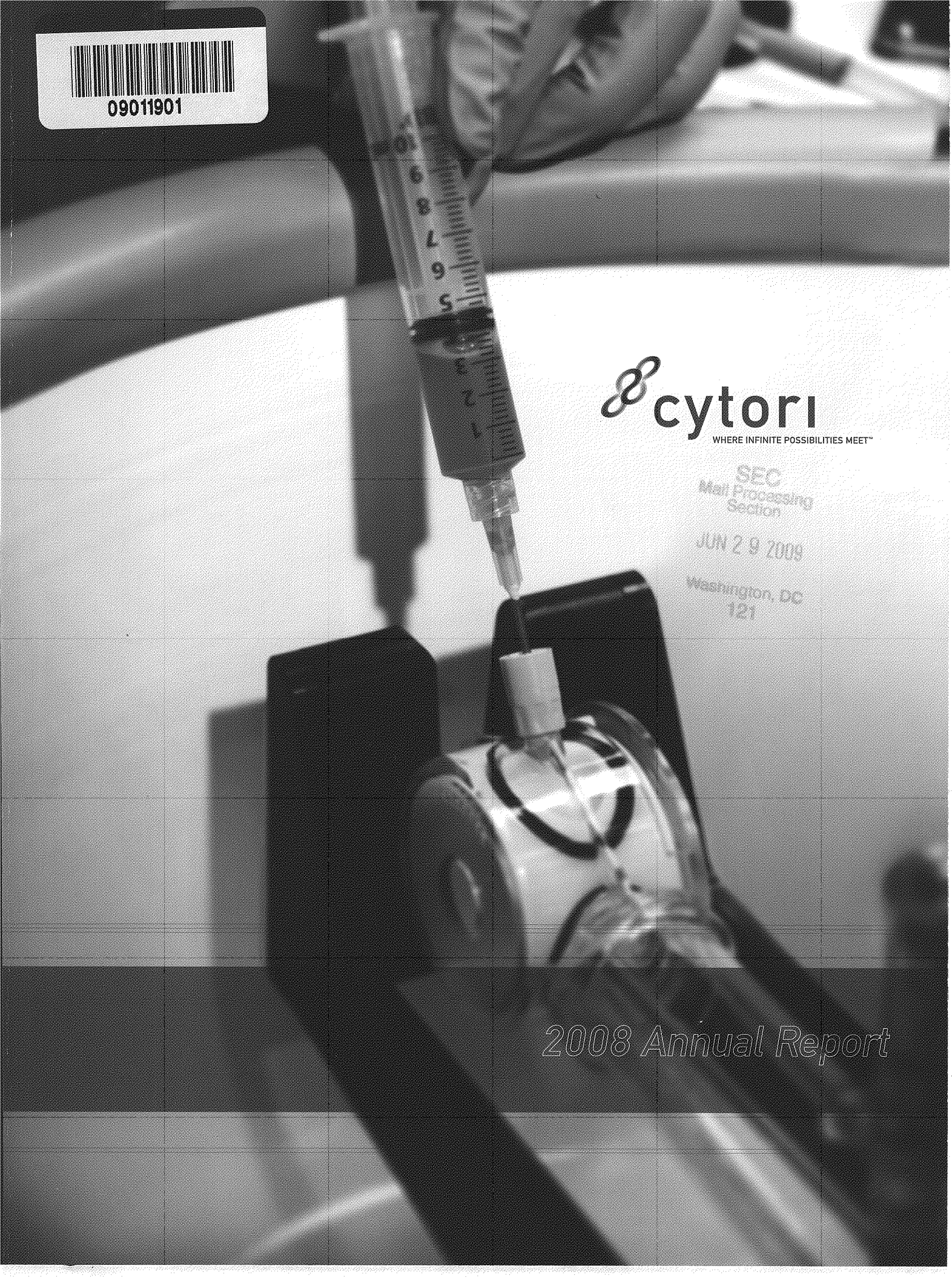


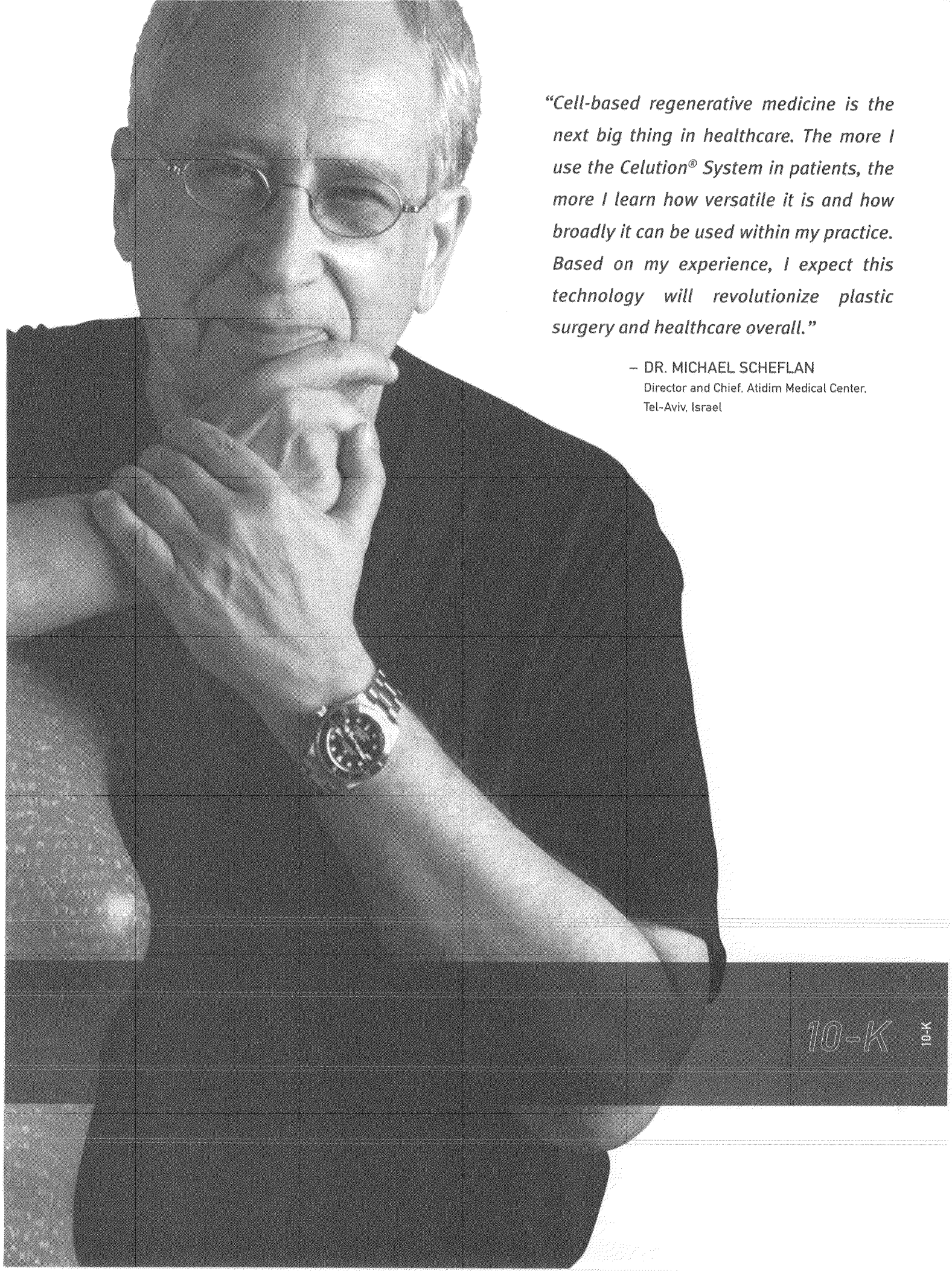
cytori

WHERE INFINITE POSSIBILITIES MEET™

2008 Annual Report

800/CRS

900/MB



"Cell-based regenerative medicine is the next big thing in healthcare. The more I use the Celution® System in patients, the more I learn how versatile it is and how broadly it can be used within my practice. Based on my experience, I expect this technology will revolutionize plastic surgery and healthcare overall."

– DR. MICHAEL SCHEFLAN
Director and Chief, Atidim Medical Center,
Tel-Aviv, Israel

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, 2008

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 ~~0-32501~~ 1-34375

CYTORI THERAPEUTICS, INC.

(Exact name of Registrant as Specified in Its Charter)

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

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

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

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

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

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

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

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

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

Large Accelerated Filer ☐ Accelerated Filer ☒ Non-Accelerated Filer ☐ Smaller reporting company ☐
(Do not check if a smaller reporting company)

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

The aggregate market value of the common stock of the registrant held by non-affiliates of the registrant on June 30, 2008, the last business day of the registrant's most recently completed second fiscal quarter, was $107,941,235 based on the closing sales price of the registrant's common stock on June 30, 2008 as reported on the Nasdaq Global Market, of $6.48 per share.

As of February 28, 2009, there were 29,313,441 shares of the registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for the 2009 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days after the end of the year ended December 31, 2008, are incorporated by reference in Part III, Items 10, 11, 12, 13 and 14 of this Form 10-K.

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PART I

Item 1. Business

General

Cytori Therapeutics, Inc., develops, manufactures, and sells medical products to enable the practice of regenerative medicine. Regenerative medicine describes the emerging field that aims to repair or restore lost or damaged tissue and cell function. Our commercial activities are currently focused on cosmetic and reconstructive surgery in Europe and Asia-Pacific, fulfilling the demand among physicians in Europe and Asia Pacific for clinical grade stem and regenerative cells, and stem and regenerative cell banking (cell preservation) worldwide. In addition, we are seeking to bring our products to market in the United States as well as other countries. Our product pipeline includes the development of potential new treatments for cardiovascular disease, spinal disc degeneration, gastrointestinal disorders, liver and renal disease and pelvic health conditions.

The foundation of our business is the patented Celution® System family of products which processes patients' cells at the bedside in real time. Each member of the Celution® System family of products consists of a central device, a related single-use consumable used for each patient procedure, proprietary enzymes, and related instrumentation. Our commercialization model is based on the sale of Celution® Systems and on generating recurring revenues from the single-use consumable sets.

Our Celution® 800/CRS System was introduced during 2008 into the European cosmetic and reconstructive surgery market through a network of medical distributors. The Celution® 900/MB is being marketed in Japan through our commercialization partner, Green Hospital Supply, Inc. (Green Hospital Supply) as part of the comprehensive StemSource® Cell Bank, which prepares cells for cryopreservation in the event they may be used in the future.

The most advanced therapeutic application in our product development pipeline is cardiovascular disease. Currently, two cardiovascular clinical trials are being conducted in Europe with adipose-derived stem and regenerative cells, processed with the Celution® 600 System, an earlier version of the Celution® 800/CV. The Celution® 800/CV has recently been introduced to these clinical sites. One of the clinical trials is in patients suffering from chronic myocardial ischemia, a severe form of chronic heart disease, and the other is in heart attack patients.

In the United States, our goal is to seek regulatory and marketing approval on the Celution® 700 System family of products. We expect to finalize our U.S. regulatory and clinical development strategy in 2009.

Summary of Celution® System Family Regulatory Status

Celution® Series	Region	Clinical Applications	Regulatory Status	Comments
900/MB	Japan	Cell Banking	Approved	
900/MB	Greece	Cell Banking	CE Mark	
800/CRS	Europe	Cell Processing for re-implantation or re-infusion into same patient (General Processing)	CE Mark	Post-marketing studies underway for reconstructive surgery
	Europe	Seeking cosmetic & reconstructive claims	In process	
800/CV	Europe	Will seek cardiovascular disease claims	In clinical study	
800/GP	Europe	Will seek multiple specific surgical claims	Pre-clinical	

Summary of Celution® System Family Regulatory Status (cont'd)

Celution® Series	Region	Clinical Applications	Regulatory Status	Comments
700/CRS	USA	Will seek reconstructive surgery claims	Pre-clinical	
700/CV	USA	Will seek cardiovascular disease claims	Pre-clinical	
700/GP	USA	Will seek multiple general surgical claims	Pre-clinical	
600	Europe	Cell Concentration	CE Mark	Two cardiac clinical trials underway: chronic and acute
200	USA	Blood Processing	510 (k) clearance	

Our MacroPore Biosurgery operating segment manages the ThinFilm biomaterial product line in Japan. We sold our non-Japan Thin Film business in 2004. Pending regulatory approval in Japan, this product line would be distributed exclusively through Senko Medical Trading Co. ("Senko") for anti-adhesion applications, soft tissue support, and minimization of the attachment of soft tissues throughout the body.

Reconstructive Surgery

The Celution® 800/CRS System is approved in Europe as a bedside device for separating and concentrating a patient's stem and regenerative cells, which reside naturally within their adipose (fat) tissue, so that these cells may be re-injected back into that same patient.

The Celution® 800/CRS System was introduced into the European and Asia-Pacific reconstructive surgery market in the first quarter of 2008. Our distribution network covers the UK, France, Germany, Norway, Finland, Denmark, Sweden, Austria and Switzerland through our commercialization partnership with GE Healthcare, and Belgium, China, Greece, Indonesia, Israel, Italy, Korea, Malaysia, Portugal, Singapore, Spain, Turkey and the Netherlands through a network of independent distributors.

We hope to begin commercializing the Celution® 800/CRS System with indications for use for breast reconstruction for partial mastectomy defects as early as 2010 pending supporting clinical data and expanded CE certification. To support this goal, a 70-patient, multi-center study, RESTORE II, was initiated in Europe in 2008. The results from this study will also be used to support reimbursement for such procedure.

Market for Clinical-Grade Cells

The Celution System is being sold to physicians to fulfill their demand for access to clinical-grade stem and regenerative cells. Celution is the only such system broadly available in Europe today that can provide real time access to cells, which can safely be administered to patients. Availability at the point of care enables physicians to apply cells across an array of applications. Certain physicians may even choose to study patient outcomes to understand the benefit of these cells under their own independently sponsored and regulated studies. Such 'translational' efforts are growing and already represent applications as diverse as wound healing, radiation injury, breast reconstruction, breast augmentation, HIV related facial wasting syndrome, vocal cord paralysis, burn, urinary incontinence, fistula repair (and Crohn's disease), bone regeneration, cardiovascular applications, peripheral vascular disease, renal insufficiency and acute kidney injury, and liver disease among many others. We expect the breadth of these applications will grow significantly as physicians continue to adopt cell based regenerative medicine into their treatment strategies based on the availability of safe clinical grade cells at the point of care.

StemSource® and Cell Banking

The Celution® 900/MB System is the foundation of our StemSource® Cell Bank for cryopreserving patients' adult stem and regenerative cells. The StemSource® Cell Bank is being marketed to hospitals, tissue banks and stem cell banking companies in Europe and Asia. With a StemSource® Cell Bank on site, hospitals will be able to offer their patients the option

of storing their adipose tissue-derived stem and regenerative cells and accessing them as clinical applications are approved.

The StemSource® Cell Bank is being marketed in Japan, Korea, Taiwan and Thailand exclusively by Green Hospital Supply, Inc. The value of a StemSource® Cell Bank lies in the recurring revenue from processing and freezing. It starts with a tissue collection procedure, which may be performed during an already planned surgery or a separate elective procedure. The cells are prepared for storage using the Celution® 900/MB System, which automates the separation and concentration of stem and regenerative cells from adipose tissue and thereby allows hospitals to more affordably offer such service to patients.

As part of our agreement with Green Hospital Supply, we equally split revenues in Japan, Korea, Taiwan and Thailand from the sale to hospitals of StemSource® Cell Banks and single-use, per-procedure consumables. Green Hospital Supply is responsible for all sales and marketing while Cytori is responsible for manufacturing the Celution® 900/MB System and sourcing all necessary equipment, including but not limited to cryopreservation chambers, cooling and thawing devices, cell banking protocols and the proprietary software and database application.

Cytori signed a commercialization partnership with GE Healthcare in January 2009, which grants GE Healthcare exclusive rights to commercialize the Celution® System in the U.K., France, Germany, Norway, Finland, Denmark, Sweden, Austria, Switzerland, Belgium, the Netherlands and Luxembourg for clinical grade access to stem and regenerative cells and stem cell banking.

Cardiovascular Disease

We currently have two clinical trials underway in Europe for adipose-derived stem and regenerative cells processed with the Celution® 600 and 800 Systems, to study cardiovascular disease. In January 2007, we initiated a clinical trial for chronic myocardial ischemia, a severe form of coronary artery disease. In late 2007, we initiated a study for acute heart attacks, for which enrollment is ongoing. Enrollment for both trials is projected to be completed in 2009. Both are double-blind, placebo controlled safety and feasibility studies, which will evaluate a variety of primary and secondary safety and efficacy endpoints.

We believe there is significant need for new forms of treatment for cardiovascular disease, which represents one of the largest healthcare market opportunities. The American Heart Association estimates that in the United States of America alone there are approximately 865,000 heart attacks each year and more than 13,000,000 people suffer from coronary heart disease.

Celution® System Pipeline

Other applications for the Celution® System family of products under investigation include gastrointestinal disorders, vascular disease, pelvic health conditions, and orthopedic and spinal applications. Our scientists are, to a varying degree, investigating these applications in pre-clinical models.

Manufacturing

The Celution® 800/CRS, Celution® 900/MB, and related single-use consumables are being manufactured at Cytori's headquarters in San Diego, CA. The completion of our internal manufacturing facilities in 2007 is expected to enable us to meet anticipated demand in 2009.

In the future, the next generation Celution® device is expected to be manufactured through a joint venture arrangement between Cytori and Olympus Corporation ("Olympus"), a global optics and life science company. Olympus-Cytori Inc. (the "Joint Venture"), enables Cytori to access Olympus' expertise in engineering, manufacturing and servicing of sophisticated medical devices. The Joint Venture will supply the Celution® System for all therapeutic applications solely to Cytori at a formula-based transfer price. Cytori owns Celution® System marketing rights for all therapeutic applications.

Competition

We compete with multiple pharmaceutical, biotechnology and medical device companies involved in the development and commercialization of medical technologies and therapies.

Regenerative medicine is rapidly progressing, 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, embryonic and fetal tissue, umbilical cord and peripheral blood, and skeletal muscle. We work exclusively with adult stem and regenerative cells from adipose tissue.

Companies working in this area include, among others, Aastrom Biosciences, Inc., Baxter International, Inc., BioHeart, Inc., Cellerix SA, Genzyme, Inc., Geron Corporation, Isolagen, Inc., MG Biotherapeutics (a joint venture between Genzyme and Medtronic), Osiris Therapeutics, Inc., Stem Cells, Inc. and Tissue Genesis, Inc. Many 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 are also working with adipose-derived cells. To the best of our knowledge, none of these companies are currently conducting human clinical trials. In addition, Cytori is 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, Baxter, BioHeart, MG Biotherapeutics, and Osiris. Baxter completed a Phase II study in the United States using stem cells extracted from peripheral blood for chronic myocardial ischemia. BioHeart is conducting multiple ongoing clinical trials in the United States and Europe for its investigational product MyoCell™, which are cultured autologous skeletal myoblasts. We are aware that BioHeart has disclosed its intentions to develop heart attack treatments using adipose-derived cells. Osiris Therapeutics, Inc. completed a Phase I clinical trial using allogeneic (donor), mesenchymal stem cells, for acute myocardial infarction and is planning a broader Phase II study.

Research and Development

Research and development expenses were $17,371,000, $20,020,000 and $21,977,000 for the years ended December 31, 2008, 2007 and 2006, respectively. For 2008, majority of the research and development expenses were related to our regenerative cell technology.

Our research and development efforts in 2008 focused predominantly on the following areas:

- Optimization of the design, functionality and manufacturing process for the Celution® System family of products, single-use consumables and related instrumentation for the entry of the device into the European reconstructive surgery market and the StemSource® Cell Banking market in Europe and Asia-Pacific;
- Development of the infrastructure and logistics in partnership with Green Hospital Supply including building out a proprietary database and software application and optimizing proprietary protocols, resulting in the first sale in Japan of the StemSource® cell banking line to the University of Kyoto;
- Preparation and initiation of a 70 patient European breast reconstruction post-marketing clinical study using the Celution® System. The study is taking place across several centers and will measure safety, volume retention as well as other metrics related to autologous fat transfers enriched with the Celution® System output to correct partial mastectomy defects;
- Implementation and continuing enrollment in two randomized, double blind, placebo controlled, cardiovascular disease clinical trials in Europe for chronic myocardial ischemia and heart attacks.
- Preparation and submission of multiple regulatory filings in the United States, Europe, and Japan related to various cell processing systems under development;
- Conducting extensive pre-clinical safety and efficacy studies investigating the use of adipose-derived stem and regenerative cells for reconstructive surgery, spinal disc repair, renal failure, pancreatitis, stroke, and other therapeutic applications;
- Investigating the cellular and molecular properties, composition, and characteristics of stem and regenerative cells residing in adipose tissue towards improving our intellectual property position and towards understanding how to improve and control the therapeutic products.

Customers

Cytori has established a network of distributors who offer our Celution® System, instrumentation and consumables to surgeons and hospitals throughout Europe. These distributors purchase the devices 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 Celution 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.

In July 2004, we entered into a Distribution Agreement with Senko under which we granted to Senko an exclusive license to sell and distribute Thin Film products in Japan. The sale of products through Senko commences upon "commercialization," which requires regulatory clearance from the Japanese regulatory authorities. We are currently pursuing the required regulatory clearance. Following commercialization, the Distribution Agreement has a five-year duration and is renewable for an additional five years after reaching mutually agreed minimum purchase guarantees. In 2004, we sold all of our non-Japan Thin Film business.

Sales by Geographic Region

For the year ended December 31, 2008, all of our product revenue came from sales of Celution® 800/CRS System to the European and Asia-Pacific reconstructive surgery market and installation of our first StemSource® Cell Bank in Greece. For the year ended December 31, 2007, our only product sales came from our bioresorbable surgical implants. As these were no longer core to our business focus, we sold our remaining interest in this line of business to Kensey Nash in May 2007 (excluding our Thin Film products in Japan) and we no longer receive any revenue from the sales of those products. Prior to May 2007, we sold our products predominantly in the United States and to a lesser extent internationally through Medtronic.

Regenerative Cell Technology

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 in Greece. This product includes a combination of equipment and service deliverables, some of which will be provided to the customer over time. We have recorded $4,528,000 in revenue during 2008 related to our Celution® products and StemSource® Cell Bank.

Additionally, our consolidated balance sheet includes a line item entitled deferred revenues, related party. This account primarily consists of the consideration we have received in exchange for future obligations that we have agreed to perform on behalf of Olympus and the Joint Venture. We recognize deferred revenues, related party, as development revenue when certain performance obligations are met. Such revenue recognition results from completion of certain milestones, such as completion of product development efforts, regulatory filings and related pre-clinical and clinical studies. In 2008, 2007 and 2006, we recognized $774,000, $5,158,000 and $5,905,000 of revenue associated with our arrangements with Olympus, respectively.

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 stem and 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. As part of this agreement, Olympus could 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. 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.

For the year ended December 31, 2006, we recorded $310,000 in grant revenue related to our agreement with the National Institutes of Health ("NIH"). Under this agreement, the NIH reimbursed us for "qualifying expenditures" related to research on Adipose-Derived Cell Therapy for Myocardial Infarction. There was no similar revenue in 2007 and 2008.

For the years ended December 31, 2008, 2007 and 2006, we recorded revenue of $47,000, $85,000 and $102,000, respectively, related to cell processing equipment, and adipose derived stem cell research products sold to various research facilities. We also recorded stem cell banking revenue of $4,000, $4,000 and $7,000 for the years ended December 31, 2008, 2007 and 2006, respectively, related to our U.S. StemSource® Cell Bank offering for the processing and preservation of adipose-derived stem and regenerative cells at our FDA and California state-licensed tissue bank facility.

MacroPore Biosurgery

In 2007 and 2006 our product sales were $792,000 and $1,451,000, respectively, all of which relate to the MacroPore Biosurgery segment. These revenues were primarily related to orders for our radiographically identifiable Spine System products, marketed under the name MYSTIQUE™. As noted above, we were concerned about the level of commitment to these products from Medtronic, our exclusive distributor, and we sold our intellectual property rights and tangible assets related to our spine and orthopedic bioresorbable implant product line to Kensey Nash in May 2007.

Under a distribution agreement with Senko, we are responsible for the completion of the initial regulatory application to the MHLW (the Japanese equivalent of the U.S. Food and Drug Administration). We recognized development revenue based on milestones defined within this agreement of $10,000 and $152,000 for the years ended December 31, 2007 and 2006, respectively. We did not recognize any similar revenue in 2008. We have not received any Thin Film product revenue in Japan yet, and we sold all our non-Japan Thin Film business in 2004.

We anticipate that our future international product revenues will increase as a result of our Distribution Agreement with Senko to the extent our Thin Film products reach commercialization in Japan.

Planned Capital Expenditures

Although capital expenditures may vary significantly depending on a variety of factors, we may spend up to $1,000,000 on capital equipment purchases in 2009, although we will diligently seek to spend much less. These may be paid with our available cash, or financed if appropriate. (See additional discussion regarding Liquidity at the beginning of Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations.)

Raw Materials

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 Cytori, and we are dependent on the ability of these suppliers to deliver functioning parts 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 could have a negative impact on our ability to manufacture products.

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 scientific discoveries, Cytori has has three issued U.S. patents and six issued International patents. In addition, we have 117 patent applications pending worldwide. We are seeking patents on methods and systems for processing adipose-derived stem and regenerative cells, on use of adipose-derived stem and regenerative cells for a variety of therapeutic indications, including their mechanisms of actions, and on compositions of matter than include adipose-derived stem and regenerative cells.

In June 2008, Cytori was issued U.S. Patent No. 7,390,484 (the '484 patent). The '484 patent is a foundational patent that protects the Celution® System technology for processing adipose tissue to obtain a diverse and mixed population of adipose derived stem and regenerative cells. The '484 patent establishes a strong barrier-to-entry against potential competitors and provides critical market protection while we seek regulatory approval in the United States.

In September 2008, Cytori was issued U.S. Patent No. 7,429,488 ('the '488 patent). The '488 patent protects Cytori's Celution® System based methods of generating adipose tissue derived stem and regenerative cell enhanced fat grafts. Cell enhanced fat grafts may be used in a variety of cosmetic and reconstructive surgery applications, including breast reconstruction following partial mastectomy, breast implant salvage, as well as facial and other cosmetic applications.

In January 2009, Cytori was issued U.S. Patent No. 7,473,420 ('the 420 patent). The '420 patent protects combinations of the Celution System output with various additives including, but not limited to, agents that promote cell differentiation such as growth factors, cytokines and protein, demineralized bone, tissue or tissue fragments, biological or artificial scaffolds, and immunosuppressive compounds. These additives may be combined with the Celution System output to increase efficacy, optimize or localize cell delivery, enhance specific cell properties or promote cell differentiation.

Cytori has also received six international patents. Specifically, Cytori has received patents in Korea and Singapore related to the Company's current Celution System devices, patents in Korea and Australia related to the Company's StemSource Cell Bank, and patents in Singapore and South Africa related to the use of adipose derived stem and regenerative cells for cardiovascular therapy.

We are also the exclusive, worldwide licensee of the Regents of the University of California's rights to U.S. Patent No. 6,777,231 (the '231 patent), U.S. Patent No. 7,470,537 (the '537 patent), six issued international patents and 17 patent applications pending worldwide. The '231 patent covers isolated adipose derived stem cells that can differentiate into two or more of a variety of cell types. The '231 patent has been construed to cover isolated adipose derived stem cells in an environment substantially free of other cellular materials found in adipose tissue. The '537 patent, issued in December 2009, covers a population of stem cells and progenitor cells which can be obtained from adipose tissue and which express certain combinations of cell surface markers. Specifically, the '537 patent covers adipose derived stem and progenitor cells that express certain combinations of Stro-1+, CD29+, CD44+, CD71+, CD49d+, CD90+, CD105+, SH3, CD45-, CD31- and low or undetectable levels of CD106. International patents related to isolated cells from adipose tissue have issued in Australia, Korea, Russia, Singapore and South Africa.

We cannot assure that any of the 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.

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 U.S. 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 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 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.

Patent litigation results in substantial costs to us and diversion of effort, and may be necessary from time to time 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.

In the fourth quarter of 2004, the University of Pittsburgh filed a lawsuit naming all of the inventors who had not assigned their ownership interest in U.S. Patent 6,777,231 to the University of Pittsburgh, seeking a determination that its assignors, rather than the University of California's assignors, are the true inventors of Patent No. 6,777,231. If the University of Pittsburgh wins the lawsuit, our license rights to this patent could be nullified or rendered non-exclusive with respect to any third party that might license rights from the University of Pittsburgh. On August 9, 2007, the United States District Court granted the University of Pittsburgh's motion for Summary Judgment in part, determining that the University of Pittsburgh's assignees were properly named as inventors on Patent 6,777,231, and that all other inventorship issues shall be determined according to the facts presented at trial. The trial was concluded in January 2008 and on June 9, 2008 the Court signed its final order which we received on June 12, 2008. The Court concluded that the University of Pittsburgh's assignors were the sole inventors of the '231 Patent. The Court's decision terminated UC's rights to the '231 Patent. Upon review of the Court's findings, we believe that the Court's decision was in error and that work completed at the University of California was critical to obtaining this patent. The UC assignors are appealing the decision. If the UC assignors' appeal of the Court's decision is successful, UC's rights to the '231 Patent should be reinstated.

We are not named as a party to the lawsuit, but our president, Marc Hedrick, is one of the inventors identified on the '231 Patent and therefore is a named individual defendant. Due to our license obligations to UC relating to the '231 Patent and other UC patent applications, we have provided substantial financial and other assistance to the defense of the lawsuit. Since our current products and products under development do not practice the '231 Patent, our primary ongoing business activities and product development pipeline should not be affected by the Court's decision. Although the '231 Patent is unrelated to our current products and product pipeline, we believe that the '231 Patent and/or the other technology licensed from UC may have long term potential to be useful for future product developments, and so we have elected to support UC's legal efforts in the appeal of the Court's final order. We have incurred substantial legal costs as a result of the University of Pittsburgh lawsuit to date, but we expect future costs will be minimal since the only remaining expense will be related to the final argument of the appeal. As a named inventor on the patent, Marc Hedrick is entitled to receive from the UC up to 7% of royalty payments made by a licensee (us) to UC. This agreement was in place prior to his employment with us.

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

Failure to obtain or maintain patent protection, or protect trade secrets, for any reason, 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 the results of our operations, cash flows and financial condition.

Government Regulation

As newly developed medical devices, our Celution® System family of products must receive regulatory clearances or approvals from the European Union, the FDA and, from other state 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, establishment 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 US FDA regulations. 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 known and may vary from country to 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.

The regulatory process can be lengthy, expensive, and uncertain. Before any new medical device may be introduced to the United States of America 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. 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 future products under development 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. 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.

Under the terms of our Joint Venture Agreements with Olympus we are the party with the primary responsibility for obtaining regulatory approvals to sell the Olympus-Cytori, Inc. devices. To date we have prepared and submitted multiple regulatory filings in the United States and Europe related to various cell processing systems under development, which notably resulted in receipt of a CE Mark on the Celution® 800 System and 510(K) clearance in the United States for various related medical technologies, including an autologous blood processing device.

We must comply with extensive regulations from foreign jurisdictions regarding safety, manufacturing processes and quality. These regulations, including the requirements for marketing authorization, may differ from the United States FDA regulatory scheme. Specifically, in regard to our Thin Film product line in Japan (distributed by Senko), we have been seeking marketing authorization from the Japanese Ministry of Health, Labour and Welfare for the past four years, but have not obtained approvals yet.

Staff

As of December 31, 2008, we had 126 employees, including part-time and full-time employees. These employees are comprised of 20 employees in manufacturing, 57 employees in research and development, 17 employees in sales and marketing and 32 employees in management and 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. A breakout by segment is as follows:

	Regenerative Cell Technology	Corporate	Total
Manufacturing	20	—	20
Research & Development	57	—	57
Sales and Marketing	17	—	17
General & Administrative	—	32	32
Total	94	32	126

Web Site Access to SEC Filings

We maintain an Internet website at www.cytoritx.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.

We file electronically with the SEC our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K pursuant to Section 13(a) of the Securities Exchange Act of 1934. The SEC maintains an Internet site that contains reports, proxy information and information statements, and other information regarding issuers that file electronically with the SEC. The address of that website is http://www.sec.gov. The materials are also available at the SEC's

Public Reference Room, located at 100 F Street, Washington, D.C. 20549. The public may obtain information through the public reference room by calling the SEC at 1-800-SEC-0330.

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 need to raise more cash in the very near term

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 are required to raise capital from one or more sources in the very near term to continue our operations at or close to the levels currently conducted. We believe that without raising additional capital soon from accessible sources of financing, as well as an increase in capital from our operations, we will not otherwise have adequate funding to complete the development, pre-clinical activities, clinical trials and marketing efforts required to successfully bring our current and future products to market. In addition, if we are not successful in raising additional cash very soon we will be required to negotiate with General Electric Capital Corporation ("GECC") and Silicon Valley Bank ("SVB") to obtain an amendment to the cash liquidity requirements of the Loan and Security Agreement dated October 14, 2008 ("Loan Agreement"). If we are not successful in obtaining either the additional finding or cash liquidity relief then we will likely very soon thereafter be in default under the Loan Agreement. If we are in default or if our senior secured lenders otherwise assert that there has been an event of default, they may seek to accelerate our senior secured loan and exercise their rights and remedies under the Loan Agreement, including the sale of our property and other assets. In such event, we may be forced to file a bankruptcy case or have an involuntary bankruptcy case filed against us or otherwise liquidate our assets. Any of these events 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 distribution partners, increased results of operations, or from other sources, or on terms attractive to us. Although we entered into a $15,000,000 loan facility with GECC and SVB in October 2008, we could not access the remaining $7,500,000 under that facility as we were not able satisfy certain financial conditions on or before December 12, 2008. The inability to obtain sufficient additional funds in the near term will at the least require us to significantly delay, scale back, or eliminate some or all of our research or product development, manufacturing operations, clinical or regulatory activities, having 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. Our ability to raise capital has been and may continue to be adversely affected by current credit conditions and the downturn in the 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 are implementing 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 historically been, and continue to be, reliant on raising outside capital to fund our operations as discussed in the prior risk factor.

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 and development activities. This is a high-risk strategy because there is no assurance that our 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.

We must keep our joint venture with Olympus operating smoothly

Our business cannot succeed on the currently anticipated timelines unless our Joint Venture collaboration with Olympus goes well. 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 not be able to commercialize any device or any therapeutic products successfully into the market. In addition, future disruption or breakup of our relationship would be extremely costly to our reputation, in addition to causing many serious practical problems.

We and Olympus must overcome contractual and cultural barriers. Our relationship is formally measured by a set of complex contracts, which have not yet been tested in practice. In addition, 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 will have a primary role in the development of Olympus-Cytori, Inc.'s next generation devices. Although Olympus has extensive experience in developing medical devices, this arrangement will result in a reduction of our control over the development and manufacturing of the next generation devices.

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. Due to limited operating history and the transition from the MacroPore biomaterials to the regenerative medicine business, comparisons of our year-to-year operating results are not necessarily meaningful and the results for any periods should not necessarily be relied upon as an indication of future performance. All 2007 product revenues came from our spine and orthopedics implant product line, which we sold in May 2007.

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.

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, whatever the 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 need to finance lengthy time-consuming clinical studies (so as to provide convincing evidence of the medical benefit) in order to overcome this inertia and skepticism particularly in reconstructive surgery, cell preservation, the cardiovascular area and many other indications.

Most products 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® platform, we are pursuing new approaches for reconstructive surgery, preservation of stem and regenerative cells for potential future use, therapies for cardiovascular disease, gastrointestinal disorders and spine and orthopedic 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 our products and/or services are likely to be another two to five years away.

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.

The timing and amount of Thin Film revenues from Senko are uncertain

The sole remaining product line in our MacroPore Biosurgery segment is our Japan Thin Film business. Our right to receive royalties from Senko, and to recognize certain deferred revenues, depends on the timing of MHLW approval for commercialization of the product in Japan. We have no control over this timing and our previous expectations have not been met. Also, even after commercialization, we will be dependent on Senko, our exclusive distributor, to drive product sales in Japan.

There is a risk that we could experience with Senko some of the same problems we experienced in our previous relationship with Medtronic, which was the exclusive distributor for our former bioresorbable spine and orthopedic implant product line.

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® device 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 begun introduction of the Celution® 800 and Celution® 900-based StemSource® Cell Bank in 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, as we await the availability of the Joint Venture next generation Celution® device.

In the event that the Olympus-Cytori Joint Venture is not successful, 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 the next generation Celution® device.

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.

Our amended regenerative cell technology license agreement with the Regents of the University of California, or the UC, 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. In addition, further legal risk arises from a lawsuit filed by the University of Pittsburgh in the United States District Court, or the Court, naming all of the inventors who had not assigned their ownership interest in Patent 6,777,231, which we refer to as the '231 Patent, to the University of Pittsburgh, seeking a determination that its assignors, rather than UC's assignors, are the true inventors of '231 Patent. On June 12, 2008, we received the Court's final order concluding that the University of Pittsburgh's assignors were the sole inventors of the '231 Patent, which terminates UC's rights to this patent unless the decision of the Court is overturned. The UC assignors are appealing the Court's decision and a Notice of Appeal was filed on July 9, 2008. We are the exclusive, worldwide licensee of the UC's rights under this patent in humans, which relates to adult stem cells isolated from adipose tissue that can differentiate into two or more of a variety of cell types. If the UC assignors do not prevail on appeal, our license rights to this patent will be permanently lost.

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 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 as to 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 of America, 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.

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

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

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

Intellectual property law outside the United States is uncertain and in many countries is currently undergoing review and revisions. The laws of some countries do not protect our patent and other intellectual property rights to the same extent as United States laws. This is particularly relevant to us as we currently conduct most of our clinical trials 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 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 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 Olympus-Cytori, Inc. are subject to intensive FDA regulation

As newly developed medical devices, Celution® System family of products 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 United States of America 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 future products under development 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 of America 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 intensive 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

Government regulations can change without notice. Given that 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.

Health Insurance Reimbursement Risks

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.

Market Acceptance of New Technology

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.

We and/or the Joint Venture have to maintain quality assurance certification and manufacturing approvals

The manufacture of our Celution® System will be, 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 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 the Company 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 in the past, and currently do not intend to pay any cash dividends in the foreseeable future.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

We currently lease 91,000 square feet located at 3020 and 3030 Callan Road, San Diego, California. The related rent agreement bears rent at a rate of $1.15 per square foot, with annual increases of 3%. The lease term is 57 months,

commencing on October 1, 2005 and expiring on June 30, 2010. We also lease 4,027 square feet of office space located at 9-3 Otsuka 2-chome, Bunkyo-ku, Tokyo, Japan. The agreement provides for rent at a rate of $4.38 per square foot, expiring on November 30, 2009. We also entered into a new lease during the second quarter of 2008 for 900 square feet of office space located at Via Gino Capponi n. 26, Florence, Italy. The lease agreement provides for rent at a rate of $2.63 per square foot, expiring on April 22, 2014. Additionally, we've entered into several lease agreements for corporate housing for our employees on international assignments. For these properties, we pay an aggregate of approximately $144,000 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, 2008, we were not a party to any material legal proceeding. We are not formally a party to the University of Pittsburgh patent litigation. However, we are responsible for reimbursing certain related litigation costs. On June 12, 2008, we received the Court's final order concluding that the University of Pittsburgh's assignors were the sole inventors of the '231 Patent. The UC assignors are appealing the Court's decision. Since our current products and products under development do not practice the '231 Patent, our primary ongoing business activities and product development pipeline should not be affected by the Court's decision. Although the '231 Patent is unrelated to our current products and product pipeline, we believe that the '231 Patent and/or the other technology licensed from UC may have long term potential to be useful for future product developments, and so we have elected to support UC's legal efforts in the appeal of the Court's final order.

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

None.

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, we began trading on the Nasdaq Capital Market under the symbol "CYTX," and have since transferred to the Nasdaq Global Market effective February 14, 2006. The following table shows the high and low sales prices for our common stock for the periods indicated, as reported by the Nasdaq Stock Market. These prices do not include retail markups, markdowns or commissions.

Nasdaq Stock Exchange

	High	Low
2007		
Quarter ended March 31, 2007	$ 7.00	$ 4.56
Quarter ended June 30, 2007	$ 6.69	$ 5.36
Quarter ended September 30, 2007	$ 6.67	$ 4.85
Quarter ended December 31, 2007	$ 6.50	$ 4.88
2008		
Quarter ended March 31, 2008	$ 6.44	$ 4.62
Quarter ended June 30, 2008	$ 8.56	$ 4.75
Quarter ended September 30, 2008	$ 7.97	$ 5.00
Quarter ended December 31, 2008	$ 5.65	$ 1.76

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

As of February 28, 2009, we had approximately 22 registered holders of our common stock. In addition, we are aware that there are at least 4,480 beneficial holders of our common stock. Because many of our shares are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of individual stockholders represented by these record holders.

Dividends

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

Equity Compensation Plan Information

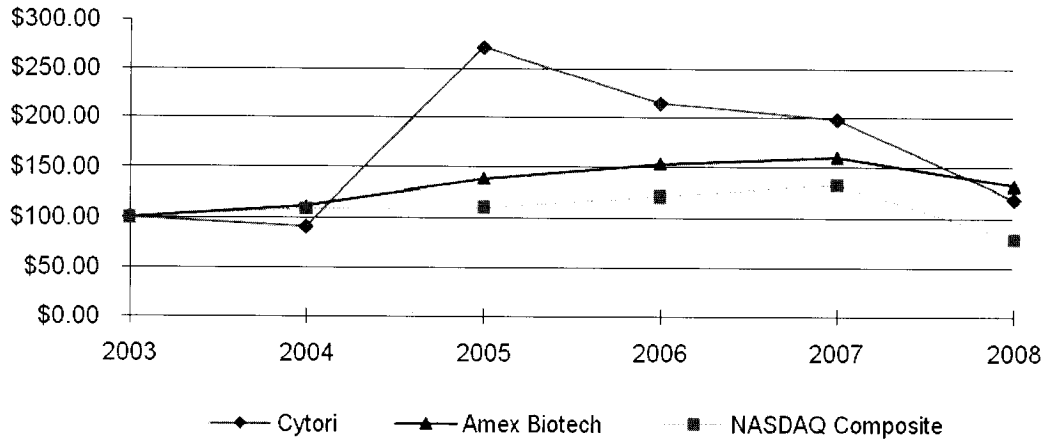
Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column(a)) (c)
Equity compensation plans approved by security holders (1)	3,810,395	$ 4.65	—
Equity compensation plans not approved by security holders (2)	2,118,312	$ 5.68	2,190,450
Total	5,928,707	$ 5.02	2,190,450

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

(2) 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 Amex Biotechnology Index during the period from December 31, 2003, through December 31, 2008. 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, 2008, are derived from, and should be read in conjunction with, our audited consolidated financial statements. The consolidated balance sheets as of December 31, 2008 and 2007, 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, 2008, 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, 2006, 2005 and 2004, and the related consolidated statements of operations and comprehensive loss, stockholders' equity (deficit), and cash flows for the years ended December 31, 2005 and 2004, which were also audited by KPMG LLP, are included with our annual reports previously filed.

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

	2008	2007	2006	2005	2004
Statements of Operations Data:					
Product revenues:					
Sales to related party	$ 28	$ 792	$ 1,451	$ 5,634	$ 4,085
Sales to third parties	4,500	—	—	—	2,237
	4,528	792	1,451	5,634	6,322
Cost of product revenues	1,854	422	1,634	3,154	3,384
Gross profit (loss)	2,674	370	(183)	2,480	2,938
Development revenues:					
Development, related party	774	5,168	6,057	51	158
Other, related party	1,500	—	—	—	—
Research grants and other	51	89	419	320	338
	2,325	5,257	6,476	371	496
Operating expenses:					
Research and development	17,371	20,020	21,977	15,450	10,384
Sales and marketing	4,602	2,673	2,055	1,547	2,413
General and administrative	11,727	14,184	12,547	10,208	6,551
Change in fair value of option liabilities	1,060	100	(4,431)	3,645	—
Restructuring charge	—	—	—	—	107
Equipment impairment charge	—	—	—	—	42
Total operating expenses	34,760	36,977	32,148	30,850	19,497
Total operating loss	(29,761)	(31,350)	(25,855)	(27,999)	(16,063)
Other income (expense):					
Gain on sale of assets	—	1,858	—	5,526	—
Gain on the sale of assets, related party	—	—	—	—	13,883
Interest income	230	1,028	708	299	252
Interest expense	(420)	(155)	(199)	(137)	(177)
Other income (expense)	(40)	(46)	(27)	(55)	15
Equity loss in investments	(45)	(7)	(74)	(4,172)	—
Net loss	$ (30,036)	$ (28,672)	$ (25,447)	$ (26,538)	$ (2,090)
Basic and diluted net loss per share	$ (1.12)	$ (1.25)	$ (1.53)	$ (1.80)	$ (0.15)
Basic and diluted weighted average common shares	26,882,431	22,889,250	16,603,550	14,704,281	13,932,390
Statements of Cash Flows Data:					
Net cash used in operating activities	$ (33,389)	$ (29,995)	$ (16,483)	$ (1,101)	$ (12,574)
Net cash provided by investing activities	(393)	5,982	591	911	13,425
Net cash provided by (used in) financing activities	34,928	26,576	16,787	5,357	(831)
Net increase (decrease) in cash	1,146	2,563	895	5,167	20
Cash and cash equivalents at beginning of year	11,465	8,902	8,007	2,840	2,820
Cash and cash equivalents at end of year	$ 12,611	$ 11,465	$ 8,902	$ 8,007	$ 2,840
Balance Sheet Data:					
Cash, cash equivalents and short-term investments	$ 12,611	$ 11,465	$ 12,878	$ 15,845	$ 13,419
Working capital	10,090	4,168	7,392	10,459	12,458
Total assets	25,609	21,507	24,868	28,166	25,470
Deferred revenues, related party	16,474	18,748	23,906	17,311	—
Deferred revenues	2,445	2,379	2,389	2,541	2,592
Option liabilities	2,060	1,000	900	5,331	—
Deferred gain on sale of assets	—	—	—	—	5,650
Long-term deferred rent	168	473	741	573	80
Long-term obligations, less current portion	5,044	237	1,159	1,558	1,128
Total stockholders' equity (deficit)	$ (7,717)	$ (9,400)	$ (10,813)	$ (6,229)	$ 12,833

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 a 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, 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 future impact and ongoing appeal with respect to the '231 patent litigation, the "Liquidity and Capital Resources" section of this report, including our 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, unforeseen 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 our filings with the Securities and Exchange Commission and under the "Risk Factors" section in Part I above.

We encourage you to read our Risk Factors descriptions 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.

Liquidity

We incurred losses of $30,036,000, $28,672,000 and $25,447,000 for the years ended December 31, 2008, 2007, and 2006 respectively. We have an accumulated deficit of $162,168,000 as of December 31, 2008. Additionally, we have used net cash of $33,389,000, $29,995,000 and $16,483,000 to fund our operating activities for years ended December 31, 2008, 2007, and 2006, respectively. To date these operating losses have been funded primarily from outside sources of invested capital.

During 2008, we initiated our commercialization activities while simultaneously pursuing available financing sources to support operations and growth. We have had, and continue to have, an ongoing need to raise additional cash from outside sources to fund our operations. However, our ability to raise capital has been adversely affected by current credit conditions and the downturn in the financial markets and the global economy. Accordingly, the combination of these facts raises substantial doubt as to the Company's ability to continue as a going concern. The accompanying consolidated financial statements and financial statement schedule have been prepared assuming that the Company will continue as a going concern. If we are unsuccessful in our efforts to raise outside capital in the near term, we will be required to significantly reduce our research, development, and administrative operations, including reduction of our employee base, in order to offset the lack of available funding.

We are pursuing financing opportunities in both the private and public debt and equity markets as well as through strategic corporate partnerships. We have an established history of raising capital through these platforms, and we are currently involved in negotiations with multiple parties. Our efforts in 2008 to raise capital have taken longer than we initially anticipated. We were however, successful in August 2008, and 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. In October 2008, we entered into a secured Loan Agreement with General Electric Capital Corporation and Silicon Valley Bank ("Lenders") to borrow up to $15,000,000. An initial term loan of $7,500,000, less fees and expenses, was funded on

October 14, 2008. We could not access the remaining $7,500,000 under this facility as we were not able to meet certain financial prerequisites that had been established by the Lenders.

We expect to continue to utilize our cash and cash equivalents to fund operations through at least the next few months, subject to minimum cash and cash liquidity requirements of the Loan and Security Agreement with the Lenders, which requires that we maintain at least three months of cash on hand to avoid an event of default under the Loan and Security Agreement. We continue to seek additional cash through product revenues, strategic collaborations, and future sales of equity or debt securities. Although there can be no assurance given, we hope to successfully complete one or more additional financing transactions and corporate partnerships in the near-term. Without this additional capital, current working capital and cash generated from sales and containment of operating costs will not provide adequate funding for research, sales and marketing efforts, clinical and preclinical trials, and product development activities at their current levels. If such efforts are not successful, we will need to significantly reduce or curtail our research and development and other operations and this could negatively affect our ability to achieve corporate growth goals. Specifically, we have prepared an operating plan (plan) that calls for us to reduce operations to focus almost entirely on the supply of current products to existing or new distribution channels. This plan would result in reductions to our current sales and marketing headcount (total headcount was 17 at December 31, 2008) as well as a reduction in manufacturing headcount (total headcount of 20 at December 31, 2008). In addition, as part of the plan, there would be minimal expenditures for ongoing scientific research, product development or clinical research. This impacts research and development headcount (total headcount was 57 at December 31, 2008), external subcontractor expenditures, capital outlay and general and administrative expenditures related to the supervision of such activities. In parallel, we would significantly reduce administrative staff (the general and administrative headcount was 32 at December 31, 2008) and salaries consistent with the overall reduction in scope of operations. In aggregate, such reductions could result in eliminations of roles for the majority of the Company's current staff and the deferral or elimination of all ongoing development projects until such time that cash resources were available from operations or outside sources to re-establish development and growth plans. Management is currently reviewing contractual obligations related to the pre-clinical and clinical commitments along with minimum purchase requirements to include deferral of such commitments as part of this plan. While management is actively pursuing its near term financial and strategic alternatives it is also, in parallel, continuing to evaluate the timing of implementation of the alternative operating plan and the initiation of the identified reductions. Based on the impact of the reductions described above and a full year impact of other actions taken by management in Q3 and Q4 of 2008, the cash operating requirements in the near term would be reduced to a range of $1.0 to $1.2 million per month.

Overview

Cytori Therapeutics, Inc. manufactures, develops, and internationally commercializes innovative medical technologies, which allow physicians to practice regenerative medicine. The Company's main product is the Celution® System, which is the first and only broadly available device that provides clinical grade autologous stem and regenerative cells in real-time. This device processes a patient's own stem and regenerative cells at the bedside so their cells may be redelivered during the same surgical procedure. Our commercialization model is based on the sale of the Celution® System and generating recurring revenue thereafter from the sale of single-use consumables used in every patient procedure and on sales of related instrumentation and ancillary products.

Commercial activities are currently focused on marketing the Celution® cell processing system and related family of products across three areas. The first is cosmetic and reconstructive surgery in Europe and Asia-Pacific. The second is to fulfill the demand among physicians in Europe and Asia Pacific for access to clinical grade stem and regenerative cells. The third is to market the Celution-based StemSource® Cell Bank worldwide to hospitals and tissue banks so they can in turn offer patients the opportunity to cyropreserve their own adipose-derive stem and regenerative cells.

The more therapeutic applications that are developed for the Celution® System and its cellular output, the more opportunities we will have to offer the Celution® System and related consumable sets to hospitals, clinics, and physicians. For this reason, we are developing and allowing others to develop additional applications for the Celution® System, which include cardiovascular disease, for which two human clinical trials are underway, renal failure, orthopedic damage, gastrointestinal disorders, and pelvic health conditions, among others.

In the first quarter of 2008, we launched the first commercial generation Celution® System product platform. Throughout the year and into 2009, we broadened our commercialization efforts and expanded our network of distribution partners. This included the opening of a sales and training center in Europe designed to educate physicians on the technology and its benefits, as well as promote sales within the region. To support future sales efforts, we initiated a 70 patient post-marketing study in Europe last year, with the goal of expanding claims and seeking reimbursement for the use of the

Celution® System in post-partial mastectomy defect reconstruction. Final results from this study are expected to be reported in 2010.

In partnership with Olympus Corporation, we made significant progress during 2008 toward finalizing the second commercial generation Celution System. Currently, we manufacture the first commercial generation Celution® System and consumables at our corporate headquarters and provide all servicing for the device through our regional offices.

Also during 2008, we were granted several U.S. and International patents and patent allowances, which cover various aspects of the Celution® System technology and applications of the Celution® System output. These developments further protect our proprietary rights and competitive position. Lastly, during 2008 we continued enrollment of our European cardiovascular disease clinical trials, which represent our most advanced product pipeline application. Enrollment for both studies should be completed in 2009 with results available as early as 2010.

Our strategy for the future, in this current financial environment with a new product that has multiple potential applications, is to focus the majority of our financial resources on activities that will promote immediate sales of the Celution System. In Europe and Asia Pacific, this entails continued investment in the RESTORE II study to support reimbursement and includes maintaining our level of investment into sales and marketing activities. In the United States, we are continuing to seek regulatory and marketing approval of the Celution® 700 System family of products. We expect to finalize our U.S. regulatory and clinical development strategy in 2009.

The market for clinical grade cells requires substantially fewer resources as the majority of the commercialization efforts are assumed by our distribution partners. This allows us to further expand the installed-base of Celution® Systems. We expect the breadth of these applications for which the device is used in this market will grow significantly as physicians continue to adopt cell based regenerative medicine into their treatment strategies based on the availability of safe clinical grade cells at the point of care.

The StemSource Cell Bank business is being offered through our commercialization partner Green Hospital Supply in Japan, Korea, Taiwan and Thailand, and is being offered by GE Healthcare in select European countries. We believe growth in the cell bank business in 2009 within Asia Pacific will be driven by hospitals where a device is already installed as part of an investigator-initiated study, and where physicians are already familiar with the use of the system and its benefits. The commercialization activities are performed predominantly by our distributors, however we continue to serve in a consulting capacity to assist as needed in sales and service.

Coinciding with our increased investment in commercial activities is a planned reduction in preclinical research and cardiovascular disease development expenses. Because we have passed the feasibility stage and are now manufacturing commercial products, we have less reliance going forward on basic and preclinical development activities. Preclinical research will continue at a base level required to fulfill demands for potential partnerships, expanding intellectual property, and supporting commercial activities. For cardiovascular disease, we plan to complete enrollment in these studies, report data in late 2009 and/or early 2010 at which point we will either seek a co-development partner or pursue further development in a measured way until such time as we have the adequate financial resources to invest in pivotal European studies and U.S. clinical trials.

Cytori's business objectives for 2009 and beyond include the following:

- Exceed global Celution® System and StemSource sales target of $10 million in 2009
- Expand global distribution network in Europe and Asia-Pacific and related sales impact
- Expand Celution® System product claims to include general and plastic surgery procedures
- Expand Celution® System reimbursement in Europe
- Substantial reduction in total operating expenses
- Complete enrollment of RESTORE II in the second quarter of 2009
- Report preliminary RESTORE II results as early as the fourth quarter of 2009 on patients who have been followed for six months at the time of analysis
- Introduce complementary cosmetic and reconstructive surgery products in the U.S. in the third quarter of 2009
- Finalize U.S. regulatory and clinical development and regulatory strategy
- Complete enrollment in cardiovascular studies (PRECISE & APOLLO) and report results in 2010

Olympus Partnership

On November 4, 2005, we entered into a strategic development and manufacturing joint venture agreement and other related agreements ("JV Agreements") with Olympus Corporation ("Olympus"). As part of the terms of the JV Agreements, we formed a joint venture, Olympus-Cytori, Inc. (the "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.

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, 2008 and 2007, the fair value of the Put was $2,060,000 and $1,000,000, respectively. Fluctuations in the Put value are recorded in the 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 on the balance sheet in the caption option liability.

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

	December 31, 2008	December 31, 2007	November 4, 2005
Expected volatility of Cytori	68.00%	60.00%	63.20%
Expected volatility of the Joint Venture	68.00%	60.00%	69.10%
Bankruptcy recovery rate for Cytori	21.00%	21.00%	21.00%
Bankruptcy threshold for Cytori	$ 16,740,000	$ 9,324,000	$ 10,780,000
Probability of a change of control event for Cytori	2.80%	2.17%	3.04%
Expected correlation between fair values of Cytori and the Joint Venture in the future	99.00%	99.00%	99.00%
Risk free interest rate	2.25%	4.04%	4.66%

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

The Joint Venture currently has exclusive access to our technology for the development, manufacture, and supply of the devices (second generation and beyond) for all therapeutic applications. Once a later generation Celution® System is developed and approved by regulatory agencies, the Joint Venture would sell such systems exclusively to us at a formula-based transfer price; we have retained marketing rights to the second generation 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. The Royalty Agreement allows for the sale of the Cytori-developed Celution® System platform, including the Celution® 800/CRS and Celution® 900/MB, 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.

We account for our investment in the Joint Venture under the equity method of accounting.

Other Related Party Transactions

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 stem and 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. As part of this agreement, Olympus could 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. 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.

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.

MacroPore Biosurgery

Spine and orthopedic products

By selling substantially all of our spine and orthopedic surgical implant business to Kensey Nash Corporation in the second quarter of 2007, we have completed our transition away from the bioresorbable product line for which we were originally founded.

Thin Film Japan Distribution Agreement

In 2004, we sold the majority of our Thin Film business to MAST Biosurgery AG. We retained all rights to Thin Film business in Japan (subject to a purchase option of MAST, which expired in May 2007), and we received back from MAST a license of all rights to Thin Film technologies in the spinal field, exclusive at least until 2012, and the field of regenerative medicine, non-exclusive on a perpetual basis.

In the third quarter of 2004, we entered into a Distribution Agreement with Senko Medical Trading Company. Under this agreement, we granted to Senko an exclusive license to sell and distribute certain Thin Film products 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. The Distribution Agreement with Senko commences upon "commercialization." Commercialization will occur when one or more Thin Film product registrations are completed with the Japanese Ministry of Health, Labour and Welfare, or MHLW. 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.

We received a $1,500,000 upfront license fee from Senko. We have recorded the $1,500,000 received as a component of deferred revenues in the accompanying consolidated condensed balance sheet. 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.

Under the Distribution Agreement, we will also be entitled to earn additional payments from Senko based on achieving defined milestones. On September 28, 2004, we notified Senko of completion of the initial regulatory application to the MHLW for the Thin Film product. As a result, we became entitled to a nonrefundable payment of $1,250,000, which we received in October 2004 and recorded as a component of deferred revenues. We did not recognize any development

revenues with respect to Senko during the year ended December 31, 2008. To date we have recognized a total of $371,000 in development revenues ($10,000, $152,000, $51,000, and $158,000 for the years ended December 31, 2007, 2006, 2005, and 2004, respectively) related to this agreement.

Capital Requirements and Liquidity

Research and development for the Celution® System product platform and clinical applications of adipose-derived stem and regenerative cell therapies has been and will continue to be very costly. As a result, we expect to continue incurring losses in the near future. We will focus our efforts on substantially reducing research and development expenses, pre-clinical research, and general and administrative activities throughout 2009 as we conclude our clinical trials (initiated in 2007) and complete the transition to a focus on manufacturing and sale of our Celution® 800/CRS for reconstructive surgery.

Over 99% of our 2008 research and development expenses of $17,371,000 were related to our regenerative cell technology business, and the majority of those were related to optimizing the Celution® 800/CRS for reconstructive surgery research and development of cardiovascular disease applications. We believe research and development expenses will be substantially reduced in 2009 (See additional discussion of liquidity at the beginning of Management Discussion and Analysis). We plan to fund this anticipated research and development from: existing cash and short-term investments; payments, if any, related to potential Celution® System platform commercialization partnerships; payments, if any, related to potential biomaterial divestitures; potential research grants; and sale of common stock through potential future financings. (See additional discussion regarding Liquidity at the beginning of Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations.)

As of December 31, 2008, we had cash and cash equivalents on hand of $12,611,000 and an accumulated deficit of $162,168,000.

Results of Operations

Product revenues

Product revenues in 2008 relate to our regenerative cell technology segment and consisted of revenues from our Celution® System products and Celution® StemSource® Cell Bank. Product revenues in 2007 and 2006 relate to our MacroPore Biosurgery segment and consisted of revenues from our spine and orthopedic products.

The following table summarizes the components for the years ended December 31, 2008, 2007, and 2006:

	Years ended		
	2008	2007	2006
Regenerative cell technology:			
Celution® Products			
Related party	$ 28,000	$ —	$ —
Third party	4,500,000	—	—
MacroPore Biosurgery:			
Spine and orthopedic products	—	$ 792,000	$ 1,451,000
Total product revenues	$ 4,528,000	$ 792,000	$ 1,451,000
% attributable to Medtronic	—	100%	100%
% attributable to Olympus	0.6%	—	—

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. Assuming all other applicable revenue recognition criteria have been met, revenue for these product sales will be 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. 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 of the fair value of 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. As of December 31, 2008 we had $66,000 of shipped product orders that did not reach final destination until 2009. Revenue for these items is expected to be

recognized in the quarter ending March 31, 2009. Additionally, we deferred $67,000 as an estimate of the fair value of future deliverables from product revenue and will recognize when such deliverables have been provided or earned.

Spine and orthopedic product revenues represent sales of bioresorbable implants used in spine and orthopedic surgical procedures. We sold substantially all of this line of business to Kensey Nash in May 2007.

The future: We expect to continue to generate regenerative cell technology product revenues during 2009 from Celution® 800/CRS and consumable sales in Europe and we expect to generate product revenues from StemSource® Cell Bank sales in Japan through our distribution partner Green Hospital Supply, Inc. We expect to have product revenues related to our MacroPore Biosurgery segment again when commercialization of the Thin Film products in Japan occurs and we begin Thin Film shipments to Senko, pending regulatory approval.

Cost of product revenues

Cost of product revenues for 2008 relates to sales of Celution® System products and a StemSource® Cell Bank in our regenerative cell technology segment and includes material, manufacturing labor, and overhead costs. Cost of product revenues for 2007 and 2006 relates to spine and orthopedic products in our MacroPore Biosurgery segment and includes material, manufacturing labor, overhead costs, and an inventory provision, if applicable. The following table summarizes the components of our cost of revenues for the years ended December 31, 2008, 2007 and 2006:

	Years ended		
	2008	2007	2006
Regenerative cell technology:			
Cost of product revenues	$ 1,811,000	$ —	$ —
Share-based compensation	43,000	—	—
Total regenerative cell technology	1,854,000	—	—
MacroPore Biosurgery:			
Cost of product revenues	—	403,000	1,472,000
Share-based compensation	—	—	88,000
Share-based compensation	—	19,000	74,000
Total MacroPore Biosurgery	—	—	—
		422,000	1,634,000
Total cost of product revenues	$ 1,854,000	$ 422,000	$ 1,634,000
Total cost of product revenues as % of product revenues	40.9%	53.3 %	112.6 %

Regenerative cell technology:

- The increase in cost of product revenues for the year ended December 31, 2008 as compared to the same periods in 2007 and 2006 was due to Celution® System product sales which commenced in 2008. Cost of sales included an economic benefit of approximately $347,000 related to material cost and labor/overhead previously expensed as research and development prior to commercialization date of March 1, 2008 that was sold during the year ended December 31, 2008. Cost of product revenues as a percentage of product revenues was 40.9% for the year ended December 31, 2008.

- Cost of product revenues included approximately $43,000 of share-based compensation expense for the year ended December 31, 2008. There was no share-based compensation expense for the years ended December 31, 2007 and 2006. For further details, see share-based compensation discussion below.

MacroPore Biosurgery:

- The decrease in cost of product revenues for the year ended December 31, 2008 as compared to the same period in 2007 was due to our sale of substantially all of the spine and orthopedic product line in May 2007. The decrease in cost of product revenues for the year ended December 31, 2007 as compared to the same period in 2006 was due to a decrease in production and sales in anticipation of the product line sale in May 2007.

- Cost of product revenues includes approximately $0, $19,000 and $74,000 of stock-based compensation expense for the years ended December 31, 2008, 2007 and 2006, respectively. For further details, see stock-based compensation discussion below.

- During the years ended December 31, 2008, 2007 and 2006, we recorded a provision of $0, $0, and $88,000, respectively, related to excess and slow-moving inventory. In 2006, this inventory was produced in anticipation of stocking orders from Medtronic which did not materialize.

The future. We expect to see a nominal decrease of gross profit margin for the regenerative cell technology segment as the balance of production inventory on hand that was previously expensed as research and development cost decreases. We expect to incur costs related to our MacroPore products if and when commercialization is achieved for our Japan Thin Film product line.

Development revenues

The following table summarizes the components of our development revenues for the years ended December 31, 2008, 2007, and 2006:

	Years ended		
	2008	2007	2006
Regenerative cell technology:			
Milestone revenue (Olympus)	$ 774,000	$ 5,158,000	$ 5,905,000
Other revenue (Olympus)	1,500,000	—	—
Research grant (NIH)	—	—	310,000
Regenerative cell storage services	4,000	4,000	7,000
Other	47,000	85,000	102,000
Total regenerative cell technology	2,325,000	5,247,000	6,324,000
MacroPore Biosurgery:			
Development (Senko)	—	10,000	152,000
Total development revenues	$ 2,325,000	$ 5,257,000	$ 6,476,000

Regenerative cell technology:

- 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, 2008, we recognized $774,000 of revenue associated with our arrangements with Olympus. The revenue recognized in 2008 was a result of completing two study milestones in the first quarter.

  Additionally, we recognized $1,500,000 of other development revenue that relates to the agreement we entered into on February 23, 2006, in which we granted Olympus an exclusive right to negotiate a commercialization collaboration for the use of adipose stem and 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. As part of this agreement, Olympus could 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. Accordingly, on December 31, 2008, we recognized $1,500,000 as other development revenue and reduced our deferred, related party balance for the same amount.

  During the year ended December 31, 2007, we recognized $5,158,000 of revenue associated with our arrangements with Olympus. The revenue recognized in 2007 was a result of completing a pre-clinical study milestone in the second quarter and completing a development milestone in the third quarter. During the year ended December 31, 2006, we recognized $5,905,000 of revenue associated with our arrangements with Olympus. The revenue recognized in 2006 was a result of completing a pre-clinical study milestone in the first quarter, receiving a CE mark for the Celution® 600 System, and reaching three additional milestones in the fourth quarter. One milestone related to the completion of a pre-clinical study while the other two were results of product development efforts.

- 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-Derived Cell Therapy for Myocardial Infarction. 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-Derived Cell Therapy for Myocardial Infarction, and (iii) file appropriate forms and follow appropriate protocols established by the NIH.

  During the year ended December 31, 2006, we incurred $479,000 in expenditures, of which $310,000 were qualified. We recognized a total of $310,000 in revenues for the year ended December 31, 2006, which included allowable grant fees as well as cost reimbursements. Our work under this NIH agreement was completed in 2006; as a result, there were no comparable revenues or costs in 2008 and 2007.

MacroPore Biosurgery (Thin Film):

Under a Distribution Agreement with Senko we are entitled to earn payments based on achieving the following defined milestones:

- Upon notifying Senko of completion of the initial regulatory application to the MHLW for the Thin Film product, we were entitled to a nonrefundable payment of $1,250,000. We so notified Senko on September 28, 2004, received payment in October of 2004, and recorded deferred revenues of $1,250,000. As of December 31, 2006, of the amount deferred, we have recognized development revenues of $371,000 ($10,000 in 2007, $152,000 in 2006, $209,000 prior to 2006).

- In addition, we also received a $1,500,000 license fee that was recorded as a component of deferred revenues in the accompanying balance sheet. Because the $1,500,000 in license fees is potentially refundable, such amounts will not be recognized as revenues until the refund rights expire. Specifically, 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 are also entitled to a non-refundable payment of $250,000 once we achieve commercialization.

The future: We expect to recognize additional development revenues from our regenerative cell technology segment during 2009, as the anticipated completion for the next phase of our Joint Venture and other Olympus product development performance obligations is in 2009. If we are successful in achieving certain milestone points related to these activities, we may recognize approximately $1,200,000 in revenues in 2009. The exact timing of 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. The cash for these contributions and obligations was received when the agreement was signed and no further related cash payments will be made to us.

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.

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, 2008, 2007 and 2006:

	Years ended		
	2008	2007	2006
Regenerative cell technology:			
Regenerative cell technology	$ 14,319,000	$ 12,889,000	$ 11,967,000
Development milestone (Joint Venture)	2,546,000	6,293,000	7,286,000
Research grants (NIH)	—	—	479,000
Stock-based compensation	501,000	645,000	1,015,000
Total regenerative cell technology	17,366,000	19,827,000	20,747,000
MacroPore Biosurgery:			
Bioresorbable polymer implants	—	111,000	1,027,000
Development milestone (Senko)	—	80,000	178,000
Thin Film related research	5,000	—	—
Stock-based compensation	—	2,000	25,000
Total MacroPore Biosurgery	5,000	193,000	1,230,000
Total research and development expenses	$ 17,371,000	$ 20,020,000	$ 21,977,000

Regenerative cell technology:

- Regenerative cell technology 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 our 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. Labor-related expenses, not including share-based compensation, decreased by $1,494,000 for the year ended December 31, 2008 as compared to the same period in 2007 primarily due to the decrease in headcount for our research and development department as a result of achievement of commercialization and transfer of employees from research and development to the manufacturing department. Professional services expense increased by $310,000 from 2007 to 2008, primarily due to increased use of consultants and temporary labor during the year ended December 31, 2008. Pre-clinical and clinical study expense decreased by $1,023,000 from 2007 to 2008 primarily due to a reduction in pre-clinical study activity as we focus on our clinical studies. Additionally, although the overall cost of a clinical trial is generally higher than for a preclinical study, such costs are typically spread out over a longer period of time. Expenses for supplies increased by $352,000 from 2007 to 2008, primarily due to timing of use of inventory supplies for research purposes and purchases of production supplies prior to the related product line commercialization.

- Professional services expense (including pre-clinical and clinical study costs) decreased by $1,163,000 from 2006 to 2007, of which $422,000 was attributed to a decrease in pre-clinical and clinical study expense primarily due to a transition in focus from pre-clinical studies to clinical studies. Rent and utilities expense decreased by $316,000 from 2006 to 2007 primarily due the termination of leases at our Top Gun location in San Diego, CA. These decreases were offset by an increase in travel expense of $389,000 and an increase in repair and maintenance expense of $382,000 from 2006 to 2007.

- 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® device. 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. For the years ended December 31, 2008, 2007 and 2006, costs associated with the development of the device were $2,546,000, $6,293,000 and $7,286,000, respectively. These expenses were comprised of $1,310,000, $3,217,000 and $3,663,000 in labor and related benefits, $706,000, $1,973,000 and $2,405,000 in consulting and other professional services, $111,000, $567,000 and $872,000 in supplies and $419,000, $536,000 and $346,000 in other miscellaneous expense, respectively.

- In 2004, we entered into an agreement with the NIH to reimburse us for up to $950,000 (Phase I $100,000 and Phase II $850,000) in "qualifying expenditures" related to research on Adipose-Derived Cell Therapy for Myocardial Infarction. For the year ended December 31, 2006, we incurred $479,000 of direct expenses relating entirely to Phase I and II. Of these expenses, $169,000 were not reimbursed in 2006. To date, we have incurred $1,125,000 of direct expenses ($180,000 of which were not reimbursed) relating to both Phases I and II of the agreement. There were no comparable expenditures in 2008 and 2007 as our work under this NIH agreement was completed during 2006.

- Stock-based compensation for the regenerative cell technology segment of research and development was $501,000, $645,000 and $1,015,000 for the years ended December 31, 2008, 2007 and 2006, respectively. See stock-based compensation discussion below for more details.

MacroPore Biosurgery:

- Our bioresorbable surgical implants platform technology is used for development of spine and orthopedic products and Thin Film products. Research and development expenses for bioresorbable polymer implants substantially decreased in 2007 and were essentially ceased by 2008, due to the termination of spine and orthopedics product research upon sale of substantially all of this product line in May 2007.

- Under a distribution agreement with Senko, we are responsible for the completion of the initial regulatory application to the MHLW and commercialization of the Thin Film product line in Japan. Commercialization occurs when one or more Thin Film product registrations are completed with the MHLW. During the years ended December 31, 2007 and 2006, we incurred $80,000 and $178,000, respectively, of expenses related to this regulatory and registration process. We did not incur any expenses related to this regulatory and registration process for the year ended December 31, 2008.

- Share-based compensation for the MacroPore Biosurgery segment of research and development for the years ended December 31, 2007 and 2006 was $2,000 and $25,000, respectively. There were no share-based compensation expenses for the MacroPore Biosurgery segment of research and development for the year ended December 31, 2008. See share-based compensation discussion below for more details.

The future: Our strategy is to substantially reduce our research and development expenditures in 2009 and we anticipate expenditures in this area to be well below the expenditures in 2008 as we shift our focus toward manufacturing and sales. (See additional discussion regarding Liquidity at the beginning of Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations.)

Sales and marketing expenses

Sales and marketing expenses include costs of marketing personnel, tradeshows, physician training, and promotional activities and materials. Before the sale of our spine and orthopedic implant product line in May 2007, Medtronic was responsible for the distribution, marketing, and sales support of our spine and orthopedic devices. The following table summarizes the components of our sales and marketing expenses for the years ended December 31, 2008, 2007 and 2006:

	Years ended		
	2008	2007	2006
Regenerative cell technology:			
International sales and marketing	$ 4,065,000	$ 2,231,000	$ 1,271,000
Stock-based compensation	361,000	265,000	517,000
Total regenerative cell technology	4,426,000	2,496,000	1,788,000
MacroPore Biosurgery:			
General corporate marketing	—	21,000	154,000
International sales and marketing	176,000	156,000	104,000
Stock-based compensation	—	—	9,000
Total MacroPore Biosurgery	176,000	177,000	267,000
Total sales and marketing	$ 4,602,000	$ 2,673,000	$ 2,055,000

Regenerative Cell Technology:

- The increase in international sales and marketing expense for the year ended December 31, 2008 as compared to the same period in 2007 was mainly attributed to the increase in salary and related benefits expense of $974,000, not including share-based compensation, an increase in travel related expenses of $321,000, and an increase in printing, supplies, and postage of $155,000, which are due to our emphasis in seeking strategic alliances and/or co-development partners for our regenerative cell technology as well as sales and marketing efforts related to our commercialization activities.

  The increase in international sales and marketing expense for the year ended December 31, 2007 as compared to same period in 2006 was mainly attributed to the increase in salary and related benefits expense of $409,000, as well as other increases due to our regenerative cell technology strategy.

- Stock-based compensation for the regenerative cell segment of sales and marketing for the year ended December 31, 2008, 2007 and 2006 was $361,000, $265,000 and $517,000, respectively. See stock-based compensation discussion below for more details.

MacroPore Biosurgery:

- General corporate marketing expenditures relate to expenditures for maintaining our corporate image and reputation within the research and surgical communities relevant to bioresorbable implants. Expenditures in this area declined to $0 in 2008 from $21,000 in 2007 and $154,000 in 2006 as we focused on our regenerative cell technology business and shifted our focus from our spine and orthopedic implant business.

- International sales and marketing expenditures relate to costs associated with developing an international bioresorbable Thin Film distributor and supporting a bioresorbable Thin Film sales office in Japan.

- Stock-based compensation for the MacroPore Biosurgery segment of sales and marketing for the years ended December 31, 2006 was $9,000. There was no stock-based compensation for the MacroPore Biosurgery segment of sales and marketing for the years ended December 31, 2008 and 2007. See stock-based compensation discussion below for more details.

The future. We expect sales and marketing expenditures related to the regenerative cell technology to be maintained at or near current levels as we continue to expand our base of distribution partners, strategic alliances and co-development partners, as well as market our Celution® System and StemSource® Cell Bank. (See additional discussion regarding Liquidity at the beginning of Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations.)

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, 2008, 2007, and 2006:

	Years ended		
	2008	**2007**	**2006**
General and administrative	$ 10,375,000	$ 12,805,000	$ 10,967,000
Stock-based compensation	1,352,000	1,379,000	1,580,000
Total general and administrative expenses	$ 11,727,000	$ 14,184,000	$ 12,547,000

- General and administrative expense, for the year ended December 31, 2008 as compared to the same period in 2007 decreased by $2,457,000. An overall decrease in general and administrative expenses (excluding share-based compensation) occurred primarily from a decrease in legal fees related to the '231 Patent (see below) of $1,793,000 and decrease in salary and related benefit expense, excluding share-based compensation) of $729,000 for the year ended December 31, 2008 as compared to the same periods in 2007.

- General and administrative expense, for the year ended December 31, 2007 as compared to the same period in 2006 increased by $1,637,000. This was primarily a result of increases in salary and related benefit expense of $802,000 and increases in professional services of $1,160,000, offset by a decrease in stock-based compensation of $201,000 for the year ended December 31, 2007 as compared with 2006. The increase in salary and related benefit expense was mainly attributed to an increase in headcount. The increase in professional services was mainly attributed to an increase of $266,000 in consulting services, increases in accounting fees of $196,000, and an increase in legal expenses of $863,000, partly incurred in connection with the 231 Patent (see below), offset by a decrease in other professional services of $165,000. In addition, we incurred a non-recurring fee of $322,000 related to our February 2007 sale of common stock.

- We have incurred substantial legal expenses in connection with the University of Pittsburgh's lawsuit. Although we are not litigants and are not responsible for any settlement costs, if we are not successful in overturning the Court's decision on the '231 Patent, our license rights to the '231 Patent will be lost. Since our current products and products under development do not practice the '231 Patent, our primary ongoing business activities and product development pipeline should not be affected by the Court's decision. Although the '231 Patent is unrelated to our current products and product pipeline, we believe that the '231 Patent and/or the other technology licensed from UC may have long term potential to be useful for future product developments, and so we have elected to support UC's legal efforts in the appeal of the Court's final order. The amended license agreement we signed with UC in the third quarter of 2006 clarified that we are responsible for patent prosecution and litigation costs related to this lawsuit. In the years ended December 31, 2008, 2007 and 2006, we expensed $625,000, $2,418,000 and $2,189,000, respectively, for legal fees related to this license. Our legal expenses related to this lawsuit and the appeal will fluctuate depending upon the activity incurred during each period.

- Stock-based compensation related to general and administrative expense for the years ended December 31, 2007, 2006 and 2005 was $1,352,000, $1,379,000 and $1,580,000, respectively. See stock-based compensation discussion below for more details.

The future. We expect general and administrative expenses to be further reduced in 2009 compared to the prior three years as we are seeking ways to minimize these expenses where possible. (See additional discussion regarding Liquidity at the beginning of Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations.)

Stock-based compensation expenses

As noted previously, we adopted SFAS 123R on January 1, 2006.

Stock-based compensation expenses include charges related to options issued to employees, directors and non-employees. Prior to January 1, 2006, the stock-based compensation expenditures connected to options granted to employees and directors (in their capacity as board members) is the difference between the exercise price of the stock based awards and the market value of our underlying common stock on the date of the grant. Unearned employee stock-based compensation is amortized over the remaining vesting periods of the options, which generally vest over a four-year period from the date of grant. From January 1, 2006 onwards, we adopted FASB No. 123 (revised 2004), "Share-based payments." Under this pronouncement, 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.

Stock-based compensation expense related to options to purchase common stock issued to non-employees is the fair value of the stock on the date of issuance, even if such stock contains sales restrictions. The following table summarizes the components of our stock-based compensation for the years ended December 31, 2008, 2007 and 2006:

	Years ended		
	2008	2007	2006
Regenerative cell technology:			
Cost of product revenues	$ 43,000	$ —	$ —
Research and development related	501,000	645,000	1,015,000
Sales and marketing related	361,000	265,000	517,000
Total regenerative cell technology	905,000	910,000	1,532,000
MacroPore Biosurgery:			
Cost of product revenues	—	19,000	74,000
Research and development related	—	2,000	25,000
Sales and marketing related	—	—	9,000
Total MacroPore Biosurgery	—	21,000	108,000
General and administrative related	1,352,000	1,379,000	1,580,000
Total stock-based compensation	$ 2,257,000	$ 2,310,000	$ 3,220,000

Regenerative cell technology:

- Of the $910,000 charge to stock-based compensation for the year ended December 31, 2007, $6,000 related to award modifications for the termination of the employment of our Vice President of Research, Regenerative Cell Technology. The charge reflects the incremental fair value of (a) the accelerated unvested stock options and (b) the extended vested stock options (over the fair value of the original awards at the modification date). There will be no further charges related these modifications.

- In the first quarter of 2006, we issued 2,500 shares of restricted common stock to a non-employee scientific advisor. 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 $18,000 recorded in the first quarter of 2006 constitutes the entire expense related to this grant, and no future period charges will be reported. The scientific advisor also receives cash consideration as services are performed.

General and Administrative:

- During the first quarter of 2008, we issued to our officers and directors stock options to purchase up to 450,000 shares of our common stock, with a four-year graded vesting schedule for our officers and two-year graded vesting for our directors. The grant date fair value of option awards granted to our officers and directors was $2.73 per share. The resulting share-based compensation expense of $1,230,000, net of estimated forfeitures, will be recognized as expense over the respective service periods.

- During the first quarter of 2007, we issued to our officers and directors stock options to purchase up to 410,000 shares of our common stock, with a four-year vesting schedule for our officers and 24-month graded vesting for our directors. The grant date fair value of option awards granted to our officers and directors was $3.82 and $3.70 per share, respectively. The resulting share-based compensation expense of $1,480,000, net of estimated forfeitures, will be recognized as expense over the respective vesting periods.

- Of the $1,379,000 charge to stock-based compensation for the year ended December 31, 2007, $58,000 related to award modifications for the termination of the employment of two employees. The charge reflects the incremental fair value of (a) the accelerated unvested stock options and (b) the extended vested stock options (over the fair value of the original awards at the modification date). There will be no further charges related these modifications.

During the second quarter of 2007, we made company-wide stock option grants to our non-executive employees to purchase 213,778 shares of our common stock, subject to a four-year graded vesting schedule. The grant date fair value for the awards was $3.65 per share. The resulting share-based compensation expense of $739,000, net of estimated forfeitures, will be recognized as expense over the respective vesting periods.

Of the $3,220,000 charge to stock-based compensation for the year ended December 31, 2006, $420,000 related to extensions and cancellations of awards previously granted to (a) our former Senior Vice President of Finance and Administration, who retired in May 2006, and (b) (i) our former Senior Vice President, Business Development, (ii) our former Vice President, Marketing and Development, and (iii) the position of a less senior employee, whose positions were eliminated during 2006. The charge reflects the incremental fair value of the extended vested stock options over the fair value of the original awards at the modification date as well as the acceleration of unrecognized compensation cost associated with cancelled option awards that would have been recognized if the four individuals continued to vest in their options until the end of their employment term. There will be no further charges related to these modifications.

The future. We will continue to grant options (which will result in an expense) to our employees 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, 2008, the total compensation cost related to non-vested stock options not yet recognized for all our plans is approximately $3,494,000. These costs are expected to be recognized over a weighted average period of 1.67 years.

Change in fair value of option liabilities

The following is a table summarizing the change in fair value of option liabilities for the years ended December 31, 2008, 2007 and 2006:

	Years ended		
	2008	2007	2006
Change in fair value of option liability ..	$ —	$ —	$ (3,731,000)
Change in fair value of put option liability	1,060,000	100,000	(700,000)
Total change in fair value of option liabilities.....	$ 1,060,000	$ 100,000	$ (4,431,000)

- We granted Olympus an option to acquire 2,200,000 shares of our common stock in 2005. The exercise price of the option shares was $10 per share. We had accounted for this grant as a liability because had the option been exercised, we would have been required to deliver listed shares of our common stock to settle the option shares. In accordance with EITF 00-19, "Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock," the fair value of this option was re-measured at the end of each quarter, using the Black-Scholes option pricing model, with the movement in fair value reported in the statement of operations as a change in fair value of option liabilities. This option expired unexercised on December 31, 2006.

- 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 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 us at the higher of (a) $22,000,000 or (b) the Put's fair value. The value of 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:

	December 31, 2008	December 31, 2007	December 31, 2006
Expected volatility of Cytori	68.00%	60.00%	66.00%
Expected volatility of the Joint Venture	68.00%	60.00%	56.60%
Bankruptcy recovery rate for Cytori	21.00%	21.00%	21.00%
Bankruptcy threshold for Cytori	$ 16,740,000	$ 9,324,000	$ 10,110,000
Probability of a change of control event for Cytori	2.80%	2.17%	1.94%
Expected correlation between fair values of Cytori and the Joint Venture in the future	99.00%	99.00%	99.00%
Risk free interest rate	2.25%	4.04%	4.71%

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.

Other income (expense)

Gain on sale of assets was $1,858,000 for the year ended December 31, 2007. There was no gain on sale of assets for the years ended December 31, 2008 and 2006.

In May 2007, we sold to Kensey Nash our intellectual property rights and tangible assets related to our spine and orthopedic bioresorbable implant product line, a part of our MacroPore Biosurgery business. Excluded from the sale was our Japan Thin Film product line. We received $3,175,000 in cash related to the disposition. The assets comprising the spine and orthopedic product line transferred to Kensey Nash were as follows:

	Carrying Value Prior to Disposition
Inventory	$ 94,000
Other current assets	17,000
Assets held for sale	436,000
Goodwill	465,000
	$ 1,012,000

We incurred expenses of $109,000 in connection with the sale during the second quarter of 2007. As part of the disposition agreement, we were required to provide training to Kensey Nash representatives in all aspects of the manufacturing process related to the transferred spine and orthopedic product line, and to act in the capacity of a product manufacturer from the point of sale through August 2007. Because of these additional manufacturing requirements, we deferred $196,000 of the gain related to the outstanding manufacturing requirements, and we recognized $1,858,000 as a gain on sale in the statement of operations during the second quarter of 2007. These manufacturing requirements were completed in August 2007 as planned, and the associated costs were classified against the deferred balance, reducing it to zero. No further costs or adjustments relating to this product line sale are anticipated.

The revenues and expenses related to the spine and orthopedic product line transferred to Kensey Nash for the years ended December 31, 2007 and 2006 were as follows:

	For the years ended December 31,	
	2007	2006
Revenues	$ 792,000	$ 1,451,000
Cost of product revenues	(422,000)	(1,634,000)
Research & development	(113,000)	(1,052,000)
Sales & marketing	(21,000)	(163,000)

The future. No additional gains will be recognized related to either sale.

Financing items

The following table summarizes interest income, interest expense, and other income and expenses for the years ended December 31, 2008, 2007 and 2006:

	Years ended		
	2008	2007	2006
Interest income	$ 230,000	$ 1,028,000	$ 708,000
Interest expense	(420,000)	(155,000)	(199,000)
Other income (expense)	(40,000)	(46,000)	(27,000)
Total	$ (230,000)	$ 827,000	$ 482,000

- Interest income decreased for the year December 31, 2008 as compared to the same period in 2007 due to a decrease in interest rates and cash balance available for investment. Interest income increased in 2007 as compared to 2006 due to a larger balance of funds available for investment, as a result of (i) the sale of common stock and common stock warrants under the shelf registration statement in February 2007, (ii) proceeds from the common stock private placement to Green Hospital Supply, Inc. in April 2007, and (iii) proceeds from the sale of our bioresorbable spine and orthopedic surgical implant product line to Kensey Nash in May 2007.

- Interest expense increased in 2008 as compared to 2007 due to interest incurred as well as non-cash amortization of debt issuance costs and debt discount associated with a new term loan. In October 2008, we entered into a secured Loan Agreement with General Electric Capital Corporation and Silicon Valley Bank ("Lenders") to borrow up to $15,000,000. An initial term loan of $7,500,000, less fees and expenses, funded on October 14, 2008. Interest expense decreased in 2007 as compared to 2006 due to the lower principal balances on our long-term equipment-financed borrowings, which were fully repaid in 2008.

- The changes in other income (expense) in 2008, 2007 and 2006 resulted primarily from changes in foreign currency exchange rates.

The future. Interest income earned in 2009 will be dependent on our levels of funds available for investment as well as general economic conditions. We expect interest expense to increase in 2009 as we continue to repay the term loan balance.

Equity loss from investment in Joint Venture

The following table summarizes equity loss from investment in joint venture for the years ended December 31, 2008, 2007 and 2006:

	Years ended		
	2008	2007	2006
Equity loss from investment in joint venture	$ (45,000)	$ (7,000)	$ (74,000)

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 two to three 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 other 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, 2008, 2007 and 2006:

	Years ended		
	2008	2007	2006
Cash and cash equivalents	$ 12,611,000	$ 11,465,000	$ 8,902,000
Short-term investments, available for sale	—	—	3,976,000
Total cash and cash equivalents and short-term investments, available for sale	$ 12,611,000	$ 11,465,000	$ 12,878,000
Current assets	$ 17,225,000	$ 12,238,000	$ 13,978,000
Current liabilities	7,135,000	8,070,000	6,586,000
Working capital	$ 10,090,000	$ 4,168,000	$ 7,392,000

In order to continue the operations of our regenerative cell business at or near current levels, we will need to raise additional capital in the very near term.

During 2008, we initiated our commercialization activities while simultaneously pursuing available financing sources to support operations and growth. We have had, and continue to have, an ongoing need to raise additional cash from outside sources to fund our operations. However, our ability to raise capital has been adversely affected by current credit conditions and the downturn in the financial markets and the global economy. Accordingly, the combination of these facts raises substantial doubt as to the Company's ability to continue as a going concern. The accompanying consolidated financial statements and financial statement schedule have been prepared assuming that the Company will continue as a going concern. If we are unsuccessful in our efforts to raise outside capital in the near term, we will be required to significantly reduce our research, development, and administrative operations, including reduction of our employee base, in order to offset the lack of available funding.

We are pursuing financing opportunities in both the private and public debt and equity markets as well as through strategic corporate partnerships. We have an established history of raising capital through these platforms, and we are currently involved in negotiations with multiple parties. Our efforts in 2008 to raise capital have taken longer than we initially anticipated. However, in August 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. In October 2008, we entered into a secured Loan agreement with General Electric Capital Corporation and Silicon Valley Bank ("Lenders") to borrow up to $15,000,000. An initial term loan of $7,500,000, less fees and expenses, was funded on October 14, 2008. We could not access the remaining $7,500,000 under this facility as we were not able to meet certain financial prerequisites that had been established by the Lenders.

We expect to continue to utilize our cash and cash equivalents to fund operations through at least the next few months, subject to minimum cash and cash liquidity requirements of the Loan and Security Agreement with the Lenders, which requires that we maintain at least three months of cash on hand to avoid an event of default under the Loan and Security Agreement. We continue to seek additional cash through product revenues, strategic collaborations, and future sales of equity or debt securities. Although there can be no assurance given, we hope to successfully complete one or more additional financing transactions and corporate partnerships in the near-term. Without this additional capital, current working capital and cash generated from sales and containment of operating costs will not provide adequate funding for research, sales and marketing efforts, clinical and preclinical trials, and product development activities at their current levels. If such efforts are not successful, we will need to significantly reduce or curtail our research and development and other operations and this could negatively affect our ability to achieve corporate growth goals. Specifically, we have prepared an operating plan (plan) that calls for us to reduce operations to focus almost entirely on the supply of current products to existing or new distribution channels. This plan would result in reductions to our current sales and marketing headcount (total headcount was 17 at December 31, 2008) as well as a reduction in manufacturing headcount (total headcount of 20 at December 31, 2008). In addition, as part of this plan, there would be minimal expenditures for ongoing scientific research, product development or clinical research. This impacts research and development headcount (total headcount was 57 at December 31, 2008), external

subcontractor expenditures, capital outlay and general and administrative expenditures related to the supervision of such activities. In parallel, we would significantly reduce administrative staff (the general and administrative headcount was 32 at December 31, 2008) and salaries consistent with the overall reduction in scope of operations. In aggregate, such reductions could result in eliminations of roles for the majority of the Company's current staff and the deferral or elimination of all ongoing development projects until such time that cash resources were available from operations or outside sources to re-establish development and growth plans. Management is currently reviewing contractual obligations related to the pre-clinical and clinical commitments along with minimum purchase requirements to include deferral of such commitments as part of this plan. While management is actively pursuing its near term financial and strategic alternatives it is also, in parallel, continuing to evaluate the timing of implementation of the alternative operating plan and the initiation of the identified reductions. Based on the impact of the reductions described above contemplated by the plan and a full year impact of other actions taken by management in Q3 and Q4 of 2008, the cash operating requirements in the near term would be reduced to a range of $1.0 to $1.2 million per month.

From inception to December 31, 2008, we have financed our operations primarily by:

- Issuing stock in pre-IPO transactions, a 2000 initial public offering in Germany, and stock option exercises,
- Generating revenues,
- Selling the bioresorbable implant CMF product line in September 2002,
- Selling the bioresorbable implant Thin Film product line (except for the territory of Japan), in May 2004,
- Licensing distribution rights to Thin Film in Japan, in exchange for an upfront license fee in July 2004 and an initial development milestone payment in October 2004,
- Obtaining a modest amount of capital equipment long-term financing,
- Selling 1,100,000 shares of common stock to Olympus under an agreement which closed in May 2005,
- Receiving upfront and milestone fees from our Joint Venture with Olympus, which was entered into in November 2005,
- Receiving funds in exchange for granting Olympus an exclusive right to negotiate in February 2006,
- Receiving $16,219,000 in net proceeds from a common stock sale under the shelf registration statement in August 2006,
- Receiving $19,901,000 in net proceeds from the sale of common stock plus common stock warrants under the shelf registration statement in February 2007,
- Receiving $6,000,000 in net proceeds from a private placement to Green Hospital Supply, Inc. in April 2007, and
- Receiving gross proceeds of $3,175,000 from the sale of our bioresorbable spine and orthopedic surgical implant product line to Kensey Nash in May 2007.
- Receiving $12,000,000 in net proceeds from a private placement to Green Hospital Supply, Inc. during first half 2008.
- Receiving $17,000,000 in gross proceeds in August 2008 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.
- Obtaining a term loan of $7,500,000 from General Electric Capital Corporation and Silicon Valley Bank (Lenders) in October 2008.

In January 2006, we also received an additional $11,000,000 upon our receipt of a CE mark for the Celution® 600 and received an additional $1,500,000 in the first half of 2006 in exchange for the grant to Olympus of an exclusive right to negotiate a commercialization collaboration for the use of adipose stem and regenerative cells for a specific therapeutic area outside of cardiovascular disease.

In August 2006, we sold 2,918,000 shares of our common stock at $5.75 per share for an aggregate of approximately $16,800,000. Olympus purchased $11,000,000 of these shares and the remaining balance was purchased by certain institutional investors. We received proceeds of $16,219,000, net of related offering costs and fees.

In February 2007, we sold units consisting of 3,746,000 shares of common stock and 1,873,000 common stock warrants (with an exercise price of $6.25 per share) to institutional and accredited investors. We received proceeds of approximately $19,901,000, net of related offering costs and fees.

We received net proceeds of $6,000,000 from the sale of 1,000,000 shares of common stock to Green Hospital Supply, Inc. in a private placement in April 2007.

In May 2007, we successfully divested substantially all of our spine and orthopedic product line to Kensey Nash for gross proceeds of $3,175,000.

On February 8, 2008, we agreed to sell 2,000,000 shares of unregistered common stock to Green Hospital Supply, Inc., a related party, 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. As of December 31, 2008, Green Hospital Supply, Inc. holds approximately 10.2% of our issued and outstanding shares.

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.

On October 14, 2008, General Electric Capital Corporation and Silicon Valley Bank (together, the "Lenders") funded a term loan in the amount of $7,500,000 less fees and expenses. In connection with the loan facility, on October 14, 2008, we issued to each Lender a warrant to purchase up to 89,074 shares of our common stock at an exercise price of $4.21 per share. These warrants are immediately exercisable and will expire on October 14, 2018.

Our cash requirements for 2009 and beyond will depend on numerous factors, including our successful restructuring of our operating plan and business strategies as described above. Under our previous operating plan, we would have expected to incur research and development expenses at high levels in our regenerative cell platform for an extended period of time. Under the new plan, we will seek to reduce these expenditures as much as possible.

The following summarizes our contractual obligations and other commitments at December 31, 2008, and the effect such obligations could have on our liquidity and cash flow in future periods (see additional discussion regarding Liquidity at the beginning of Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations):

	Payments due by period				
Contractual Obligations	**Total**	**Less than 1 year**	**1 – 3 years**	**3 – 5 years**	**More than 5 years**
Long-term obligations	$ 7,914,000	$ 2,047,000	$ 5,847,000	$ 20,000	$ —
Interest commitment on long-term obligations	1,376,000	741,000	628,000	7,000	—
Operating lease obligations	2,746,000	1,754,000	899,000	85,000	8,000
Minimum purchase requirements	2,125,000	850,000	1,275,000	—	—
Pre-clinical research study obligations	563,000	563,000	—	—	—
Clinical research study obligations	5,839,000	4,000,000	1,839,000	—	—
Total	$ 20,563,000	$ 9,955,000	$ 10,488,000	$ 112,000	$ 8,000

Net cash (used in) provided by operating, investing and financing activities for the years ended December 31, 2008, 2007 and 2006, is summarized as follows:

	Years Ended		
	2008	2007	2006
Net cash used in operating activities	$ (33,389,000)	$ (29,995,000)	$ (16,483,000)
Net cash provided by (used in) investing activities	(393,000)	5,982,000	591,000
Net cash provided by financing activities	34,928,000	26,576,000	16,787,000

Operating activities

Net cash used in operating activities for all periods presented resulted primarily from expenditures related to our regenerative cell research and development efforts.

Research and development efforts, other operational activities, and a comparatively small amount of product sales generated a $30,036,000 net loss for the year ended December 31, 2008. The cash impact of this loss was $33,389,000, after adjusting for the $774,000 of deferred revenue, related party, recognized in 2008, for which cash was received in earlier years, $1,533,000 of depreciation and amortization, a $1,060,000 change in the value of our put option, $2,257,000 non-cash stock based compensation expense, and $178,000 of 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.

Research and development efforts, other operational activities, and a comparatively small amount of product sales generated a $28,672,000 net loss for the year ended December 31, 2007. The cash impact of this loss was $29,995,000, after adjusting for the $5,158,000 of deferred revenue, related party, recognized in 2007, for which cash was received in earlier years, $1,858,000 of gain on sale of assets, $1,616,000 of depreciation and $2,310,000 non-cash stock based compensation expense, along with other changes in working capital due to timing of product shipments (accounts receivable) and payment of liabilities.

Research and development efforts, other operational activities, and a comparatively small amount of product sales generated a $25,447,000 net loss for the year ended December 31, 2006. The cash impact of this loss was $16,483,000, after adjusting for the $11,000,000 cash we received in 2006 from the Joint Venture upon obtaining the CE Mark in the first quarter of 2006, the $1,500,000 received from Olympus mentioned above, $2,120,000 of non-cash depreciation and amortization, $3,220,000 non-cash stock based compensation expense, and $4,431,000 non-cash change in the fair value of option liabilities, along with other changes in working capital due to timing of product shipments and payment of liabilities.

Investing activities

Net cash used by investing activities for the year ended December 31, 2008 resulted primarily from purchases of property and equipment.

Net cash provided by investing activities for the year ended December 31, 2007 resulted primarily from net proceeds from the purchase and sale of short-term investments and proceeds from the sale of assets, offset in part by purchases of property and equipment.

Net cash provided by investing activities for the year ended December 31, 2006 resulted primarily from net proceeds from the purchase and sale of short-term investments, offset in part by expenditures for leasehold improvements.

Capital spending is essential to our product innovation initiatives and to maintain our operational capabilities. For the years ended December 31, 2008, 2007 and 2006, we used cash to purchase $393,000, $563,000 and $3,138,000, respectively, of property and equipment to support manufacturing of our bioresorbable implants and for the research and development of the regenerative cell technology platform. The increase in 2006 capital spending was caused primarily by expenditures for leasehold improvements made to our new facilities.

Financing Activities

The net cash provided by financing activities for the year ended December 31, 2008 related mainly to the private issuance of 2,000,000 shares of unregistered common stock to Green Hospital Supply, Inc. for $12,000,000 and the private

placement offering 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 for approximately $17,000,000 in gross proceeds, of which Olympus Corporation acquired 1,000,000 unregistered shares and 500,000 common stock warrants in exchange for $6,000,000 of the total proceeds raised. Additionally, in October 2008, we obtained a term loan in the amount of $7,500,000, less fees and expenses, from General Electric Capital Corporation and Silicon Valley Bank (together, the "Lenders").

The net cash provided by financing activities for the year ended December 31, 2007 related mainly to the issuance of common stock and common stock warrants under the shelf registration statement in exchange for net proceeds of $19,901,000 as well as a common stock private placement made with Green Hospital Supply, Inc. for net proceeds of $6,000,000. Net cash proceeds provided by financing activities also included proceeds from the exercise of employee stock options, offset to some extent by principal payments on long-term obligations.

The net cash provided by financing activities for the year ended December 31, 2006 related mainly to the issuance of 2,918,255 shares of our common stock in exchange for $16,219,000, net of related expenses. Net cash provided by financing activities also included proceeds from the exercise of employee stock options, offset by principal payments on long-term obligations.

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.

Revenue Recognition

We derive our revenue from a number of different sources, including but not limited to:

- Fees for achieving certain defined milestones under research and/or development arrangements.
- Product sales, and
- Payments under license or distribution agreements.

A number of our revenue generating arrangements are relatively simple in nature, meaning that there is little judgment necessary with regard to the timing of when we recognize revenues or how such revenues are presented in the financial statements.

However, we have also entered into more complex arrangements, including but not limited to our contracts with Olympus, Senko, and the NIH. Moreover, some of our non-recurring transactions, such as our disposition of the majority of our Thin Film business to MAST, contain elements that relate to our revenue producing activities.

As a result, some of our most critical accounting judgments relate to the identification, timing, and presentation of revenue related activities. These critical judgments are as follows:

Multiple-element arrangements

Some of our revenue generating arrangements contains a number of distinct revenue streams, known as "elements." For example, our Distribution Agreement with Senko contains direct or indirect future revenue streams related to:

- A distribution license fee (which was paid at the outset of the arrangement),
- Milestone payments for achieving commercialization of the Thin Film product line in Japan,

- Training for representatives of Senko,
- Sales of Thin Film products to Senko, and
- Royalty payments on future product sales made by Senko to its end customers.

Emerging Issues Task Force Issue 00-21, "Revenue Arrangements with Multiple Deliverables" ("EITF 00-21"), governs whether each of the above elements in the arrangement should be accounted for individually, or whether the entire contract should be treated as a single unit of accounting.

EITF 00-21 indicates that individual elements may be separately accounted for only when:

- The delivered element has stand alone value to the customer,
- There is objective evidence of the fair value of the remaining undelivered elements, and
- If the arrangement contains a general right of return related to any products delivered, delivery of the remaining goods and services is probable and within the complete control of the seller.

In the case of the Senko Distribution Agreement, we determined that (a) the milestones payments for achieving commercialization and (b) the future sale of Thin Film products to Senko were "separable" elements. That is, each of these elements, upon delivery, will have stand alone value to Senko and there will be objective evidence of the fair value of any remaining undelivered elements at that time. The arrangement does not contain any general right of return, and so this point is not relevant to our analysis.

On the other hand, we concluded that (a) the upfront distribution license fee, (b) the revenues from training for representatives of Senko, and (c) the payments in the form of royalties on future product sales are not separable elements under EITF 00-21.

In arriving at our conclusions, we had to consider whether our customer, Senko, would receive stand alone value from each delivered element. We also, in some cases, had to support the fair value of certain undelivered elements. Finally, we had to make assumptions about how the non-separable elements of the arrangement are earned, particularly the estimated period over which Senko will benefit from the arrangement (refer to the "Recognition" discussion below for further background).

We also agreed to perform elements under the November 4, 2005 agreements we signed with Olympus, including:

- Granting the Joint Venture (which Olympus is considered to control) an exclusive and perpetual manufacturing license to our device technology, including the Celution® System platform and certain related intellectual property; and
- Completing certain pre-clinical and clinical studies, assisting with product development and seeking regulatory approval and/or clearances toward commercialization of the Celution® System platform.

We concluded that the license and development services must be accounted for as a single unit of accounting. In reaching this conclusion, we determined that the license would not have stand alone value to the Joint Venture. This is because Cytori is the only party that could be reasonably expected to perform certain development contributions and obligations, including product development assistance, certain agreed regulatory filings and generally associated pre-clinical and clinical studies necessary for the Joint Venture to derive value from the license.

Recognition

Besides determining whether to account separately for components of a multiple-element arrangement, we also use judgment in determining the appropriate accounting period in which to recognize revenues that we believe (a) have been earned and (b) are realizable. The following describes some of the recognition issues we have considered during the reporting period.

- Product Revenues
    - 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 arrangement. Revenue for these product sales will be recognized upon delivery to the customer, as all risks and rewards of ownership have been substantively transferred to the customer at that point. For Celution® 800/CRS System 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, in accordance with Emerging Issues Task Force (EITF) Issue No. 00-10, "Accounting for Shipping and Handling Fees and Costs" ("EITF 00-10"). Delivery occurs when goods are shipped and title of risk of loss transfer to the customer, in accordance with the terms specified in the arrangement with the customer. 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 product.

      For those sales that include multiple deliverables, we allocate revenue based on the relative fair values of the individual components as determined in accordance with EITF 00-21. When more than one element such as product maintenance or technical support services are included in an arrangement, we allocate revenue between the elements based on each element's relative fair value, provided that each element meets 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 items. Fair value is generally determined based upon the price charged when the element is sold separately. In the absence of fair value for a delivered element, we allocate revenue first to the fair value of the undelivered elements and allocate the residual revenue to the delivered elements. Deferred service revenue is recognized ratably over the period the services are provided. In the absence of fair value for an undelivered element, the arrangement is 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.

      An allowance for doubtful accounts is maintained for estimated losses resulting from the inability of our customers to make required payments. This reserve is determined by analyzing specific customer accounts and applying historical loss rates to the aging of remaining accounts receivable balances. If the financial condition of our customer were to deteriorate, resulting in tehir inability to pay their accounts when due, additional reserves might be required.

      Before the disposal of substantially all of our bioresorbable spine and orthopedic product line in May 2007, we sold our (non-Thin Film) MacroPore Biosurgery products to Medtronic, Inc., a related party. We recognized revenue on product sales to Medtronic upon shipment of ordered products to Medtronic, as title and risk of loss were transferred at that point. In May 2007, we sold to Kensey Nash our intellectual property rights and tangible assets related to our bioresorbable spine and orthopedic product line.

- Upfront License Fees/Milestones
    - As part of the Senko Distribution Agreement, we received an upfront license fee upon execution of the arrangement, which, as noted previously, was not separable under EITF 00-21. Accordingly, the license has been combined with the development (milestones) element to form a single accounting unit. This single element of $3,000,000 in fees includes $1,500,000 which is potentially refundable. We have recognized, and will continue to recognize, the non-contingent fees allocated to this combined element as revenues as we complete each of the performance obligations associated with the milestones component of this combined deliverable. Note that the timing of when we have recognized revenues to date does not

correspond with the cash we received upon achieving certain milestones. For example, the first such milestone payment for $1,250,000 became payable to us when we filed a commercialization application with the Japanese regulatory authorities. However, we determined that the payment received was not commensurate with the level of effort expended, particularly when compared with other steps we believe are necessary to commercialize the Thin Film product line in Japan. Accordingly, we did not recognize the entire $1,250,000 received as revenues, but instead all but $371,000 of this amount is classified as deferred revenues. Approximately $371,000 ($10,000 in 2007, $152,000 in 2006, $51,000 in 2005 and $158,000 in 2004) has been recognized to date as development revenues based on our estimates of the level of effort expended for completed milestones as compared with the total level of effort we expect to incur under the arrangement to successfully achieve regulatory approval of the Thin Film product line in Japan. These estimates were subject to judgment and there may be changes to these estimates as we continue to seek regulatory approval. In fact there can be no assurance that commercialization in Japan will ever be achieved, as we have yet to receive approval from the MHLW for the Thin Film product.

- We also received upfront fees as part of the Olympus arrangements (although, unlike in the Senko agreement, these fees were non-refundable). Specifically, in exchange for an upfront fee, we granted the Joint Venture an exclusive, perpetual license to certain of our intellectual property and agreed to perform additional development activities. This upfront fee has been recorded in the liability account entitled deferred revenues, related party, on our consolidated balance sheet. Similar to the Senko agreement, we expect to recognize revenues from the combined license/development accounting unit as we perform our obligations under the agreements, as this represents our final obligation underlying the combined accounting unit. Specifically, we have recognized revenues from the license/development accounting unit using a "proportional performance" methodology, resulting in the de-recognition of amounts recorded in the deferred revenues, related party, account as we complete various milestones underlying the development services. 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. Revenue will be recognized as the above mentioned R&D milestones are completed. We established the R&D milestones based upon our development obligations to the JV and the specific R&D support activities to be performed to achieve these obligations. Our R&D milestones consist of the following primary performance categories: product development, regulatory approvals, and generally associated pre-clinical and clinical trials. Within each category are milestones that take substantive effort to complete and are critical pieces of the overall progress towards completion of the next generation product, which we are obligated to support within the agreements entered into with Olympus. To determine whether substantive effort was required to achieve the milestones, we considered the external costs, required personnel and relevant skill levels, the amount of time required to complete each milestone, and the interdependent relationships between the milestones, in that the benefits associated with the completion of one milestone generally support and contribute to the achievement of the next. Determination of the relative values assigned to each milestone involved substantial judgment. The assignment process was based on discussions with persons responsible for the development process and the relative costs of completing each milestone. We considered the costs of completing the milestones in allocating the portion of the "deferred revenues, related party" account balance to each milestone. Management believes that, while the costs incurred in achieving the various milestones are subject to estimation, due to the high correlation of such costs to outputs achieved, the use of external contract research organization ("CRO") costs and internal labor costs as the basis for the allocation process provides management the ability to accurately and reasonably estimate such costs. The accounting policy described above could result in revenues being recorded in an earlier accounting period than had other judgments or assumptions been made by us.

- Government Grants

  - We are at times eligible to receive grants from the NIH related to various research activities. Revenues derived from reimbursement of direct out-of-pocket expenses for research costs associated with grants are recorded in compliance with EITF Issue No. 99-19, "Reporting Revenue Gross as a Principal Versus Net as an Agent", and EITF Issue No. 01-14, "Income Statement Characterization of Reimbursements Received for "Out-of-Pocket" Expenses Incurred". In accordance with the criteria established by these EITF Issues,

the Company records grant revenue for the gross amount of the reimbursement. The costs associated with these reimbursements are reflected as a component of research and development expense in the consolidated statements of operations. Additionally, research arrangements we have with NIH, as well commercial enterprises such as Olympus and Senko, are considered a key component of our central and ongoing operations. Moreover, the government obtains rights under the arrangement, in the same manner (but perhaps not to the same extent) as a commercial customer that similarly contracts with us to perform research activities. For instance, the government and any authorized third parties may use our federally funded research and/or inventions without payment of royalties to us. Accordingly, the inflows from such arrangements are presented as revenues in the consolidated statements of operations.

Our policy was to recognize revenues under the NIH grant arrangement as the lesser of (i) qualifying costs incurred (and not previously recognized), plus our allowable grant fees for which we are entitled to funding or (ii) the amount determined by comparing the outputs generated to date versus the total outputs expected to be achieved under the research arrangement.

Goodwill Impairment Testing

In late 2002, we purchased StemSource, Inc. and recognized over $4,600,000 in goodwill associated with the acquisition, of which $3,922,000 remains on our balance sheet as of December 31, 2008. As required by Statement of Financial Accounting Standard No. 142, "Goodwill and Other Intangible Assets" ("SFAS 142"), we must test this goodwill at least annually for impairment as well as when an event occurs or circumstances change such that it is reasonably possible that impairment may exist. Moreover, this testing must be performed at a level of the organization known as the reporting unit. A reporting unit is at least the same level as a company's operating segments, and sometimes even one level lower. Our two reporting units are the same as our two operating segments.

Specifically, the process for testing goodwill for impairment under SFAS 142 involves the following steps:

- Company assets and liabilities, including goodwill, are allocated to each reporting unit for purposes of completing the goodwill impairment test.
- The carrying value of each reporting unit – that is, the sum of all of the net assets allocated to the reporting unit – is then compared to its fair value.
- If the fair value of the reporting unit is lower than its carrying amount, goodwill may be impaired – additional testing is required.

The application of the goodwill impairment test involves a substantial amount of judgment. For instance, SFAS 142 requires that assets and liabilities be assigned to a reporting unit if both of the following criteria are met:

- The asset will be employed in or the liability relates to the operations of a reporting unit.
- The asset or liability will be considered in determining the fair value of the reporting unit.

We developed mechanisms to assign company-wide assets like shared property and equipment, as well as company-wide obligations such as borrowings under our GE loan facility, to our two reporting units. In some cases, certain assets were not allocable to either reporting unit and were left unassigned.

In 2007, all goodwill that previously had been assigned to our MacroPore Biosurgery reporting unit was derecognized as a result of our sale of our spine and orthopedic product line to Kensey Nash. Accordingly, there was no need to test this component of our business for goodwill impairment in 2008 and 2007.

Also, in 2008, we completed our goodwill impairment testing for our regenerative cell technology reporting unit using an income-based approach incorporating discounted projections of estimated future cash flows as well as a market-based approach. We concluded that the fair value of this unit exceeded its carrying value, and that none of our reported goodwill was impaired.

Again, the manner in which we assigned assets, liabilities, and goodwill to our reporting units, as well as how we determined the fair value of such reporting units, involves significant uncertainties and estimates. The judgments employed may have an effect on whether a goodwill impairment loss is recognized.

Variable Interest Entity (Olympus-Cytori Joint Venture)

FASB Interpretation No. 46 (revised 2003), "Consolidation of Variable Interest Entities - An Interpretation of ARB No. 51" ("FIN 46R") requires a variable interest entity ("VIE") to be consolidated by its primary beneficiary. Evaluating whether an entity is a VIE and determining its primary beneficiary involves significant judgment.

We concluded that the Olympus-Cytori Joint Venture was a VIE based on the following factors:

- Under FIN 46R, an entity is a VIE if it has insufficient equity to finance its activities. We recognized that the initial cash contributed to the Joint Venture formed by Olympus and Cytori ($30,000,000) would be completely utilized by the first quarter of 2006. Moreover, it was highly unlikely that the Joint Venture would be able to obtain the necessary financing from third party lenders without additional subordinated financial support – such as personal guarantees by one or both of the Joint Venture stockholders. Accordingly, the joint venture will require additional financial support from Olympus and Cytori to finance its ongoing operations, indicating that the Joint Venture is a VIE. In fact, we contributed $300,000 and $150,000 in the fourth quarter of 2007 and first quarter of 2006, respectively, to fund the Joint Venture's ongoing operations.

- Moreover, Olympus has a contingent put option that would, in specified circumstances, require Cytori to purchase Olympus's interests in the Joint Venture for a fixed amount of $22,000,000. Accordingly, Olympus is protected in some circumstances from absorbing all expected losses in the Joint Venture. Under FIN 46R, this means that Olympus may not be an "at-risk" equity holder, although Olympus clearly has decision rights over the operations of the Joint Venture.

Because the Joint Venture is undercapitalized, and because one of the Joint Venture's decision makers may be protected from losses, we have determined that the Joint Venture is a VIE under FIN 46R.

As noted previously, a VIE is consolidated by its primary beneficiary. The primary beneficiary is defined in FIN 46R as the entity that would absorb the majority of the VIE's expected losses or be entitled to receive the majority of the VIE's residual returns (or both).

Significant judgment was involved in determining the primary beneficiary of the Joint Venture. Under FIN 46R, we believe that Olympus and Cytori are "de facto agents" and, together, will absorb more than 50% of the Joint Venture's expected losses and residual returns. Ultimately, we concluded that Olympus, and not Cytori, was the party most closely related with the joint venture and, hence, its primary beneficiary. Our conclusion was based on the following factors:

- The business operations of the Joint Venture will be most closely aligned to those of Olympus (i.e., the manufacture of devices).

- Olympus controls the Board of Directors, as well as the day-to-day operations of the Joint Venture.

The application of FIN 46R involves substantial judgment. Had we consolidated the Joint Venture, though, there would be no effect on our net loss or shareholders' equity at December 31, 2008 or for the year then ended. However, certain balance sheet and income statement captions would have been presented in a different manner. For instance, we would not have presented a single line item entitled investment in joint venture in our balance sheet but, instead, would have performed a line by line consolidation of each of the Joint Venture's accounts into our financial statements.

Net Operating Loss and Tax Credit Carryforwards

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 $61,965,000 as of December 31, 2008 to reflect the estimated amount of deferred tax assets that may not be realized. We increased our valuation allowance by approximately $11,529,000 during the year ended December 31, 2008. 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, 2008, we had federal and state tax loss carryforwards of approximately $117,177,000 and $98,679,000 respectively. The federal and state net operating loss carryforwards begin to expire in 2019 and 2011 respectively, if unused. At December 31, 2008, we had federal and state tax credit carryforwards of approximately $3,364,000 and $3,043,000

respectively. The federal credits will begin to expire in 2017, if unused, and $160,000 of the state credits will begin to expire in 2009 if unused. The remaining state credits carry forward indefinitely. In addition, we had a foreign tax loss carryforward of $4,142,000 and $93,000 in Japan and Italy, respectively.

The Internal Revenue Code limits the future availability of net operating loss and tax credit carryforwards that arose prior to certain cumulative changes in a corporation's ownership resulting in a change of control of Cytori. Due to prior ownership changes as defined in IRC Section 382, a portion of our net operating loss and tax credit carryforwards are limited in their annual utilization. In September 1999, we experienced an ownership change for purposes of the IRC Section 382 limitation. As of December 31, 2008, these pre-change net operating losses and credits are fully available.

Additionally, in 2002 when we purchased StemSource, we acquired federal and state net operating loss carryforwards of approximately $2,700,000 and $2,700,000 respectively. This event triggered an ownership change for purposes of IRC Section 382. It is estimated that the pre-change net operating losses and credits will be fully available by 2008.

We have completed an update to our IRC Section 382 study analysis through April 17, 2007. We have not had any additional ownership changes based on this study.

Recent Accounting Pronouncements

In July 2006, FASB issued Interpretation No. 48, Accounting for Uncertainty in Income Taxes—An Interpretation of FASB Statement No. 109 ("FIN 48"). FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an entity's financial statements in accordance with FASB Statement No. 109, Accounting for Income Taxes, and prescribes a recognition threshold and measurement attributes for financial statement disclosure of tax positions taken or expected to be taken on a tax return. Under FIN 48, the impact of an uncertain income tax position on the income tax return must be recognized at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. Additionally, FIN 48 provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

On January 1, 2008, we adopted certain provisions of SFAS No. 157, "Fair Value Measurements" ("SFAS 157"). SFAS 157 provides a single definition of fair value and a common framework for measuring fair value as well as new disclosure requirements for fair value measurements used in financial statements. SFAS 157 applies to reported balances that are required or permitted to be measured at fair value under existing pronouncements; accordingly, the standard does not require any new fair value measurements of reported balances.

In February 2008, the FASB issued Staff Position "Effective Date of FASB Statement No. 157" (FSP No. 157-2), which delayed the adoption date until January 1, 2009 for non-financial assets and liabilities that are measured at fair value on a non-recurring basis, such as goodwill and identifiable intangible assets. We do not expect the adoption of the SFAS 157 for non-financial assets and liabilities to have a material impact on our consolidated financial position or results of operations.

On January 1, 2008, we also adopted SFAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities" ("SFAS 159"), which permits companies to choose to measure many financial instruments and certain other items at fair value. However, we have not elected to measure any additional financial instruments or other items at fair value under the provisions of this standard.

In March 2007, the FASB ratified the consensus reached by the Emerging Issues Task Force (EITF) on Issue No. 07-3, "Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities" ("EITF 07-3"). EITF 07-3 states that nonrefundable advance payments for future research and development activities should be deferred and capitalized. Such amounts should be recognized as an expense as the goods are delivered or the related services are performed. The guidance is effective for all periods beginning after December 15, 2007, which we adopted effective January 1, 2008. The adoption of EITF 07-3 did not have a significant effect on our consolidated financial statements.

In December 2007, the FASB issued SFAS No. 160, "Noncontrolling Interests in Consolidated Financial Statements - an Amendment of ARB No. 51" ("SFAS 160"). SFAS 160 establishes new accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. SFAS 160 is effective for annual periods beginning on or after December 15, 2008. We do not believe that the adoption of SFAS 160 will have a significant effect on our consolidated financial statements.

In December 2007, the FASB issued SFAS No. 141 (revised 2007), "Business Combinations" ("SFAS 141R"). SFAS 141R retains the fundamental requirements of Statement No. 141 to account for all business combinations using the acquisition method (formerly the purchase method) and for an acquiring entity to be identified in all business combinations. However, the new standard requires the acquiring entity in a business combination to recognize all the assets acquired and liabilities assumed in the transaction; establishes the acquisition-date fair value as the measurement objective for all assets acquired and liabilities assumed; and requires the acquirer to disclose the information they need to evaluate and understand the nature and financial effect of the business combination. SFAS 141R is effective for acquisitions made on or after the first day of annual periods beginning on or after December 15, 2008. We do not believe that the adoption of SFAS 141R will have a significant effect on our consolidated financial statements.

In December 2007, the FASB ratified the consensus reached by the Emerging Issues Task Force on EITF Issue 07-1, "Accounting for Collaborative Arrangements" ("EITF 07-1"). EITF 07-1 requires collaborators to present the results of activities for which they act as the principal on a gross basis and report any payments received from (made to) other collaborators based on other applicable GAAP or, in the absence of other applicable GAAP, based on analogy to authoritative accounting literature or a reasonable, rational, and consistently applied accounting policy election. The guidance is effective for fiscal years beginning after December 15, 2008. We are currently in the process evaluating whether the adoption of EITF 07-1 will have a significant effect on our consolidated financial statements.

In June 2008, the FASB ratified the consensus on EITF Issue No. 07-5, "Determining Whether an Instrument (or Embedded Feature) Is Indexed to an Entity's Own Stock" ("EITF 07-5"). EITF 07-5 provides a framework for evaluating the terms of a particular instrument to determine whether such instrument is considered a derivative financial instrument. EITF 07-5 is effective for financial statements issued for fiscal years beginning after December 15, 2008 and must be applied by recording a cumulative effect adjustment to the opening balance of retained earnings (or other appropriate components of equity) as of the date of adoption. We anticipate the adoption of EITF 07-5 will result is the recognition of a liability for the warrants issued in August 2008 as part of our private placement of common stock of approximately $2.9 million and a corresponding increase in stockholders' deficit as of January 1, 2009. Future changes in the fair value of the warrant liability will be recognized as a component of earnings (loss).

In October 2008, the FASB issued Staff Position "Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active" (FSP No. 157-3). FSP No. 157-3 clarifies the application of SFAS 157 in a market that is not active and provides an example to illustrate key considerations in determining the fair value of a financial asset when market for that financial asset is not active. This guidance is effective upon issuance, including prior periods for which financial statements have not been issued. The adoption of FSP No. 157-3 did not have a significant effect on our consolidated financial statements.

In April 2008, the FASB issued FASB Staff Position ("FSP") FAS 142-3, "Determination of the Useful Life of Intangible Assets." This FSP amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under FASB Statement No. 142, *Goodwill and Other Intangible Assets.* The intent of this FSP is to improve the consistency between the useful life of a recognized intangible asset under Statement 142 and the period of expected cash flows used to measure the fair value of the asset under FASB Statement No. 141R, and other U.S. generally accepted accounting principles. This FSP is effective for our interim and annual financial statements beginning after November 15, 2008. We do not expect the adoption of this FSP will have a material impact on the our financial statements.

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. Investment securities are subject to market rate risk as their fair value will fall if market interest rates increase. If market interest rates were to increase immediately and uniformly by 100 basis points from the levels prevailing at December 31, 2008, for example, and assuming average investment duration of seven months, the fair value of the portfolio would not decline by a material amount. We do not use derivative financial instruments to mitigate the risk inherent in these securities. However, we do attempt to reduce such risks by generally limiting the maturity date of such securities, diversifying our investments and limiting the amount of credit exposure with any one issuer. While we do not always have the intent, we do

currently have the ability to hold these investments until maturity and, therefore, believe that reductions in the value of such securities attributable to short-term fluctuations in interest rates would not materially affect our financial position, results of operations or cash flows. Changes in interest rates would, of course, affect the interest income we earn on our cash balances after re-investment.

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, 2008, 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.

Item 8. Financial Statements and Supplementary Data

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, 2008 and 2007, 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, 2008. 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 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, 2008 and 2007, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2008, 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.

The accompanying consolidated financial statements and financial statement schedule have been prepared assuming that the Company will continue as a going concern. As discussed in note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations and has a net capital deficiency that raise substantial doubt about its ability to continue as a going concern. The Company's research and development activities have historically required substantial capital resources and its ability to raise capital has been adversely affected by current economic conditions. Management's plans in regard to these matters are also described in note 1. The consolidated financial statements and financial statement schedule do not include any adjustments that might result from the outcome of this uncertainty.

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, 2008, 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 6, 2009, expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

San Diego, California
March 6, 2009

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, 2008, 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 U.S. 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 U.S. 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, 2008, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (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. as of December 31, 2008 and 2007, 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, 2008, and our report dated March 6, 2009, expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

San Diego, California
March 6, 2009

CYTORI THERAPEUTICS, INC.
CONSOLIDATED BALANCE SHEETS

	As of December 31, 2008	As of December 31, 2007
Assets		
Current assets:		
Cash and cash equivalents	$ 12,611,000	$ 11,465,000
Accounts receivable, net of allowance for doubtful accounts of $122,000 and $1,000 in 2008 and 2007, respectively	1,308,000	9,000
Inventories, net	2,143,000	—
Other current assets	1,163,000	764,000
Total current assets	17,225,000	12,238,000
Property and equipment, net	2,552,000	3,432,000
Investment in joint venture	324,000	369,000
Other assets	729,000	468,000
Intangibles, net	857,000	1,078,000
Goodwill	3,922,000	3,922,000
Total assets	$ 25,609,000	$ 21,507,000
Liabilities and Stockholders' Deficit		
Current liabilities:		
Accounts payable and accrued expenses	$ 5,088,000	$ 7,349,000
Current portion of long-term obligations	2,047,000	721,000
Total current liabilities	7,135,000	8,070,000
Deferred revenues, related party	16,474,000	18,748,000
Deferred revenues	2,445,000	2,379,000
Option liability	2,060,000	1,000,000
Long-term deferred rent	168,000	473,000
Long-term obligations, less current portion	5,044,000	237,000
Total liabilities	33,326,000	30,907,000
Commitments and contingencies		
Stockholders' deficit:		
Preferred stock, $0.001 par value; 5,000,000 shares authorized; -0- shares issued and outstanding in 2008 and 2007	—	—
Common stock, $0.001 par value; 95,000,000 shares authorized; 31,176,275 and 25,962,222 shares issued and 29,303,441 and 24,089,388 shares outstanding in 2008 and 2007, respectively	31,000	26,000
Additional paid-in capital	161,214,000	129,504,000
Accumulated deficit	(162,168,000)	(132,132,000)
Treasury stock, at cost	(6,794,000)	(6,794,000)
Amount due from exercises of stock options	—	(4,000)
Total stockholders' deficit	(7,717,000)	(9,400,000)
Total liabilities and stockholders' deficit	$ 25,609,000	$ 21,507,000

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

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

	For the Years Ended December 31,		
	2008	2007	2006
Product revenues:			
Related party	$ 28,000	$ 792,000	$ 1,451,000
Third party	4,500,000	—	—
	4,528,000	792,000	1,451,000
Cost of product revenues	1,854,000	422,000	1,634,000
Gross profit (loss)	2,674,000	370,000	(183,000)
Development revenues:			
Development, related party	774,000	5,158,000	5,905,000
Other, related party	1,500,000	—	—
Development	—	10,000	152,000
Research grants and other	51,000	89,000	419,000
	2,325,000	5,257,000	6,476,000
Operating expenses:			
Research and development	17,371,000	20,020,000	21,977,000
Sales and marketing	4,602,000	2,673,000	2,055,000
General and administrative	11,727,000	14,184,000	12,547,000
Change in fair value of option liabilities	1,060,000	100,000	(4,431,000)
Total operating expenses	34,760,000	36,977,000	32,148,000
Operating loss	(29,761,000)	(31,350,000)	(25,855,000)
Other income (expense):			
Gain on sale of assets	—	1,858,000	—
Interest income	230,000	1,028,000	708,000
Interest expense	(420,000)	(155,000)	(199,000)
Other expense, net	(40,000)	(46,000)	(27,000)
Equity loss from investment in joint venture	(45,000)	(7,000)	(74,000)
Total other income (loss)	(275,000)	2,678,000	408,000
Net loss	(30,036,000)	(28,672,000)	(25,447,000)
Other comprehensive income (loss) - unrealized holding income (loss)	—	(1,000)	17,000
Comprehensive loss	$ (30,036,000)	$ (28,673,000)	$ (25,430,000)
Basic and diluted net loss per common share	$ (1.12)	$ (1.25)	$ (1.53)
Basic and diluted weighted average common shares	26,882,431	22,889,250	16,603,550

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, 2008, 2007 AND 2006

	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Treasury Stock Shares	Treasury Stock Amount	Accumulated Other Comprehensive Income (Loss)	Amount due From Exercises of Stock Options	Total
Balance at December 31, 2005	18,194,283	$ 18,000	$ 82,196,000	$ (78,013,000)	2,872,834	$ (10,414,000)	$ (16,000)	$ —	$ (6,229,000)
Stock-based compensation expense	—	—	3,202,000	—	—	—	—	—	3,202,000
Issuance of common stock under stock option plan	397,205	1,000	934,000	—	—	—	—	—	935,000
Compensatory common stock awards	2,500	—	18,000	—	—	—	—	—	18,000
Sale of common stock	2,918,255	3,000	16,216,000	—	—	—	—	—	16,219,000
Stock issued for license amendment	100,000	—	487,000	—	—	—	—	—	487,000
Amount due from exercises of stock options	—	—	—	—	—	—	—	(15,000)	(15,000)
Unrealized gain on investments	—	—	—	—	—	—	17,000	—	17,000
Net loss for the year ended December 31, 2006	—	—	—	(25,447,000)	—	—	—	—	(25,447,000)
Balance at December 31, 2006	21,612,243	22,000	103,053,000	(103,460,000)	2,872,834	(10,414,000)	1,000	(15,000)	(10,813,000)
Stock-based compensation expense	—	—	2,310,000	—	—	—	—	—	2,310,000
Issuance of common stock under stock option plan	604,334	1,000	1,863,000	—	—	—	—	—	1,864,000
Sale of common stock	3,745,645	3,000	19,898,000	—	—	—	—	—	19,901,000

Sale of treasury stock	—	—	2,380,000	—	(1,000,000)	3,620,000	—	—	6,000,000
Amount due from exercises of stock options	—	—	—	—	—	—	—	11,000	11,000
Unrealized loss on investments	—	—	—	—	—	—	(1,000)	—	(1,000)
Net loss for the year ended December 31, 2007	—	—	—	(28,672,000)	—	—	—	—	(28,672,000)
Balance at December 31, 2007	25,962,222	26,000	129,504,000	(132,132,000)	1,872,834	(6,794,000)	—	(4,000)	(9,400,000)
Stock-based compensation expense	—	—	2,257,000	—	—	—	—	—	2,257,000
Issuance of common stock under stock option plan	388,536	—	790,000	—	—	—	—	—	790,000
Sale of common stock	4,825,517	5,000	28,099,000	—	—	—	—	—	28,104,000
Amount due from exercises of stock options	—	—	—	—	—	—	—	4,000	4,000
Allocation of fair value for debt warrants	—	—	564,000	—	—	—	—	—	564,000
Net loss for the year ended December 31, 2008	—	—	—	(30,036,000)	—	—	—	—	(30,036,000)
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)

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,		
	2008	2007	2006
Cash flows from operating activities:			
Net loss	$ (30,036,000)	$ (28,672,000)	$ (25,447,000)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	1,533,000	1,616,000	2,120,000
Amortization of deferred financing costs and debt discount	178,000	—	—
Inventory provision	—	70,000	88,000
Warranty provision (reversal)	(44,000)	(65,000)	(23,000)
Increase (reduction) in allowance for doubtful accounts	121,000	(1,000)	(7,000)
Change in fair value of option liabilities	1,060,000	100,000	(4,431,000)
Gain on sale of assets	—	(1,858,000)	—
Stock-based compensation	2,257,000	2,310,000	3,220,000
Stock issued for license amendment	—	—	487,000
Equity loss from investment in joint venture	45,000	7,000	74,000
Increases (decreases) in cash caused by changes in operating assets and liabilities:			
Accounts receivable	(1,420,000)	217,000	598,000
Inventories	(2,143,000)	—	6,000
Other current assets	(147,000)	(70,000)	(90,000)
Other assets	(63,000)	(40,000)	30,000
Accounts payable and accrued expenses	(2,217,000)	1,827,000	281,000
Deferred revenues, related party	(2,274,000)	(5,158,000)	6,595,000
Deferred revenues	66,000	(10,000)	(152,000)
Long-term deferred rent	(305,000)	(268,000)	168,000
Net cash used in operating activities	(33,389,000)	(29,995,000)	(16,483,000)
Cash flows from investing activities:			
Proceeds from the sale and maturity of short-term investments	5,739,000	28,007,000	67,137,000
Purchases of short-term investments	(5,739,000)	(24,032,000)	(63,258,000)
Proceeds from the sale of assets	—	3,175,000	—
Costs from sale of assets	—	(305,000)	—
Purchases of property and equipment	(393,000)	(563,000)	(3,138,000)
Investment in joint venture	—	(300,000)	(150,000)
Net cash provided by (used in) investing activities	(393,000)	5,982,000	591,000
Cash flows from financing activities:			
Principal payments on long-term obligations	(958,000)	(1,200,000)	(952,000)
Proceeds from long-term obligations	7,500,000	—	600,000
Debt issuance costs	(513,000)	—	—
Proceeds from exercise of employee stock options	795,000	1,875,000	920,000
Proceeds from sale of common stock	28,954,000	21,500,000	16,780,000
Costs from sale of common stock	(850,000)	(1,599,000)	(561,000)
Proceeds from sale of treasury stock	—	6,000,000	—
Net cash provided by financing activities	34,928,000	26,576,000	16,787,000
Net increase in cash and cash equivalents	1,146,000	2,563,000	895,000
Cash and cash equivalents at beginning of year	11,465,000	8,902,000	8,007,000
Cash and cash equivalents at end of year	$ 12,611,000	$ 11,465,000	$ 8,902,000

	For the Years Ended December 31,		
	2008	2007	2006
Supplemental disclosure of cash flows information:			
Cash paid during period for:			
Interest	$ 180,000	$ 160,000	$ 201,000
Taxes	—	2,000	1,000
Supplemental schedule of non-cash investing and financing activities:			
Fair value of warrants allocated to additional paid in capital	$ 564,000	$ —	$ —
Final payment fee of the long-term debt	375,000		
Amount due from exercise of stock options	—	4,000	15,000

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

1. Organization and Operations

The Company

Cytori Therapeutics, Inc., develops, manufactures and sells medical technologies to enable the practice of regenerative medicine. Our commercial activities are currently focused on reconstructive surgery in Europe and stem cell banking (cell preservation) in Japan and we are seeking to bring our products to market in the United States as well as other countries. Our product pipeline is developing potential new treatments for cardiovascular disease, orthopedic damage, gastrointestinal disorders, and pelvic health.

Our Thin Film product line will be marketed exclusively in Japan by Senko Medical Trading Co. ("Senko") following regulatory approval of the product in Japan.

We have two subsidiaries located in Japan and Italy.

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.

For the years ended December 31, 2007 and 2006, we recorded bioresorbable product revenue from Medtronic of $792,000 and $1,451,000, respectively, which represented 13.1% and 18.3% of total product and development revenues, respectively. We sold substantially all of our bioresorbable spine and orthopedic surgical implant product line to Kensey Nash in May 2007. There was no bioresorbable product revenue recorded in 2008.

Liquidity and Capital Availability

We incurred losses of $30,036,000, $28,672,000 and $25,447,000 for the years ended December 31, 2008, 2007, and 2006 respectively. We have an accumulated deficit of $162,168,000 as of December 31, 2008. Additionally, we have used net cash of $33,389,000, $29,995,000 and $16,483,000 to fund our operating activities for years ended December 31, 2008, 2007, and 2006, respectively. To date these operating losses have been funded primarily from outside sources of invested capital.

During 2008, we initiated our commercialization activities while simultaneously pursuing available financing sources to support operations and growth. We have had, and continue to have, an ongoing need to raise additional cash from outside sources to fund our operations. However, our ability to raise capital has been adversely affected by current credit conditions and the downturn in the financial markets and the global economy. Accordingly, the combination of these facts raises substantial doubt as to the Company's ability to continue as a going concern. The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. If we are unsuccessful in our efforts to raise outside capital in the near term, we will be required to significantly reduce our research, development, and administrative operations, including reduction of our employee base, in order to offset the lack of available funding.

We are pursuing financing opportunities in both the private and public debt and equity markets as well as through strategic corporate partnerships. We have an established history of raising capital through these platforms, and we are currently involved in negotiations with multiple parties. Our efforts in 2008 to raise capital have taken longer than we initially anticipated. In August 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. In October 2008, we entered into a secured Loan Agreement with General Electric Capital Corporation and Silicon Valley Bank ("Lenders") to borrow up to $15,000,000. An initial term loan of $7,500,000, less fees and expenses, was funded on October 14, 2008. We could not access the remaining $7,500,000 under this facility as we were not able to meet certain financial prerequisites that had been established by the Lenders.

We expect to continue to utilize our cash and cash equivalents to fund operations through at least the next few months, subject to minimum cash and cash liquidity requirements of the Loan and Security Agreement with the Lenders, which requires that we maintain at least three months of cash on hand to avoid an event of default under the Loan and Security Agreement. We continue to seek additional cash through product revenues, strategic collaborations, and future sales of equity or debt securities. Although there can be no assurance given, we hope to successfully complete one or more additional financing transactions and corporate partnerships in the near-term. Without this additional capital, current working capital and cash generated from sales and containment of operating costs will not provide adequate funding for research, sales and marketing efforts, clinical and preclinical trials, and product development activities at their current levels. If such efforts are not successful, we will need to significantly reduce or curtail our research and development and other operations and this could negatively affect our ability to achieve corporate growth goals. Specifically, we have prepared an operating plan (plan) that calls for us to reduce operations to focus almost entirely on the supply of current products to existing or new distribution channels. In addition, as part of this plan, there would be minimal expenditures for ongoing scientific research, product development or clinical research. This impacts research and development headcount, external subcontractor expenditures, capital outlay and general and administrative expenditures related to the supervision of such activities. In parallel, we would significantly reduce administrative staff and salaries consistent with the overall reduction in scope of operations. In aggregate, such reductions could result in eliminations of roles for the majority of the Company's current staff and the deferral or elimination of all ongoing development projects until such time that cash resources were available from operations or outside sources to re-establish development and growth plans. Management is currently reviewing contractual obligations related to the pre-clinical and clinical commitments along with minimum purchase requirements to include deferral of such commitments as part of this plan. While management is actively pursuing its near term financial and strategic alternatives it is also, in parallel, continuing to evaluate the timing of implementation of the alternative operating plan and the initiation of the identified reductions.

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, accounting for product line dispositions, valuing our put option arrangement with Olympus Corporation (Put option) (see notes 3 and 4), 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., valuing allowance 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 periodically, and the effects of revisions are reflected in the consolidated financial statements in the periods they are determined to be necessary.

Presentation

Certain prior period amounts have been reclassified to conform to current period presentation.

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 $11,718,000 and $10,502,000 as of December 31, 2008 and 2007, 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. We believe that the risk is not significant.

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 that maintain safety and liquidity. These guidelines are periodically reviewed and modified to take advantage of trends in yields and interest rates.

We evaluate our investments in accordance with the provisions of Statement of Financial Standards ("SFAS") No. 115, "Accounting for Certain Investments in Debt and Equity Securities." Based on our intent, our investment policies and our ability to liquidate debt securities, we classify short-term investment securities within current assets. Available-for-sale securities are carried at fair value, with unrealized gains and losses reported as accumulated other comprehensive income (loss) within stockholders' equity. The amortized cost basis of debt securities is periodically adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization is included as a component of interest income or interest expense. The amortized cost basis of securities sold is based on the specific identification method and all such realized gains and losses are recorded as a component within other income (expense). We review the carrying values of our investments and write down such investments to estimated fair value by a charge to the statements of operations when the severity and duration of a decline in the value of an investment is considered to be other than temporary. The cost of securities sold or purchased is recorded on the settlement date.

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, 2008 and 2007.

Fair Value of Financial Instruments

The carrying amounts of our cash and cash equivalents, accounts receivable, accounts payable and accrued expenses approximate their fair value due to the short-term nature of these balances. The carrying amounts of our current portion of long-term obligations and long-term obligations approximate fair value as the terms and rates of interest for these instruments approximate terms and market rates of interest currently available to us for similar instruments. Our option liability is already reported at its fair value based on established option pricing theory and assumptions (notes 3 and 4). Short-term investments are also reported at fair value in the financial statements.

Inventories

Inventories include the cost of material, labor, and overhead, and are stated at the lower of average 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.

Our inventory balance as of December 31, 2008 includes the cost of materials on hand as of December 31, 2008 that we purchased on or after March 1, 2008. March 1, 2008 is considered our commercialization date based on completion of final development activities associated with our Celution® 800/CRS System products. All materials purchased prior to the commercialization date were expensed as research and development expense during the period they were purchased, of which $78,000 (with a net book value of $0) was on hand as of December 31, 2008 to be utilized in future manufacturing.

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

In accordance with SFAS No. 144, "Accounting for Impairment or Disposal of Long-Lived Assets," 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

SFAS No. 142, "Goodwill and Other Intangible Assets," establishes financial accounting and reporting standards for acquired goodwill and other intangible assets. Under SFAS No. 142, goodwill and indefinite-lived intangible assets are not amortized but are reviewed at least annually for impairment. Separable intangible assets that have finite useful lives will continue to be amortized over their respective useful lives.

SFAS No. 142 requires that goodwill be tested for impairment on at least an annual basis or whenever events or changes in circumstances indicate that the carrying value of goodwill may not be recoverable. We completed this testing as of November 30, 2008, and concluded that no impairment existed.

In 2007, all goodwill that had been assigned to our MacroPore Biosurgery reporting unit was derecognized during our sale of substantially all of our spine and orthopedic product line to Kensey Nash (see note 5).

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, 2008 and 2007 are as follows:

	December 31, 2008		
	Regenerative Cell Technology	MacroPore Biosurgery	Total
Other intangibles, net:			
Beginning balance	$ 1,078,000	$ —	$ 1,078,000
Amortization	(221,000)	—	(221,000)
Ending balance	857,000	—	857,000
Goodwill, net:			
Beginning balance	3,922,000	—	3,922,000
Disposal of assets	—	—	—
Ending balance	3,922,000	—	3,922,000
Total goodwill and other intangibles, net	$ 4,779,000	$ —	$ 4,779,000
Cumulative amortization of other intangible assets	$ 1,359,000	$ —	$ 1,359,000

	December 31, 2007		
	Regenerative Cell Technology	MacroPore Biosurgery	Total
Other intangibles, net:			
Beginning balance	$ 1,300,000	$ —	$ 1,300,000
Amortization	(222,000)	—	(222,000)
Ending balance	1,078,000	—	1,078,000
Goodwill, net:			
Beginning balance	3,922,000	465,000	4,387,000
Disposal of assets	—	(465,000)	(465,000)
Ending balance	3,922,000	—	3,922,000
Total goodwill and other intangibles, net	$ 5,000,000	$ —	$ 5,000,000
Cumulative amortization of other intangible assets	$ 1,138,000	$ —	$ 1,138,000

As of December 31, 2008, future estimated amortization expense for these other intangible assets is expected to be as follows:

2009	222,000
2010	222,000
2011	222,000
2012	191,000
	$ 857,000

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 arrangement. Revenue for these product sales will be recognized upon delivery to the customer, as all risks and rewards of ownership have been substantively transferred to the customer at that point. For Celution® 800/CRS System 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, in accordance with Emerging Issues Task Force (EITF) Issue No. 00-10, "Accounting for Shipping and Handling Fees and Costs" ("EITF 00-10"). 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 product.

For those sales that include multiple deliverables, we allocate revenue based on the relative fair values of the individual components as determined in accordance with EITF Issue No. 00-21, "Revenue Arrangements with Multiple Deliverables" ("EITF 00-21"). When more than one element such as product maintenance or technical support services are included in an arrangement, we allocate revenue between the elements based on each element's relative fair value, provided that each element meets 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 items. Fair value is generally determined based upon the price charged when the element is sold separately. In the absence of fair value for a delivered element, we allocate revenue first to the fair value of the undelivered elements and allocate the residual revenue to the delivered elements. Deferred service revenue is recognized ratably over the period the services are provided. In the absence of fair value for an undelivered element, the arrangement is 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.

An allowance for doubtful accounts is maintained for estimated losses resulting from the inability of our customers to make required payments. This reserve is determined by analyzing specific customer accounts and applying historical loss rates to the aging of remaining accounts receivable balances. If the financial condition of our customer were to deteriorate, resulting in their inability to pay their accounts when due, additional reserves might be required.

Before the disposal of substantially all of our bioresorbable spine and orthopedic product line in May 2007, we sold our (non-Thin Film) MacroPore Biosurgery products to Medtronic, Inc. We recognized revenue on product sales to Medtronic upon shipment of ordered products to Medtronic, as title and risk of loss were transferred at that point. In May 2007, we sold to Kensey Nash our intellectual property rights and tangible assets related to our bioresorbable spine and orthopedic product line (see note 5).

License/Distribution Fees

We recognize any upfront payments received from license/distribution agreements as revenues over the period in which the customer benefits from the license/distribution agreement.

To date, we have not received any upfront license payments that are separable under EITF 00-21. Accordingly, such license revenues have been combined with other elements, such as research and development activities, for purposes of revenue recognition. For instance, we account for the license fees and milestone payments under the Distribution Agreement with Senko as a single unit of accounting. Similarly, we have attributed the upfront fees received under the arrangements with Olympus Corporation, a related party (see note 3), to a single unit of accounting comprising a license we granted to Olympus-Cytori, Inc. (the "Joint Venture"), a related party, as well as development services we agreed to perform for this entity.

In the first quarter of 2006, we granted Olympus an exclusive right to negotiate a commercialization collaboration for the use of adipose stem and regenerative cells for a specific therapeutic area outside of cardiovascular disease. In exchange for this right, we received $1,500,000 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 the third quarter of 2004, we 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 received a $1,500,000 upfront license fee from them in return for this right. We recorded the $1,500,000 received as deferred revenues in the accompanying consolidated balance sheets. 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 are currently pursuing the required regulatory clearance in order to initiate commercialization.

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 presented in compliance with EITF Issue No. 99-19, "Reporting Revenue Gross as a Principal Versus Net as an Agent," and EITF Issue No. 01-14, "Income Statement Characterization of Reimbursements Received for "Out-of-Pocket" Expenses Incurred." In accordance with the criteria established by these EITF Issues, we record grant revenue for the gross amount of the reimbursement. The costs associated with these reimbursements are reflected as a component of research and development expense in our consolidated 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 consolidated statements of operations.

We received a total of $22,000,000 from Olympus and Olympus-Cytori, Inc. during 2005 in two separate but related transactions (see note 3). Approximately $4,689,000 of this amount related to common stock that we issued, as well as two options we granted, to Olympus. Moreover, during the first quarter of 2006, we received $11,000,000 from the Joint Venture upon achieving the CE Mark on the Celution® 600. The difference between the proceeds received and the fair values of the common stock and option liability 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 (or "JV"), rather than additional equity investment in Cytori. Considering the $4,689,000 initially allocated to the common stock issued and the two options, 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 therapeutic device technology, including the Celution® System platform and certain related intellectual property, and (b) provide future development contributions related to commercializing the Celution® System platform. As noted above, the license and development services are not separable under EITF 00-21. 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. Revenue will be recognized as the above mentioned R&D milestones are completed.

We established the R&D milestones based upon our development obligations to the JV and the specific R&D support activities to be performed to achieve these obligations. Our R&D milestones consist of the following primary performance categories: product development, regulatory approvals, and generally associated pre-clinical and clinical trials. Within each category are milestones that take substantive effort to complete and are critical pieces of the overall progress towards completion of the next generation product, which we are obligated to support within the agreements entered into with Olympus.

To determine whether substantive effort was required to achieve the milestones, we considered the external costs, required personnel and relevant skill levels, the amount of time required to complete each milestone, and the interdependent relationships between the milestones, in that the benefits associated with the completion of one milestone generally support and contribute to the achievement of the next.

Determination of the relative values assigned to each milestone involved substantial judgment. The assignment process was based on discussions with persons responsible for the development process and the relative costs of completing each milestone.

We considered the costs of completing the milestones in allocating the portion of the "deferred revenues, related party" account balance to each milestone. Management believes that, while the costs incurred in achieving the various milestones are subject to estimation, due to the high correlation of such costs to outputs achieved, the use of external contract research organization costs and internal labor costs as the basis for the allocation process provides management the ability to accurately and reasonably estimate such costs.

Of the amounts received and deferred, we recognized development revenues of $774,000 and $5,158,000 in the years ended December 31, 2008 and 2007, respectively. All related development costs are expensed as incurred and are included in research and development expense on the statement of operations.

In the third quarter of 2004, we 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. We have also earned or will be entitled to earn additional payments under the Distribution Agreement based on achieving the following defined research and development milestones:

- In 2004, we received a nonrefundable payment of $1,250,000 from Senko after filing an initial regulatory application with the Japanese Ministry of Health, Labour and Welfare ("MHLW") related to the Thin Film product line. We initially recorded this payment as deferred revenues of $1,250,000.

- Upon the achievement of commercialization (i.e., regulatory approval by the MHLW), we will be entitled to an additional nonrefundable payment of $250,000.

Of the amounts received and deferred, we recognized development revenues of $10,000 and $152,000 in the years ended December 31, 2007 and 2006, respectively, representing the fair value of the completed milestones relative to the fair value of the total efforts expected to be necessary to achieve regulatory approval by the MHLW. There was no development revenue recognized during the year ended December 31, 2008. As noted above, the license and the milestone components of the Senko Distribution Agreement are accounted for as a single unit of accounting. This single element includes a $1,500,000 license fee which is potentially refundable. We have recognized, and will continue to recognize, the non-contingent fees allocated to this combined deliverable as we complete performance obligations under the Distribution Agreement with Senko. We will not recognize the potentially refundable portion of the fees until the right of refund expires. See note 6 for further details. Accordingly, we expect to recognize approximately $1,129,000 (consisting of remaining $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 commercialization is achieved. We will not recognize the potentially refundable portion of the fees ($1,500,000) until the right of refund expires.

Under our agreement with the NIH, we were reimbursed for "qualifying expenditures" related to research on adipose-derived cell therapy for myocardial infarction. 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 could accurately track and report all expenditures related solely to research on Adipose-Derived Cell Therapy for Myocardial Infarction, and (iii) file appropriate forms and follow appropriate protocols established by the NIH. When we were reimbursed for costs incurred under grant arrangements with the NIH, we recognized revenues for the lesser of:

- Qualifying costs incurred (and not previously recognized) to date, plus any allowable grant fees for which we are entitled to funding from the NIH; or

- The outputs generated to date versus the total outputs expected to be achieved under the research arrangement.

For the year ended December 31, 2006, we recognized NIH grant revenue of $310,000. Our work under this NIH agreement was completed in 2006; as a result, there were no comparable revenues or costs in 2008 and 2007.

Warranty

For the bioresorbable spine and orthopedic products, we provided a limited warranty under our agreements with our customers for products that fail to comply with product specifications. We have recorded a reserve for estimated costs we may incur under our warranty program. In May 2007, we sold to Kensey Nash our intellectual property rights and tangible assets related to our bioresorbable spine and orthopedic product line.

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 ensuring 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 to a level substantially less than "probable", and a warranty estimate is not justified at this time. Accordingly, we did not record a warranty reserve for our Celution® 800/CRS System and StemSource® Cell Bank product line during the year ended December 31, 2008.

The following summarizes the movements in our warranty obligations, which is included in accounts payable and accrued expenses, at December 31, 2008, 2007 and 2006:

	As of January 1,	Additions/ (Deductions) to expenses	Claims	As of December 31,
2008:				
Warranty obligations	$ 67,000	$ (44,000)	$ —	$ 23,000
2007:				
Warranty obligations	$ 132,000	$ (65,000)	$ —	$ 67,000
2006:				
Warranty obligations	$ 155,000	$ (23,000)	$ —	$ 132,000

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, pre-clinical and clinical studies. Included in these expenditures are salaries and benefits related to these efforts (excluding stock based compensation), which were approximately $6,189,000 in 2008.

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, 2008, 2007 and 2006, costs associated with the development of the device were $2,546,000, $6,293,000 and $7,286,000, respectively.

Our agreement with the NIH entitled us to qualifying expenditures of up to $950,000 for Phase I and Phase II related to research on Adipose-Derived Cell Therapy for Myocardial Infarction. We incurred $479,000 ($169,000 of which were not reimbursed) of direct expenses for the year ended December 31, 2006. There were no comparable expenditures in 2008 and 2007 as our work under the NIH agreement was completed during 2006.

Under a Distribution Agreement with Senko we are responsible for the completion of the initial regulatory application to the MHLW and commercialization of the Thin Film product line in Japan. During the years ended December 31, 2007 and 2006, we incurred $80,000 and $178,000, respectively, of expenses related to this regulatory and registration process. We did not incur any expenses related to this regulatory and registration process during the year ended December 31, 2008. We are currently pursuing the required regulatory clearance in order to initiate commercialization.

Deferred Financing Costs and Other Debt-Related Costs

Deferred financing costs are capitalized and amortized to interest expense over the term of its 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 in accordance with Accounting Principle Board No. 14 (APB 14), "*Accounting for Convertible Debt and Debt Issued with Stock Purchase Warrants.*" The fair value of the warrant issued to the Lenders is calculated utilizing the Black-Scholes option-pricing model. We are amortizing 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 is 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 deferred tax assets.

Stock Based Compensation

Accounting Policy

On January 1, 2006, we adopted the provisions of Financial Accounting Standards Board Statement No. 123R, "Share-Based Payment" ("SFAS 123R") using the modified prospective transition method. SFAS 123R requires us to measure all share-based payment awards granted after January 1, 2006, including those with employees, at fair value. Under SFAS 123R, the fair value of stock options and other equity-based compensation must be recognized as expense in the statements of operations over the requisite service period of each award.

In addition, beginning January 1, 2006, we have recognized compensation expense under SFAS 123R for the unvested portions of outstanding share-based awards previously granted under our (a) 2004 Equity Incentive Plan and (b) 1997 Stock Option and Stock Purchase Plan, over the periods these awards continue to vest. This compensation expense is recognized based on the fair values and attribution methods that were previously disclosed in our prior period financial statements under Financial accounting Standards Board Statement No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123").

Other Comprehensive Income (Loss)

Comprehensive income (loss) is the total of net income (loss) and all other non-owner changes in equity. Other comprehensive income (loss) refers to these revenues, expenses, gains, and losses that, under generally accepted accounting principles, are included in comprehensive income (loss) but excluded from net income (loss).

During the years ended December 31, 2007 and 2006, our only element of other comprehensive income (loss) resulted from unrealized gains (losses) on available-for-sale investments, which are reflected in the consolidated statements of stockholders' equity as accumulated other comprehensive income (loss). We did not have any comparable other comprehensive income (loss) during the year ended December 31, 2008.

Segment Information

We report our financial results based on two distinct operating segments – (a) Regenerative cell technology and (b) MacroPore Biosurgery, which manufactures bioresorbable implants.

Our regenerative cell technology segment develops, manufactures and sells medical technologies to enable the practice of regenerative medicine with an initial focus on reconstructive surgery and cell banking. Our commercialization model is based on the sale of Celution® Systems and their related harvest and delivery instrumentation, and on generating recurring revenues from single-use consumable sets utilized during each patient procedure.

Our MacroPore Biosurgery unit develops Thin Film bioresorbable implants for sale in Japan through Senko Medical Trading Company ("Senko"), which has exclusive distribution rights to these products in Japan. Also, until after the second quarter of 2007, the MacroPore Biosurgery segment manufactured and distributed the HYDROSORB™ family of spine and orthopedic implants.

We measure the success of each operating segment based on operating profits and losses and, additionally, in the case of the regenerative cell technology segment, the achievement of key research objectives. In arriving at our operating results for each segment, we use the same accounting policies as those used for our consolidated company and as described throughout this note. However, segment operating results exclude allocations of company-wide general and administrative costs and changes in fair value of our option liabilities.

During the second half of 2007, we had minimal activity in the MacroPore Biosurgery operating segment as a result of sale in May 2007 to Kensey Nash of the intellectual property rights and tangible assets related to the spine and orthopedic bioresorbable implant product line. However, due to production and sales activity in the MacroPore Biosurgery operating segment prior to the sale to Kensey Nash, we have reported two operating segments through December 31, 2008.

Prior year results presented below have been developed on the same basis as the current year amounts. For all periods presented, we did not have any intersegment transactions.

The following tables provide information regarding the performance and assets of our operating segments:

	Years ended December 31,		
	2008	2007	2006
Revenues:			
Regenerative cell technology	$ 6,853,000	$ 5,247,000	$ 6,324,000
MacroPore Biosurgery	—	802,000	1,603,000
Total revenues	$ 6,853,000	$ 6,049,000	$ 7,927,000
Segment operating income (losses):			
Regenerative cell technology	(16,793,000)	$ (17,075,000)	$ (16,211,000)
MacroPore Biosurgery	(181,000)	9,000	(1,528,000)
General and administrative expenses	(11,727,000)	(14,184,000)	(12,547,000)
Changes in fair value of option liabilities	(1,060,000)	(100,000)	4,431,000
Total operating loss	$ (29,761,000)	$ (31,350,000)	$ (25,855,000)

	As of December 31,	
	2008	2007
Assets:		
Regenerative cell technology	$13,240,000	$ 11,591,000
MacroPore Biosurgery	—	—
Corporate assets	12,369,000	9,916,000
Total assets	$ 25,609,000	$ 21,507,000

We derived our revenues from the following products, research grants, development and service activities:

	Years ended December 31,		
	2008	2007	2006
Regenerative cell technology:			
Product revenues:			
Celution® products	$ 4,528,000	$ —	$ —
Development revenues:			
Milestone revenue (Olympus)	774,000	5,158,000	5,905,000
Other (Olympus)	1,500,000	—	—
Research grant (NIH)	—	—	310,000
Regenerative cell storage services	4,000	4,000	7,000
Other	47,000	85,000	102,000
Total regenerative cell technology	6,853,000	5,247,000	6,324,000
MacroPore Biosurgery:			
Product revenues:			
Spine & orthopedic products	—	792,000	1,451,000
Development revenues	—	10,000	152,000
Total MacroPore Biosurgery	—	802,000	1,603,000
Total revenues	$ 6,853,000	$ 6,049,000	$ 7,927,000

The following table provides geographical information regarding our sales to external customers:

For the Years Ended December 31,	U.S. Revenues	Non-U.S. Revenues	Total Revenues
2008	$ 2,290,000	$ 4,563,000	$ 6,853,000
2007	$ 6,010,000	$ 39,000	$ 6,049,000
2006	$ 7,827,000	$ 100,000	$ 7,927,000

At December 31, 2008 and 2007, our long-lived assets, net of depreciation, excluding goodwill and intangibles (all of which are in the U.S.), are located in the following jurisdictions:

As of December 31,	U.S. Domiciled	Non-U.S. Domiciled	Total
2008	$ 3,197,000	$ 408,000	$ 3,605,000
2007	$ 3,932,000	$ 337,000	$ 4,269,000

Loss Per Share

We compute loss per share based on the provisions of SFAS No. 128, "Earnings Per Share." Basic per share data is computed by dividing net income or loss available 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 available 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 share equivalents that would have been outstanding if potential common shares had been issued using the treasury stock method. Potential common shares were related entirely to outstanding but unexercised option awards and warrants for all periods presented.

We have excluded all potentially dilutive securities from the calculation of diluted loss per share attributable to common stockholders for the years ended December 31, 2008, 2007 and 2006, as their inclusion would be antidilutive. Potentially dilutive common shares excluded from the calculations of diluted loss per share were 9,393,574, 7,880,098 and 5,934,029 for the years ended December 31, 2008, 2007 and 2006, respectively.

Recent Accounting Pronouncements

In July 2006, FASB issued Interpretation No. 48, Accounting for Uncertainty in Income Taxes—An Interpretation of FASB Statement No. 109 ("FIN 48"). FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an entity's financial statements in accordance with FASB Statement No. 109, Accounting for Income Taxes, and prescribes a recognition threshold and measurement attributes for financial statement disclosure of tax positions taken or expected to be taken on a tax return. Under FIN 48, the impact of an uncertain income tax position on the income tax return must be recognized at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. Additionally, FIN 48 provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

On January 1, 2008, we adopted certain provisions of SFAS No. 157, "Fair Value Measurements" ("SFAS 157"). SFAS 157 provides a single definition of fair value and a common framework for measuring fair value as well as new disclosure requirements for fair value measurements used in financial statements. SFAS 157 applies to reported balances that are required or permitted to be measured at fair value under existing pronouncements; accordingly, the standard does not require any new fair value measurements of reported balances.

In February 2008, the FASB issued Staff Position "Effective Date of FASB Statement No. 157" (FSP No. 157-2), which delayed the adoption date until January 1, 2009 for non-financial assets and liabilities that are measured at fair value on a non-recurring basis, such as goodwill and identifiable intangible assets. We do not expect the adoption of the SFAS 157 for non-financial assets and liabilities to have a material impact on our consolidated financial position or results of operations.

On January 1, 2008, we also adopted SFAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities" ("SFAS 159"), which permits companies to choose to measure many financial instruments and certain other items at fair value. However, we have not elected to measure any additional financial instruments or other items at fair value under the provisions of this standard.

In March 2007, the FASB ratified the consensus reached by the Emerging Issues Task Force (EITF) on Issue No. 07-3, "Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities" ("EITF 07-3"). EITF 07-3 states that nonrefundable advance payments for future research and development activities should be deferred and capitalized. Such amounts should be recognized as an expense as the goods are delivered or the related services are performed. The guidance is effective for all periods beginning after December 15, 2007, which we adopted effective January 1, 2008. The adoption of EITF 07-3 did not have a significant effect on our consolidated financial statements.

In December 2007, the FASB issued SFAS No. 160, "Noncontrolling Interests in Consolidated Financial Statements - An Amendment of ARB No. 51" ("SFAS 160"). SFAS 160 establishes new accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. SFAS 160 is effective for annual periods beginning on or after December 15, 2008. We do not believe that the adoption of SFAS 160 will have a significant effect on our consolidated financial statements.

In December 2007, the FASB issued SFAS No. 141 (revised 2007), "Business Combinations" ("SFAS 141R"). SFAS 141R retains the fundamental requirements of Statement No. 141 to account for all business combinations using the acquisition method (formerly the purchase method) and for an acquiring entity to be identified in all business combinations. However, the new standard requires the acquiring entity in a business combination to recognize all the assets acquired and liabilities assumed in the transaction; establishes the acquisition-date fair value as the measurement objective for all assets acquired and liabilities assumed; and requires the acquirer to disclose the information they need to evaluate and understand the nature and financial effect of the business combination. SFAS 141R is effective for acquisitions made on or after the first day of annual periods beginning on or after December 15, 2008. We do not believe that the adoption of SFAS 141R will have a significant effect on our consolidated financial statements.

In December 2007, the FASB ratified the consensus reached by the Emerging Issues Task Force on EITF Issue 07-1, "Accounting for Collaborative Arrangements" ("EITF 07-1"). EITF 07-1 requires collaborators to present the results of activities for which they act as the principal on a gross basis and report any payments received from (made to) other collaborators based on other applicable GAAP or, in the absence of other applicable GAAP, based on analogy to authoritative accounting literature or a reasonable, rational, and consistently applied accounting policy election. The guidance is effective for fiscal years beginning after December 15, 2008. We are currently in the process evaluating whether the adoption of EITF 07-1 will have a significant effect on our consolidated financial statements.

In October 2008, the FASB issued Staff Position "Determining the Fair Value of a Financial Asset when the Market for That Asset is not Active" (FSP No. 157-3). FSP No. 157-3 clarifies the application of SFAS 157 in a market that is not active and provides an example to illustrate key considerations in determining the fair value of a financial asset when market for that financial asset is not active. This guidance is effective upon issuance, including prior periods for which financial statements have not been issued. The adoption of FSP No. 157-3 did not have a significant effect on our consolidated financial statements.

In June 2008, the FASB ratified the consensus on EITF Issue No. 07-5, "Determining Whether an Instrument (or Embedded Feature) Is Indexed to an Entity's Own Stock" ("EITF 07-5"). EITF 07-5 provides a framework for evaluating the terms of a particular instrument to determine whether such instrument is considered a derivative financial instrument. EITF 07-5 is effective for financial statements issued for fiscal years beginning after December 15, 2008 and must be applied by recording a cumulative effect adjustment to the opening balance of retained earnings (or other appropriate components of equity) as of the date of adoption. We anticipate the adoption of EITF 07-5 will result is the recognition of a liability for the warrants issued in August 2008 as part of our private placement of common stock of approximately $2.9 million and a corresponding increase in stockholders' deficit as of January 1, 2009. Future changes in the fair value of the warrant liability will be recognized as a component of earnings (loss).

In April 2008, the FASB issued FASB Staff Position ("FSP") FAS 142-3, "Determination of the Useful Life of Intangible Assets." This FSP amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under FASB Statement No. 142, *Goodwill and Other Intangible Assets.* The intent of this FSP is to improve the consistency between the useful life of a recognized intangible asset under Statement 142 and the period of expected cash flows used to measure the fair value of the asset under FASB Statement No. 141R, and other U.S. generally accepted accounting principles. This FSP is effective for our interim and annual financial statements beginning after November 15, 2008. We do not expect the adoption of this FSP will have a material impact on the our 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 balance sheet. 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. If and such revenues are recognized, deferred revenue will be decreased (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, 2008, Olympus holds approximately 13.7% (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 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 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") pursuant to FASB Interpretation No. 46 (revised 2003), "Consolidation of Variable Interest Entities - an interpretation of ARB No. 51" ("FIN 46R"), 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, 2008, the carrying value of our investment in the Joint Venture is $324,000.

We are under no obligation to provide additional funding to the Joint Venture, but may choose to do so. We contributed $300,000 and $150,000 to the Joint Venture during 2007 and 2006, respectively. The Company made no contribution during 2008.

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, 2008 and 2007, the fair value of the Put was $2,060,000 and $1,000,000, 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:

	December 31, 2008	December 31, 2007	November 4, 2005
Expected volatility of Cytori	68.00%	60.00%	63.20%
Expected volatility of the Joint Venture	68.00%	60.00%	69.10%
Bankruptcy recovery rate for Cytori	21.00%	21.00%	21.00%
Bankruptcy threshold for Cytori	$ 16,740,000	$ 9,324,000	$ 10,780,000
Probability of a change of control event for Cytori	2.80%	2.17%	3.04%
Expected correlation between fair values of Cytori and the Joint Venture in the future	99.00%	99.00%	99.00%
Risk free interest rate	2.25%	4.04%	4.66%

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

Olympus-Cytori Joint Venture

The Joint Venture has exclusive access to our technology for the development, manufacture, and supply of the devices (second generation and beyond) for all therapeutic applications. Once a later generation Celution® System is developed and approved by regulatory agencies, the Joint Venture may sell such systems exclusively to us at a formula-based transfer price; we have retained marketing rights to the second and all subsequent generation 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 and because no commercial devices have yet been developed to trigger the forecast requirement, we estimate that the fair value of this guarantee is de minimis as of December 31, 2008.

In August 2007 we entered into a License and Royalty Agreement with the Joint Venture. This Royalty Agreement 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. The Royalty Agreement allows for the sale of the Cytori systems, including Celution® 800/CRS and Celution® 900/MB, 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. During the year ended December 31, 2008, in connection with our sales of our Celution® 800/CRS System products to the European and Asia-Pacific reconstructive surgery market, we incurred approximately $157,000 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 condensed statement of operations.

Deferred revenues, related party

As of December 31, 2008, 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, 2008 and 2007 and for the years ended December 31, 2008, 2007, and 2006 and reconciliation from the net loss of the joint venture to Cytori's equity loss from investment in joint venture is as follows:

	December 31, 2008 (Unaudited)	December 31, 2007 (Unaudited)
Balance Sheets		
Assets:		
Cash	$ 646,000	$ 713,000
Amounts due from related party	24,000	—
Prepaid insurance	9,000	9,000
Computer equipment and software, net	20,000	24,000
Total assets	$ 699,000	$ 746,000
Liabilities and Stockholders' Equity:		
Accrued expenses	$ 36,000	$ 27,000
Amounts due to related party	16,000	72,000
Stockholders' equity	647,000	647,000
Total liabilities and stockholders' equity	$ 699,000	$ 746,000

	Years ended December 31,		
	2008 (Unaudited)	2007 (Unaudited)	2006 (Unaudited)
Statements of Operation			
Revenues:			
Royalty revenue	$ 157,000	$ —	$ —
Operating expenses:			
Research and development expense	—	—	11,000,000
General and administrative expense:			
Accounting and other corporate services	75,000	40,000	172,000
Quality system services	64,000	36,000	-
Other	24,000	10,000	2,000
Operating expenses	163,000	86,000	11,174,000
Operating loss	(6,000)	(86,000)	(11,174,000)
Other income (expense):			
Interest income	5,000	7,000	-
Net loss	$ (1,000)	$ (79,000)	$ (11,174,000)
Reconciliation to equity loss from investment in joint venture			
Net loss	$ (1,000)	$ (79,000)	$ (11,174,000)
Intercompany eliminations	88,000	(65,000)	(11,026,000)
Net loss after intercompany eliminations	(89,000)	(14,000)	(148,000)
Cytori's percentage of interest in joint venture	50%	50%	50%
Cytori's equity loss from investment in joint venture	$ (45,000)	$ (7,000)	$ (74,000)

4. Fair Value Measurements

As discussed in note 2, Fair Value of Financial Instruments, we adopted SFAS 157 on January 1, 2008. SFAS 157 emphasizes that fair value is a market-based measurement, not an entity-specific measurement. Therefore, a fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability. SFAS 157 establishes 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, with Level 1 having the highest priority and Level 3 having the lowest:

- Level 1: Quoted prices in active markets for identical assets or liabilities.
- Level 2: Quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable in active markets.
- Level 3: Valuations derived from valuation techniques in which one or more significant inputs are unobservable in active markets.

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

	Balance as of December 31, 2008	Basis of Fair Value Measurements Level 1	Level 2	Level 3
Assets:				
Cash equivalents	$ 11,718,000	$ 11,718,000	$ —	$ —
Liabilities:				
Put option liability	$ (2,060,000)	$ —	$ —	$ (2,060,000)

We use quoted market prices to determine the fair value of our cash equivalents, which consist of money market funds and other highly liquid, exchange-traded fixed income and equity securities, and therefore these are classified in Level 1 of the fair value hierarchy.

Our put option liability (see note 3) is valued 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, 2008	Year ended December 31, 2007
Beginning balance	$ (1,000,000)	$ (900,000)
Increase in fair value recognized in operating expenses	(1,060,000)	(100,000)
Ending balance	$ (2,060,000)	$ (1,000,000)

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 condensed balance sheet as of December 31, 2008.

5. Gain on Sale of Assets

Spine & Orthopedics Product Line

In May 2007, we sold to Kensey Nash our intellectual property rights and tangible assets related to our spine and orthopedic bioresorbable implant product line, a part of our MacroPore Biosurgery business. Excluded from the sale was our Japan Thin Film product line. We received $3,175,000 in cash related to the disposition. The assets comprising the spine and orthopedic product line transferred to Kensey Nash were as follows:

	Carrying Value Prior to Disposition
Inventory	$ 94,000
Other current assets	17,000
Assets held for sale	436,000
Goodwill	465,000
	$ 1,012,000

We incurred expenses of $109,000 in connection with the sale during the second quarter of 2007. As part of the disposition agreement, we were required to provide training to Kensey Nash representatives in all aspects of the manufacturing process related to the transferred spine and orthopedic product line, and to act in the capacity of a product manufacturer from the point of sale through August 2007. Because of these additional manufacturing requirements, we deferred $196,000 of the gain related to the outstanding manufacturing requirements, and we recognized $1,858,000 as a gain on sale in the statement of operations during the second quarter of 2007. These manufacturing requirements were completed in August 2007 as planned, and the associated costs were classified against the deferred balance, reducing it to zero. No further costs or adjustments relating to this product line sale were incurred subsequent to August 2007.

The revenues and expenses related to the spine and orthopedic product line transferred to Kensey Nash for the years ended December 31, 2007 and 2006 were as follows:

	Years ended December 31,	
	2007	2006
Revenues	$ 792,000	$ 1,451,000
Cost of product revenues	(422,000)	(1,634,000)
Research & development	(113,000)	(1,052,000)
Sales & marketing	(21,000)	(163,000)

6. Thin Film Japan Distribution Agreement

In the third quarter of 2004, we 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. 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.

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.

At the inception of this arrangement, we received a $1,500,000 license fee which was recorded as deferred revenues in 2004. We have also received $1,250,000 in milestone payments from Senko. See "Revenue Recognition" under note 2 above for our policies with regard to the timing of when these amounts will be recognized as revenues.

As part of the Thin Film sales agreement we granted MAST a right to acquire our Thin Film-related interest in Japan. This right expired unexercised on May 31, 2007.

7. Short-term Investments

We did not have any short-term investments as of December 31, 2008 and 2007, as all our excess cash is included with cash and cash equivalents in the accompanying consolidated balance sheets.

Proceeds from sales and maturity of short term investments for the years ended December 31, 2008, 2007 and 2006 were $5,739,000, $28,007,000 and $67,137,000, respectively. Gross realized losses for such sales were approximately $1,000 for the year ended December 31, 2006. There were no gross realized losses for such sales for the years ended December 31, 2008 and 2007.

8. Composition of Certain Financial Statement Captions

Inventories, net

As of December 31, 2008 and 2007, inventories, net, were comprised of the following:

	December 31, 2008	December 31, 2007
Raw materials	$ 712,000	$ —
Work in process	347,000	—
Finished goods	1,084,000	—
	$ 2,143,000	$ —

Other Current Assets

As of December 31, 2008 and 2007, other current assets were comprised of the following:

	December 31, 2008	December 31, 2007
Prepaid insurance	$ 208,000	$ 287,000
Prepaid other	390,000	411,000
Capitalized debt issuance costs, current	252,000	—
Other receivables	313,000	66,000
	$ 1,163,000	$ 764,000

Property and Equipment, net

As of December 31, 2008 and 2007, property and equipment, net, were comprised of the following:

	December 31, 2008	December 31, 2007
Manufacturing and development equipment	$ 2,996,000	$ 2,833,000
Office and computer equipment	2,665,000	2,430,000
Leasehold improvements	3,125,000	3,124,000
	8,786,000	8,387,000
Less accumulated depreciation and amortization	(6,234,000)	(4,955,000)
	$ 2,552,000	$ 3,432,000

Accounts Payable and Accrued Expenses

As of December 31, 2008 and 2007, accounts payable and accrued expenses were comprised of the following:

	December 31, 2008	December 31, 2007
Accrued legal fees	$ 1,196,000	$ 2,749,000
Accrued R&D studies	1,110,000	1,263,000
Accounts payable	464,000	479,000
Accrued vacation	774,000	816,000
Accrued bonus	—	886,000
Accrued expenses	842,000	623,000
Deferred rent	305,000	265,000
Warranty reserve	23,000	67,000
Accrued accounting fees	302,000	131,000
Accrued payroll	72,000	70,000
	$ 5,088,000	$ 7,349,000

9. 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
2009	1,754,000
2010	814,000
2011	85,000
2012	60,000
2013	25,000
2014	8,000
Total	$ 2,746,000

On May 24, 2005, we entered into a lease for 91,000 square feet of space located at 3020 and 3030 Callan Road, San Diego, California. The majority of our operations are located in this facility. The agreement bears monthly rent at an initial rate of $1.15 per square foot, with annual increases of 3%. The lease term is 57 months, commencing on October 1, 2005 and expiring on June 30, 2010. Payments for our Callan Road location commenced in June 2006.

We also lease 4,027 square feet of office space located at 9-3 Otsuka 2-chome, Bunkyo-ku, Tokyo, Japan. The agreement bears rent at a rate of $4.38 per square foot, for a term of two years expiring on November 30, 2009.

Additionally, we entered into a new lease during the second quarter of 2008 for a 900 square feet of office space located at Via Gino Capponi n. 26, Florence, Italy. The lease agreement provides for rent at a rate of $2.63 per square foot, expiring on April 22, 2014. Additionally, we've entered into several lease agreements for corporate housing for our employees on international assignments.

Rent expense, which includes common area maintenance, for the years ended December 31, 2008, 2007 and 2006 was $2,015,000, $1,992,000 and $2,397,000, respectively.

We have entered into agreements with various clinical 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 pre-clinical development 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, 2008, we have pre-clinical research study obligations of $563,000 (all of which are expected to be complete within a year) and clinical research study obligations of $5,839,000 ($4,000,000 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 minimum purchase requirements clause. As of December 31, 2008, we have minimum purchase obligations of $2,125,000 ($850,000 of which are to be expected to complete 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 10 for a discussion of our commitments and contingencies related to our interactions with the University of California.

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.

10. License Agreement

On October 16, 2001, StemSource, Inc. entered into an exclusive worldwide license agreement with the Regents of the University of California or UC, licensing all of UC's rights to certain pending patent applications being prosecuted by UC and (in part) by the University of Pittsburgh, for the life of these patents, with the right of sublicense. The exclusive license relates to an issued patent number 6,777,231, which we refer to as the '231 Patent, and various pending applications relating to adipose-derived stem cells. In November 2002, we acquired StemSource, and the license agreement was assigned to us.

The agreement, which was amended and restated in September 2006 to better reflect our business model, calls for various periodic payments until such time as we begin commercial sales of any products utilizing the licensed technology. Upon achieving commercial sales of products or services covered by the UC license agreement, we will be required to pay variable earned royalties based on the net sales of products sold. Minimum royalty amounts will increase annually with a plateau in 2015. In addition, there are certain due diligence milestones that are required to be reached as a result of the agreement. Failure to fulfill these milestones may result in a reduction of or loss of the specific rights to which the affected milestone relates.

In connection with the amendment of the agreement in the third quarter of 2006, we agreed to issue 100,000 shares of our common stock to UC in the fourth quarter of 2006. At the time the agreement was reached, our shares were trading at $4.87 per share. The expense was charged to general and administrative expense.

Additionally, we are obligated to reimburse UC for patent prosecution and other legal costs on any patent applications contemplated by the agreement. In particular, the University of Pittsburgh filed a lawsuit in the fourth quarter of 2004, naming all of the inventors who had not assigned their ownership interest in the '231 Patent to the University of Pittsburgh. It was seeking a determination that its assignors, rather than UC's assignors, are the true inventors of the '231 Patent. This lawsuit has subjected us to and will likely continue to subject us to significant costs and expenses.

On August 9, 2007, the United States District Court, or the Court, granted the University of Pittsburgh's motion for Summary Judgment in part, determining that the University of Pittsburgh's assignors were properly named as inventors on the '231 Patent, and that all other inventorship issues shall be determined according to the facts presented at trial. The trial was concluded in January 2008 and on June 9, 2008 the Court signed its final order which we received on June 12, 2008. The Court concluded that the University of Pittsburgh's assignors were the sole inventors of the '231 Patent. The Court's decision terminated UC's rights to the '231 Patent. Upon review of the Court's findings, we believe that the Court's decision was in error. The UC assignors have agreed to appeal the decision and a Notice of Appeal was filed on July 9, 2008. If the UC assignors' appeal of the Court's decision is successful, UC's rights to the '231 Patent should be reinstated.

We are not named as a party to the lawsuit, but our president, Marc Hedrick, is one of the inventors identified on the '231 Patent and therefore is a named individual defendant. Due to our license obligations to UC relating to the '231 Patent and other UC patent applications, we have provided substantial financial and other assistance to the defense of the lawsuit. Since our current products and products under development do not practice the '231 Patent, our primary ongoing business activities and product development pipeline should not be affected by the Court's decision. Although the '231 Patent is unrelated to our current products and product pipeline, we believe that the '231 Patent and/or the other technology licensed from UC may have long term potential to be useful for future product developments, and so we have elected to support UC's legal efforts in the appeal of the Court's final order.

In the years ended December 31, 2008, 2007 and 2006, we expensed $625,000, $2,418,000 and $2,189,000, respectively, for legal fees related to this license. These expenses have been classified as general and administrative expense in the accompanying consolidated financial statements. We believe that the $896,000 accrued as of December 31, 2008 is a reasonable estimate of our liability for the unpaid expenses incurred through December 31, 2008.

11. Long-term Obligations

On October 14, 2008, we entered into a Loan and Security Agreement with General Electric Capital Corporation and Silicon Valley Bank (together, the "Lenders") pursuant to which the Lenders agreed to make term loans to the Company in the aggregate principal amount of $15,000,000, and secured by property and assets of the Company. An initial term loan of $7,500,000, less fees and expenses, funded on October 14, 2008. The term loan accrues interest at a fixed rate of 10.58% per annum and is payable over a 37-month period. At maturity of each term loan, we will also make a final payment equal to 5% ($375,000) of the term loan, and treated it as a discount to the loan. We may incur additional fees if we elect to prepay a term loan. In connection with the loan facility, on October 14, 2008, we issued to each Lender a warrant to purchase up to 89,074 shares of our common stock at an exercise price of $4.21 per share. These warrants are immediately exercisable and will expire on October 14, 2018. We could not access the remaining $7,500,000 under this facility as we were not able to meet certain financial prerequisites that had been established by the Lenders.

We allocated the aggregate proceeds of the term loan between the warrants and the debt obligations based on their relative fair values in accordance with Accounting Principle Board No. 14 (APB 14), " Accounting for Convertible Debt and Debt Issued with Stock Purchase Warrants ." The fair value of the warrant issued to the Lenders is calculated utilizing the Black-Scholes option-pricing model. We are amortizing the resultant discount of $564,000 over the term of the loan using the effective interest method, with effective interest rate being 21.28%. If the maturity of the debt is accelerated because of defaults or conversions, then the amortization is accelerated. We were in compliance with our financial and non-financial covenants as of December 31, 2008. As of December 31, 2008, unamortized balance of the aggregate debt discount is $823,000.

Additional details relating to the above term loan that is outstanding as of December 31, 2008, are presented in the following table:

Origination Date	Original Loan Amount	Interest Rate	Current Monthly Payment*	Term	Remaining Principal (Face Value)
October 2008	$ 7,500,000	10.58 %	$ 71,000	37 Months	$ 7,500,000

* *Current payment is interest only (starting March 2009 monthly payment will be $263,000 which includes principal and interest)*

As of December 31, 2008, the future contractual principal payments on all of our promissory notes are as follows:

For the Years Ending December 31,	
2009	$ 2,047,000
2010	2,706,000
2011	2,747,000
Total	$ 7,500,000

Reconciliation of Face Value to Book Value	
Total debt and lease obligation, including final payment fee (Face Value)	$ 7,914,000
Less: Debt Discount	(823,000)
Total:	7,091,000
Less: Current Portion	(2,047,000)
Long-Term Obligation	$ 5,044,000

Additionally, we entered into a capital lease for the printers for our main building. We recorded value of the leased printers in our property, plant, and equipment balance and accrued $39,000 in long term obligations, respectively.

Our interest expense for the years ended December 31, 2008, 2007 and 2006 (all of which related to the loan entered into October 2008 and promissory notes issued in connection with our Amended Master Security Agreement, which was fully repaid in 2008) was $420,000, $155,000 and $199,000, respectively. For the year ended December 31, 2008, interest expense is calculated using the effective interest method, therefore it is inclusive of non-cash amortization in the amount of $178,000 related to the amortization of the debt discount and capitalized loan fees.

12. Income Taxes

Due to our net loss position for the years ended December 31, 2008, 2007 and 2006, 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, 2008, 2007, and 2006.

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, 2008, 2007 and 2006 is as follows:

	2008	2007	2006
Income tax expense (benefit) at federal statutory rate	(34.00)%	(34.00)%	(34.00)%
Stock based compensation	0.56%	0.92%	0.99%
Credits	(1.67)%	(4.87)%	(2.72)%
Change in federal valuation allowance	38.38%	41.62%	34.52%
Equity loss on investment in Joint Venture	0.06%	0.01%	0.12%
Other, net	(3.33)%	(3.68)%	1.09%
	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, 2008 and 2007 are as follows:

	2008	2007
Deferred tax assets:		
Allowances and reserves	$ 84,000	$ 55,000
Accrued expenses	452,000	582,000
Deferred revenue and gain on sale of assets	4,950,000	5,910,000
Stock based compensation	2,965,000	2,528,000
Net operating loss carryforwards	48,265,000	37,704,000
Income tax credit carryforwards	4,665,000	4,140,000
Capitalized assets and other	371,000	284,000
Property and equipment, principally due to differences in depreciation	549,000	—
	62,301,000	51,203,000
Valuation allowance	(61,965,000)	(50,435,000)
Total deferred tax assets, net of allowance	336,000	768,000
Deferred tax liabilities:		
Property and equipment, principally due to differences in depreciation	—	(338,000)
Intangibles	(336,000)	(430,000)
Other	—	—
Total deferred tax liability	(336,000)	(768,000)
Net deferred tax assets (liability)	$ —	$ —

We have established a valuation allowance against our net deferred tax asset due to the uncertainty surrounding the realization of such assets. Management periodically evaluates the recoverability of the deferred tax asset. 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 $61,965,000 as of December 31, 2008 to reflect the estimated amount of deferred tax assets that may not be realized. We increased our valuation allowance by approximately $11,529,000 for the year ended December 31, 2008. The valuation allowance includes approximately $579,000 related to stock option deductions, the benefit of which will be credited to equity if ever utilized.

At December 31, 2008, we had federal and state tax net operating loss carryforwards of approximately $117,177,000 and $98,679,000, respectively. The federal and state net operating loss carryforwards begin to expire in 2019 and 2011, respectively, if unused. At December 31, 2008, we had federal and state tax credit carryforwards of approximately $3,364,000 and $3,043,000, respectively. The federal credits will begin to expire in 2017, if unused, and $160,000 of the state credits will begin to expire in 2009 if unused. The remaining state credits carry forward indefinitely. In addition, we had a foreign tax loss carryforward of $4,142,000 and $93,000 in Japan and Italy, respectively.

The Internal Revenue Code limits the future availability of net operating loss and tax credit carryforwards that arose prior to certain cumulative changes in a corporation's ownership resulting in a change of our control. Due to prior ownership changes as defined in IRC Section 382, a portion of the net operating loss and tax credit carryforwards are limited in their annual utilization. In September 1999, we experienced an ownership change for purposes of the IRC Section 382 limitation. As of December 31, 2007, these pre-change net operating losses and credits are fully available.

Additionally, in 2002 when we purchased StemSource, we acquired federal and state net operating loss carryforwards of approximately $2,700,000 and $2,700,000, respectively. This event triggered an ownership change for purposes of IRC Section 382. It is estimated that the pre-change net operating losses and credits will be fully available by 2008.

We have completed an update to our IRC Section 382 study analysis through April 17, 2007. We have not had any additional ownership changes based on this study.

As a result of the adoption of SFAS 123R, we recognize windfall 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 occurring from January 1, 2006 onward. At December 31, 2008, deferred tax assets do not include $1,193,000 of excess tax benefits from stock-based compensation.

We adopted FIN 48 on January 1, 2007. There were no unrecognized tax benefits as of the date of adoption.

Following is a tabular reconciliation of the unrecognized tax benefits activity during 2008:

Unrecognized Tax Benefits – December 31, 2007	$ 716,000
Gross increases – tax positions in prior period	—
Gross decreases – tax positions in prior period	—
Gross increase – current-period tax positions	236,000
Settlements	—
Lapse of statute of limitations	—
Unrecognized Tax Benefits – December 31, 2008	$ 952,000

None of the amount included in the FIN 48 liability 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, 2008.

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 gross FIN 48 liability within the next twelve months.

13. 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 2008, 2007 and 2006.

14. Stockholders' Deficit

Preferred Stock

We have authorized 5,000,000 shares of $.001 par value preferred stock, with no shares outstanding as of December 31, 2008 and 2007. 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

In February 2007, we completed a registered direct public offering of units consisting of common stock and warrants. We received net proceeds of $19,901,000 from the sale of units consisting of 3,746,000 shares of common stock and 1,873,000 common stock warrants (with an exercise price of $6.25 per share and a five-year exercisability period) under our shelf registration statement.

On February 8, 2008, we agreed to sell 2,000,000 shares of unregistered common stock to Green Hospital Supply, Inc., a related party, 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. As of December 31, 2008, Green Hospital Supply, Inc., a related party, holds approximately 10.2% (unaudited) of our issued and outstanding shares.

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.

We have accounted for the warrants as permanent equity, consistent with EITF 00-19, "Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock". The warrants must be settled through a cash exercise whereby the warrant holder exchanges cash for shares of Cytori common stock, unless the exercise occurs when the related registration statement is not effective, in which case the warrant holder can only exercise through the cashless exercise feature of the warrant agreement.

In June 2008, the FASB ratified the consensus on EITF Issue No. 07-5, "Determining Whether an Instrument (or Embedded Feature) Is Indexed to an Entity's Own Stock" ("EITF 07-5"). EITF 07-5 provides a framework for evaluating the terms of a particular instrument to determine whether such instrument is considered a derivative financial instrument. EITF 07-5 is effective for financial statements issued for fiscal years beginning after December 15, 2008 and must be applied by recording a cumulative effect adjustment to the opening balance of retained earnings (or other appropriate components of equity) as of the date of adoption. We anticipate the adoption of EITF 07-5 will result is the recognition of a liability for the warrants issued in August 2008 as part of our private placement of common stock of approximately $2.9 million and a corresponding increase in stockholders' deficit as of January 1, 2009. Future changes in the fair value of the warrant liability will be recognized as a component of earnings (loss).

Warrant Adjustments

Our issuance of warrants with an exercise price of $4.21 per share to the Lenders, 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, the common stock warrants issued on August 11, 2008, are currently exercisable for 1,413,896 shares of our common stock at an exercise price of $8.49 per share.

Treasury Stock

On August 11, 2003, the Board of Directors authorized the repurchase of up to 3,000,000 shares of our common stock in the open market, from time to time until August 10, 2004 at a purchase price per share not to exceed €15.00, based on the exchange rate in effect on August 11, 2003. During 2003, we repurchased 614,099 shares of our Common Stock at an average cost of $3.69 per share for a total of $2,266,000.

In 2003, we sold 150,500 shares of treasury stock for $542,000 at an average price of $3.60 per share. The basis of the treasury stock sold was the weighted average purchase price or $3.67 per share with the difference of $10,000 accounted for as a reduction to additional paid-in capital.

On December 6, 2003, we exchanged 1,447,755 shares of common stock (all listed on the Frankfurt Stock Exchange) held in our treasury for 1,447,755 of our unlisted outstanding common stock issued to former StemSource shareholders. $104,000 was accounted for as a charge against additional paid-in capital relating to the difference between the weighted average purchase price and fair market value of the listed shares held in treasury at the time of the exchange.

In 2004, we repurchased 27,650 shares of our common stock for $76,000 on the open market at a price of $2.75 per share. Additionally in 2004, we repurchased 262,602 shares of our common stock for $976,000 from a former director and officer of StemSource at a price of $3.72 per share.

Our repurchase program expired on August 10, 2004. We have no plans to initiate a new repurchase program at this time.

In April 2007, we sold 1,000,000 shares of unregistered common stock from our treasury to Green Hospital Supply, Inc. for $6,000,000 cash, or $6.00 per share. The basis of the treasury stock sold was the weighted average purchase price, or $3.62 per share, and the difference of $2.38 per share, or $2,380,000, was accounted for as an increase to additional paid-in capital.

15. 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 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.

16. Stock-based Compensation

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, 2008, there are 2,190,450 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.

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.

Generally, awards issued under the 2004 Plan or the 1997 Plan are subject to four-year vesting, and have a contractual term of 10 years. Most awards 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, 2008 is as follows:

	Options	Weighted Average Exercise Price
Balance as of January 1, 2008	6,007,275	$ 4.85
Granted	534,250	$ 5.21
Exercised	(388,536)	$ 2.04
Expired	(146,777)	$ 6.50
Cancelled/forfeited	(77,505)	$ 5.68
Balance as of December 31, 2008	5,928,707	$ 5.02

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Balance as of December 31, 2008	5,928,707	$ 5.02	5.34	$ 936,815
Vested and expected to vest at December 31, 2008	5,825,490	$ 5.00	5.29	$ 933,678
Vested and exercisable at December 31, 2008	4,775,056	$ 4.85	4.62	$ 901,759

The following table summarizes information about options outstanding as of December 31, 2008:

	Options Outstanding			Options Exercisable	
Range of Exercise Price	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life in Years	Number of Shares	Weighted Average Exercise Price
Less than $2.00	32,218	$ 0.72	0.5	32,218	$ 0.72
$ 2.00 – 3.99	1,538,168	$ 3.06	3.7	1,488,784	$ 3.07
$ 4.00 – 5.99	2,759,822	$ 4.76	6.4	1,989,179	$ 4.56
$ 6.00 – 7.99	1,265,332	$ 6.84	5.1	1,013,064	$ 6.89
$ 8.00 – 9.99	256,167	$ 8.67	6.9	174,811	$ 8.68
More than $10.00	77,000	$ 13.18	1.2	77,000	$ 13.18
	5,928,707			4,775,056	

The total intrinsic value of stock options exercised was $1,849,000, $1,758,000, and $1,913,000 for the years ended December 31, 2008, 2007 and 2006, respectively.

The fair value of each option awarded during the year ended December 31, 2008, 2007, and 2006 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,		
	2008	2007	2006
Expected term	5 years	6 years	6 years
Risk-free interest rate	2.83%	4.59%	4.50%
Volatility	59.62%	74.61%	78.61%
Dividends	—	—	—
Resulting weighted average grant date fair value	$ 2.77	$ 3.74	$ 5.26

Through December 31, 2007, the expected term assumption was estimated using the "simplified method," as described in Staff Accounting Bulletin No. 107, "Share-Based Payment" ("SAB 107"). This method estimates the expected term of an option based on the average of the vesting period and the contractual term of an option award. Starting January 1, 2008, following the guidance of Staff Accounting Bulletin No. 110, "Share-Based Payment" 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. The fair value of each option awarded during the year ended December 31, 2008 was estimated assuming an expected term of 5.0 years.

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.

The following summarizes the total compensation cost recognized in the accompanying financial statements:

	Years ended December 31,		
	2008	2007	2006
Total compensation cost for share-based payment arrangements recognized in the statement of operations (net of tax of $0)	$ 2,257,000	$ 2,310,000	$ 3,220,000

As of December 31, 2008, the total compensation cost related to non-vested stock options not yet recognized for all of our plans is approximately $3,494,000. These costs are expected to be recognized over a weighted average period of 1.67 years.

In calculating the fair value of option awards granted after January 1, 2006, we generally used the same methodologies and assumptions employed prior to our adoption of SFAS 123R. For instance, our estimate of expected volatility is based exclusively on our historical volatility, since we have granted options that vest purely based on the passage of time and otherwise meet the criteria to exclusively rely on historical volatility, as set out in SAB 107. We did, however, change our policy of attributing the cost of share-based payment awards granted after January 1, 2006 from the "graded vesting approach" to the "straight-line" method. We believe that this change more accurately reflects the manner in which our employees vest in an option award.

Cash received from stock option and warrant exercises for the years ended December 31, 2008, 2007 and 2006 was approximately $795,000, $1,875,000, and $920,000, respectively. SFAS 123R requires that cash flows resulting from tax deductions in excess of the cumulative compensation cost recognized for options exercised (excess tax benefits) be classified as cash inflows provided by financing activities and cash outflows used in operating activities. No income tax benefits have been recorded related to the stock option exercises. SFAS 123R prohibits recognition of tax benefits for exercised stock options until such benefits are realized. As we presently have tax loss carryforwards from prior periods and expect to incur tax losses in 2008, we are not able to benefit from the deduction for exercised stock options in the current reporting period.

In November 2005, the FASB issued Staff Position (FSP) No. FAS 123(R)-3, "Transition Election Related to Accounting for Tax Effects of Share-Based Payment Awards" (FSP 123R-3). We have elected to adopt the alternative transition method provided in the FSP 123R-3 for calculating the tax effects of stock-based compensation pursuant to SFAS 123R. The alternative transition method includes simplified methods to establish the beginning balance of the APIC pool related to the tax effects of employee stock-based compensation, and to determine the subsequent impact on the APIC pool and Consolidated Statements of Cash Flows of the tax effects of employee stock-based compensation awards that are outstanding upon adoption of SFAS 123R.

To settle stock option awards that will be exercised, we will issue new shares of our common stock. At December 31, 2008, we have an aggregate of 64,104,526 shares authorized and available to satisfy option exercises under our plans.

Cash used to settle equity instruments granted under share-based payment arrangements amounted to $0 in all periods presented.

Award Modifications

On August 2, 2007, our Senior Vice President – Research - Regenerative Cell Technology ("VP") terminated employment with us. We paid the former VP a lump sum cash severance payment of $66,667 and extended the exercise period of his 35,000 vested stock options through December 31, 2007. In addition to the cash severance payment, we recorded stock based compensation expense of $5,741 in the third quarter of 2007, which reflects the incremental fair value of the extended vested stock options (over the fair value of the original awards at the modification date).

In connection with the sale of our HYDROSORB™ spine and orthopedics surgical implant product line, we eliminated the positions of two less senior employees on August 31, 2007. At the time these positions were eliminated, we (a) accelerated the vesting of 2,084 unvested stock options held by these two employees, and (b) extended the exercise period of 37,292 vested stock options owned by them through December 31, 2008. 16,041 unvested stock options held by these two employees were forfeited.

In connection with the above modifications and in accordance with SFAS 123R, we recorded additional stock based compensation expense of $58,402 in the year ended December 31, 2007, as a component of general and administrative. This charge constitutes the entire expense related to the modification of these options, and no future period charges will be required.

Marshall G. Cox retired from our board of directors (and his employment by the Company thereby ceased) on May 3, 2007. We subsequently entered into a consulting agreement with Mr. Cox whereby he will continue to provide services to the Company through March 1, 2009. Subject to his continued service to the Company, all of Mr. Cox's outstanding stock options previously granted to him in his capacity as a director will continue to vest and be exercisable, in accordance with their original terms. As of May 3, 2007, Mr. Cox held a total of 91,250 unvested stock options. After May 3, 2007, the fair value of Mr. Cox's unvested stock options will be remeasured each reporting period until they fully vest. There was no additional stock based compensation expense recorded as a result of the modification of Mr. Cox's options.

In May 2006, our Senior Vice President of Finance and Administration, Treasurer, and Principal Accounting Officer terminated full-time employment with us. In connection with his full-time employment termination, we extended the exercise period of his 204,997 vested stock options as of May 31, 2006 to December 31, 2007. Moreover, we entered into a part-time employment agreement with him according to which all stock option vesting ceased as of May 31, 2006, resulting in the cancellation of 75,003 non-vested stock options on May 31, 2006.

In connection with a broader reduction in force, we eliminated the positions of our Senior Vice President, Business Development, and Vice President, Marketing & Development, on July 25, 2006. We subsequently entered into short-term employment agreements with the individuals formerly holding these positions. These individuals continued to provide service to us following the elimination of their former positions on July 25, 2006. At the time these positions were eliminated, 142,686 non-vested stock options held by these two employees were forfeited. Moreover, subject to certain restrictions, we extended the exercise period for 328,564 vested stock options held by these employees to December 31, 2007.

We also eliminated the position of a less senior employee on July 31, 2006. Simultaneously, we continued the individual's employment in a new capacity; however, we cancelled 8,125 non-vested stock options held by this individual on July 31, 2006.

In connection with the above modifications and in accordance with SFAS 123R, we recorded additional expense of $567,000 in the year ended December 31, 2006, as components of research and development, general and administrative and sales and marketing expense. This charge constitutes the entire expense related to these options, and no future period charges will be required.

Non-Employee Stock Based Compensation

In the fourth quarter of 2007, we granted an option to purchase 22,500 shares of our common stock to a non-employee scientific advisor. The stock option has a contractual term of 10 years and 7,500 shares vested on May 31, 2008, with two remaining tranches of 7,500 shares each to vest on May 31, 2009 and 2010, subject to the individual's continued service to the Company. This scientific advisor will also be receiving cash consideration as services are performed. We will remeasure the fair value of this advisor's unvested stock options each reporting period until they fully vest, and the resulting stock based compensation expense will be recorded as a component of research and development expenses.

17. Related Party Transactions

Refer to note 3 for a discussion of related party transactions with Olympus and note 14 for a discussion of related party transactions with Green Hospital Supply, Inc.

18. Quarterly Information (unaudited)

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

	For the three months ended			
	March 31, 2008	June 30, 2008	September 30, 2008	December 31, 2008
Product revenues	$ 153,000	$ 1,404,000	$ 2,319,000	$ 652,000
Gross profit	93,000	729,000	1,671,000	181,000
Development revenues	811,000	12,000	1,000	1,501,000
Operating expenses	9,232,000	9,113,000	8,481,000	7,934,000
Other income	55,000	(41,000)	(8,000)	(281,000)
Net loss	$ (8,273,000)	$ (8,413,000)	$ (6,817,000)	$ (6,533,000)
Basic and diluted net loss per share	$ (0.34)	$ (0.33)	$ (0.24)	$ (0.22)

	For the three months ended			
	March 31, 2007	June 30, 2007	September 30, 2007	December 31, 2007
Product revenues	$ 280,000	$ 512,000	$ —	$ —
Gross profit	55,000	315,000	—	—
Development revenues	45,000	1,814,000	3,373,000	25,000
Operating expenses	8,908,000	8,245,000	8,983,000	10,841,000
Other income	139,000	2,120,000	282,000	137,000
Net loss	$ (8,669,000)	$ (3,996,000)	$ (5,328,000)	$ (10,679,000)
Basic and diluted net loss per share	$ (0.43)	$ (0.17)	$ (0.22)	$ (0.44)

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

Not applicable.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

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

As required by Rule 13a-15(b) under the Exchange Act, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures 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 and were operating at a reasonable assurance level as of December 31, 2008.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). 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 based on the framework in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. 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. Based on our evaluation under the framework in Internal Control - Integrated Framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2008.

The effectiveness of our internal control over financial reporting as of December 31, 2008 has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their report 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, 2008 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 proxy statement for our 2009 annual stockholders' meeting, which will be filed with the SEC on or before April 30, 2009.

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 proxy statement for our 2009 annual stockholders' meeting, which will be filed with the SEC on or before April 30, 2009.

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 proxy statement for our 2009 annual stockholders' meeting, which will be filed with the SEC on or before April 30, 2009.

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 proxy statement for our 2009 annual stockholders' meeting, which will be filed with the SEC on or before April 30, 2009.

Item 14. Principal Accountant 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 proxy statement for our 2009 annual stockholders meeting, which will be filed with the SEC on or before April 30, 2009.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) (1) Financial Statements — **Page**

(a) (2) Financial Statement Schedules

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

For the years ended December 31, 2008, 2007 and 2006
(in thousands of dollars)

	Balance at beginning of year	Additions/(Reductions) ((charges)/ credits to expense)	Charged to Other Accounts	Deductions	Balance at end of year
Allowance for doubtful accounts					
Year ended December 31, 2008	$ 1	$ 121	$ —	$ —	$ 122
Year ended December 31, 2007	$ 2	$ 1	$ —	$ (2)	$ 1
Year ended December 31, 2006	$ 9	$ —	$ —	$ (7)	$ 2

(a)(3) Exhibits

Exhibit Number	Description
2.5	Asset Purchase Agreement dated May 30, 2007, by and between Cytori Therapeutics, Inc. and MacroPore Acquisition Sub, Inc (filed as Exhibit 2.5 to our Form 10-Q Quarterly Report as filed on August 14, 2007 and incorporated by reference herein)
3.1	Amended and Restated Certificate of Incorporation (filed as Exhibit 3.1 to our Form 10-Q Quarterly Report as filed on August 13, 2002 and incorporated by reference herein)
3.2	Amended and Restated Bylaws of Cytori Therapeutics, Inc. (filed as Exhibit 3.2 to our Form 10-Q Quarterly Report, as filed on August 14, 2003 and incorporated by reference herein)
3.3	Certificate of Ownership and Merger (effecting name change to Cytori Therapeutics, Inc.) (filed as Exhibit 3.1.1 to our Form 10-Q, as filed on November 14, 2005 and incorporated by reference herein)
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 (filed as Exhibit 4.1 to our Form 8-A which was filed on May 30, 2003 and incorporated by reference herein)
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 (filed as Exhibit 4.1.1 to our Form 8-K, which was filed on May 18, 2005 and incorporated by reference herein).
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 (filed as Exhibit 4.1.1 to our Form 8-K, which was filed on September 4, 2007 and incorporated by reference herein).
10.1#	Amended and Restated 1997 Stock Option and Stock Purchase Plan (filed as Exhibit 10.1 to our Form 10 registration statement, as amended, as filed on March 30, 2001 and incorporated by reference herein)
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)
10.2+	Development and Supply Agreement, made and entered into as of January 5, 2000, by and between the Company and Medtronic (filed as Exhibit 10.4 to our Form 10 registration statement, as amended, as filed on June 1, 2001 and incorporated by reference herein)
10.3+	Amendment No. 1 to Development and Supply Agreement, effective as of December 22, 2000, by and between the Company and Medtronic (filed as Exhibit 10.5 to our Form 10 registration statement, as amended, as filed on June 1, 2001 and incorporated by reference herein)
10.4+	License Agreement, effective as of October 8, 2002, by and between the Company and Medtronic PS Medical, Inc. (filed as Exhibit 2.2 to our Current Report on Form 8-K which was filed on October 23, 2002 and incorporated by reference herein)
10.5+	Amendment No. 2 to Development and Supply Agreement, effective as of September 30, 2002, by and between the Company and Medtronic, Inc. (filed as Exhibit 2.4 to our Current Report on Form 8-K which was filed on October 23, 2002 and incorporated by reference herein)
10.7	Amended Master Security Agreement between the Company and General Electric Corporation, September, 2003 (filed as Exhibit 10.1 to our Form 10-Q Quarterly Report, as filed on November 12, 2003 and incorporated by reference herein)
10.8#	Asset Purchase Agreement dated May 7, 2004 between Cytori Therapeutics, Inc. and MAST Biosurgery AG (filed as Exhibit 2.1 to our Form 8-K Current Report, as filed on May 28, 2004 and incorporated by reference herein.)
10.8.1	Settlement Agreement dated August 9, 2005, between MAST Biosurgery AG, MAST Biosurgery, Inc. and the Company (filed as Exhibit 10.26 to our Form 10-Q, which was filed on November 14, 2005 and incorporated by reference herein)
10.9#	Offer Letter for the Position of Chief Financial Officer dated June 2, 2004 between the Company and Mark Saad (filed as Exhibit 10.18 to our Form 10-Q Quarterly Report, as filed on August 16, 2004 and incorporated by reference herein)
10.10#	2004 Equity Incentive Plan of Cytori Therapeutics, Inc. (filed as Exhibit 10.1 to our Form 8-K Current Report, as filed on August 27, 2004 and incorporated by reference herein)
10.10.1#	Board of Directors resolution adopted November 9, 2006 regarding determination of fair market value for stock option grant purposes (filed as Exhibit 10.10.1 to our Form 10-K Annual Report, as filed on March 30, 2007 and incorporated by reference herein)
10.11	Exclusive Distribution Agreement, effective July 16, 2004 by and between the Company and Senko Medical Trading Co. (filed as Exhibit 10.25 to our Form 10-Q Quarterly Report, as filed on November 15, 2004 and incorporated by reference herein)
10.12#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Nonstatutory) (filed as Exhibit 10.19 to our Form 10-Q Quarterly Report, as filed on November 15, 2004 and incorporated by reference herein)
10.13#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Nonstatutory) with Cliff (filed as Exhibit 10.20 to our Form 10-Q Quarterly Report, as filed on November 15, 2004 and incorporated by reference herein)

10.14#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Incentive) (filed as Exhibit 10.21 to our Form 10-Q Quarterly Report, as filed on November 15, 2004 and incorporated by reference herein)
10.15#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Incentive) with Cliff (filed as Exhibit 10.22 to our Form 10-Q Quarterly Report, as filed on November 15, 2004 and incorporated by reference herein)
10.16#	Form of Options Exercise and Stock Purchase Agreement Relating to the 2004 Equity Incentive Plan (filed as Exhibit 10.23 to our Form 10-Q Quarterly Report, as filed on November 15, 2004 and incorporated by reference herein)
10.17#	Form of Notice of Stock Options Grant Relating to the 2004 Equity Incentive Plan (filed as Exhibit 10.24 to our Form 10-Q Quarterly Report, as filed on November 15, 2004 and incorporated by reference herein)
10.18#	Separation Agreement and General Release dated July 15, 2005, between John K. Fraser and the Company (filed as Exhibit 10.25 to our Form 10-Q Quarterly Report as filed on November 14, 2005 and incorporated by reference herein)
10.19#	Consulting Agreement dated July 15, 2005, between John K. Fraser and the Company (filed as Exhibit 10.28 to our Form 10-Q Quarterly Report as filed on November 14, 2005 and incorporated by reference herein)
10.20	Agreement Between Owner and Contractor dated October 10, 2005, between Rudolph and Sletten, Inc. and the Company (filed as Exhibit 10.20 to our Form 10-K Annual Report as filed on March 30, 2006 and incorporated by reference herein)
10.21#	Severance Agreement and General Release dated August 10, 2005, between Sharon V. Schulzki and the Company (filed as Exhibit 10.27 to our Form 10-Q Quarterly report as filed on November 14, 2005 and incorporated by reference herein)
10.22	Common Stock Purchase Agreement dated April 28, 2005, between Olympus Corporation and the Company (filed as Exhibit 10.21 to our Form 10-Q Quarterly Report as filed on August 15, 2005 and incorporated by reference herein)
10.23	Sublease Agreement dated May 24, 2005, between Biogen Idec, Inc. and the Company (filed as Exhibit 10.21 to our Form 10-Q Quarterly Report as filed on August 15, 2005 and incorporated by reference herein)
10.24#	Employment Offer Letter to Doug Arm, Vice President of Development—Biologics, dated February 1, 2005 (filed as Exhibit 10.21 to our Form 10-Q Quarterly Report as filed on August 15, 2005 and incorporated by reference herein)
10.25#	Employment Offer Letter to Alex Milstein, Vice-President of Clinical Research, dated May 1, 2005 (filed as Exhibit 10.21 to our Form 10-Q Quarterly Report as filed on August 15, 2005 and incorporated by reference herein)
10.26#	Employment Offer Letter to John Ransom, Vice-President of Research, dated November 15, 2005 (filed as Exhibit 10.26 to our Form 10-K Annual Report as filed on March 30, 2006 and incorporated by reference herein)
10.27+	Joint Venture Agreement dated November 4, 2005, between Olympus Corporation and the Company (filed as Exhibit 10.27 to our Form 10-K Annual Report as filed on March 30, 2006 and incorporated by reference herein)
10.28+	License/ Commercial Agreement dated November 4, 2005, between Olympus-Cytori, Inc. and the Company (filed as Exhibit 10.28 to our Form 10-K Annual Report as filed on March 30, 2006 and incorporated by reference herein)
10.28.1	Amendment One to License/ Commercial Agreement dated November 14, 2007, between Olympus-Cytori, Inc. and the Company (filed as Exhibit 10.28.1 to our Form 10-K Annual Report as filed on March 14, 2008 and incorporated by reference herein).
10.29+	License/ Joint Development Agreement dated November 4, 2005, between Olympus Corporation, Olympus-Cytori, Inc. and the Company (filed as Exhibit 10.29 to our Form 10-K Annual Report as filed on March 30, 2006 and incorporated by reference herein)
10.29.1	Amendment No. 1 to License/ Joint Development Agreement dated May 20, 2008, between Olympus Corporation, Olympus-Cytori, Inc. and the Company (filed as Exhibit 10.29.1 to our Form 10-Q Quarterly Report as filed on August 11, 2008 and incorporated by reference herein).
10.30+	Shareholders Agreement dated November 4, 2005, between Olympus Corporation and the Company (filed as Exhibit 10.30 to our Form 10-K Annual Report as filed on March 30, 2006 and incorporated by reference herein)
10.31+	Exclusive Negotiation Agreement with Olympus Corporation, dated February 22, 2006 (filed as Exhibit 10.31 to our Form 10-Q Quarterly Report as filed on May 15, 2006 and incorporated by reference herein)
10.32	Common Stock Purchase Agreement, dated August 9, 2006, by and between Cytori Therapeutics, Inc. and Olympus Corporation (filed as Exhibit 10.32 to our Form 8-K Current Report as filed on August 15, 2006 and incorporated by reference herein)
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) (filed as Exhibit 10.33 to our Form 8-K Current Report as filed on August 15, 2006 and incorporated by reference herein)
10.34	Placement Agency Agreement, dated August 9, 2006, between Cytori Therapeutics, Inc. and Piper Jaffray & Co. (filed as Exhibit 10.34 to our Form 8-K Current Report as filed on August 15, 2006 and incorporated by reference herein)
10.35#	Stock Option Extension Agreement between Bruce A. Reuter and Cytori Therapeutics, Inc. effective July 25, 2006 (filed as Exhibit 10.35 to our Form 10-Q Quarterly Report as filed on November 145, 2006 and incorporated by reference herein)
10.36#	Stock Option Extension Agreement between Elizabeth A. Scarbrough and Cytori Therapeutics, Inc. effective July 25, 2006 (filed as Exhibit 10.36 to our Form 10-Q Quarterly Report as filed on November 14, 2006 and incorporated by reference herein)
10.37#	Employment Agreement between Bruce A. Reuter and Cytori Therapeutics, Inc. effective July 25, 2006 (filed as Exhibit 10.37 to our Form 10-Q

Quarterly Report as filed on November 14, 2006 and incorporated by reference herein)

10.38# Employment Agreement between Elizabeth A. Scarbrough and Cytori Therapeutics, Inc. effective July 25, 2006 (filed as Exhibit 10.38 to our Form 10-Q Quarterly Report as filed on November 14, 2006 and incorporated by reference herein)

10.39+ Exclusive License Agreement between us and the Regents of the University of California dated October 16, 2001 (filed as Exhibit 10.10 to our Form 10-K Annual Report as filed on March 31, 2003 and incorporated by reference herein)

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. (filed as Exhibit 10.39 to our Form 10-Q Quarterly Report as filed on November 14, 2006 and incorporated by reference herein)

10.40# Stock Option Extension Agreement between Charles Galetto and Cytori Therapeutics, Inc. signed on May 24, 2006 and effective as of June 1, 2006 (filed as Exhibit 10.20 to our Form 10-Q Quarterly Report as filed on August 14, 2006 and incorporated by reference herein)

10.41# Part-time Employment Agreement between Charles Galetto and Cytori Therapeutics, Inc. signed on May 24, 2006 and effective as of June 1, 2006 (filed as Exhibit 10.21 to our Form 10-Q Quarterly Report as filed on August 14, 2006 and incorporated by reference herein)

10.42 Placement Agency Agreement, dated February 23, 2007, between Cytori Therapeutics, Inc. and Piper Jaffray & Co. (filed as Exhibit 10.1 to our Form 8-K Current Report as filed on February 26, 2007 and incorporated by reference herein).

10.43 Financial services advisory engagement letter agreement, dated February 16, 2007, between Cytori Therapeutics, Inc. and WBB Securities, LLC (filed as Exhibit 10.2 to our Form 8-K Current Report as filed on February 26, 2007 and incorporated by reference herein)

10.44 Form of Subscription Agreement, dated February 23, 2007 (filed as Exhibit 10.3 to our Form 8-K Current Report as filed on February 26, 2007 and incorporated by reference herein)

10.45 Form of Warrant to be dated February 28, 2007 (filed as Exhibit 10.4 to our Form 8-K Current Report as filed on February 26, 2007 and incorporated by reference herein)

10.46 Common Stock Purchase Agreement, dated March 28, 2007, by and between Cytori Therapeutics, Inc. and Green Hospital Supply, Inc. (filed as Exhibit 10.46 to our Form 10-Q Quarterly Report as filed on May 11, 2007 and incorporated by reference herein).

10.47 Consulting Agreement, dated May 3, 2007, by and between Cytori Therapeutics, Inc. and Marshall G. Cox. (filed as Exhibit 10.47 to our Form 10-Q Quarterly Report as filed on August 14, 2007 and incorporated by reference herein).

10.48+ Master Cell Banking and Cryopreservation Agreement, effective August 13, 2007, by and between Green Hospital Supply, Inc. and Cytori Therapeutics, Inc. (filed as Exhibit 10.48 to our Form 10-Q Quarterly Report as filed on November 13, 2007 and incorporated by reference herein).

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 (filed as Exhibit 10.48.1 to our Form 8-K Current Report as filed on June 10, 2008 and incorporated by reference herein).

10.49+ License & Royalty Agreement, effective August 23, 2007, by and between Olympus-Cytori, Inc. and Cytori Therapeutics, Inc. (filed as Exhibit 10.49 to our Form 10-Q Quarterly Report as filed on November 13, 2007 and incorporated by reference herein).

10.50 General Release Agreement, dated August 13, 2007, between John Ransom and Cytori Therapeutics, Inc. (filed as Exhibit 10.49 to our Form 10-Q Quarterly Report as filed on November 13, 2007 and incorporated by reference herein).

10.51 Common Stock Purchase Agreement, dated February 8, 2008, by and between Green Hospital Supply, Inc. and Cytori Therapeutics, Inc. (filed as Exhibit 10.51 to our Form 8-K Current Report as filed on February 19, 2008 and incorporated by reference herein).

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. (filed as Exhibit 10.51.1 to our Form 8-K Current Report as filed on February 29, 2008 and incorporated by reference herein).

10.52# Agreement for Acceleration and/or Severance, dated January 31, 2008, by and between Christopher J. Calhoun and Cytori Therapeutics, Inc. (filed as Exhibit 10.52 to our Form 10-K Annual Report as filed on March 14, 2008 and incorporated by reference herein).

10.53# Agreement for Acceleration and/or Severance, dated January 31, 2008, by and between Marc H. Hedrick and Cytori Therapeutics, Inc. (filed as Exhibit 10.53 to our Form 10-K Annual Report as filed on March 14, 2008 and incorporated by reference herein).

10.54# Agreement for Acceleration and/or Severance, dated January 31, 2008, by and between Mark E. Saad and Cytori Therapeutics, Inc. (filed as Exhibit 10.54 to our Form 10-K Annual Report as filed on March 14, 2008 and incorporated by reference herein).

10.55 Common Stock Purchase Agreement, dated August 7, 2008, by and between the Company and Olympus Corporation (filed as Exhibit 10.32 to our current report on Form 8-K filed on August 8, 2008 and incorporated by reference herein).

10.55.1 Amendment No. 1 to Common Stock Purchase Agreement, dated August 8, 2008, by and between the Company and Olympus Corporation (filed as Exhibit 10.32.1 to our current report on Form 8-K filed on August 14, 2008 and incorporated by reference herein).

10.56 Securities Purchase Agreement, dated August 7, 2008, by and among the Company and the Purchasers identified on the signature pages thereto (filed as Exhibit 10.33 to our current report on Form 8-K filed on August 8, 2008 and incorporated by reference herein).

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 (filed as Exhibit 10.34 to our current report on Form 8-K filed on August 8, 2008 and incorporated by reference herein).

10.58 Registration Rights Agreement, dated August 7, 2008, by and among the Company and the Purchasers identified on the signature pages thereto (filed as

Exhibit 10.35 to our current report on Form 8-K filed on August 8, 2008 and incorporated by reference herein).

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 (filed herewith).
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 (filed herewith).
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 (filed herewith).
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 (filed herewith).
14.1	Code of Ethics (filed as Exhibit 14.1 to our Annual Report on Form 10-K which was filed on March 30, 2004 and incorporated by reference herein)
23.1	Consent of KPMG LLP, Independent Registered Public Accounting Firm (filed herewith).
31.1	Certification of Principal Executive Officer Pursuant to Securities Exchange Act Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith).
31.2	Certification of Principal Financial Officer Pursuant to Securities Exchange Act Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith).
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 (filed herewith).

\+ *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 6, 2009

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/ Ronald D. Henriksen Ronald D. Henriksen	*Chairman of the Board of Directors*	March 6, 2009
/s/ Christopher J. Calhoun Christopher J. Calhoun	*Chief Executive Officer, Vice-Chairman, Director (Principal Executive Officer)*	March 6, 2009
/s/ Marc H. Hedrick, MD Marc H. Hedrick, MD	*President, Director*	March 6, 2009
/s/ Mark E. Saad Mark E. Saad	*Chief Financial Officer (Principal Financial Officer)*	March 6, 2009
/s/ John W. Townsend John W. Townsend	*Chief Accounting Officer*	March 6, 2009
/s/ David M. Rickey David M. Rickey	*Director*	March 6, 2009
/s/ Rick Hawkins Rick Hawkins	*Director*	March 6, 2009
/s/ E. Carmack Holmes, MD E. Carmack Holmes, MD	*Director*	March 6, 2009
/s/ Paul W. Hawran Paul W. Hawran	*Director*	March 6, 2009

EXHIBIT 23.1

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Cytori Therapeutics, Inc.:

We consent to the incorporation by reference in the registration statement (Nos. 333-82074 and 333-122691) on Form S-8 and (Nos. 333-140875, 333-157023, 333-153233 and 333-134129) on Form S-3 of Cytori Therapeutics, Inc. of our reports dated March 6, 2009, with respect to the consolidated balance sheets of Cytori Therapeutics, Inc. and subsidiaries as of December 31, 2008 and 2007, 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, 2008, 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, 2008, and to the reference to our firm in Item 6, *Selected Financial Data*, which reports appear in the December 31, 2008, annual report on Form 10-K of Cytori Therapeutics, Inc.

/s/ KPMG LLP

San Diego, California
March 6, 2009

EXHIBIT 31.1

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

I, Christopher J. Calhoun, certify that:

1. I have reviewed this annual report on Form 10-K of Cytori Therapeutics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer 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 6, 2009
/s/ Christopher J. Calhoun
Christopher J. Calhoun,
Chief Executive Officer

EXHIBIT 31.2

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

I, Mark E. Saad, certify that:

1. I have reviewed this annual report on Form 10-K of Cytori Therapeutics, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer 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 6, 2009
/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, 2008 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.

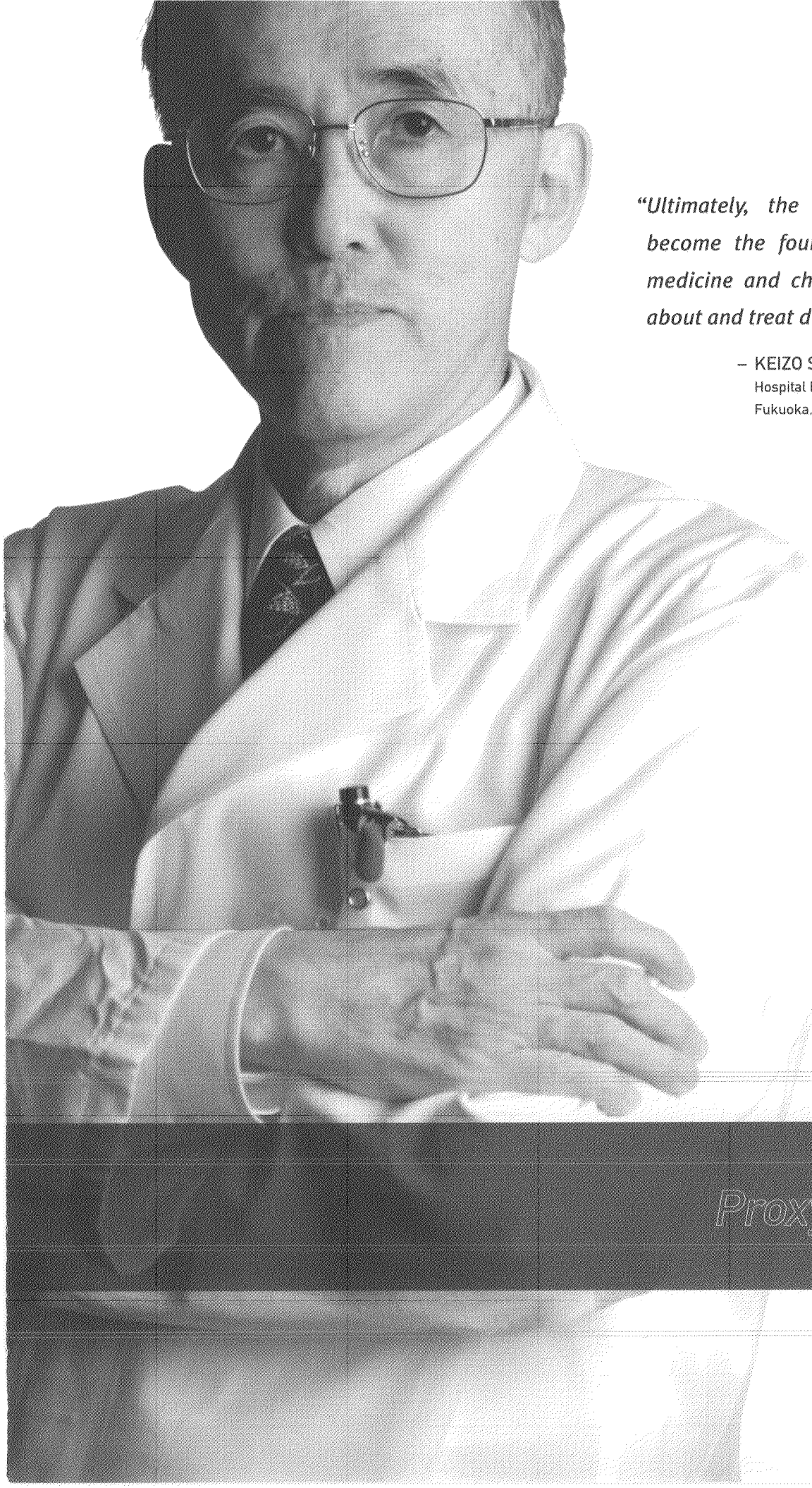
2. The information contained in the Form 10-K report of Cytori Therapeutics, Inc. that this certification accompanies fairly presents, in all material respects, the financial condition and results of operations of Cytori Therapeutics, Inc.

Dated: March 6, 2009

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

Dated: March 6, 2009

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



"Ultimately, the Celution® System will become the foundation of regenerative medicine and change the way we think about and treat disease."

– KEIZO SUGIMACHI, MD, PH.D.
Hospital Director, Kyushu Central Hospital,
Fukuoka, Japan

Proxy Statement

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

SCHEDULE 14A

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

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

Check the appropriate box:

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

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

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

Payment of Filing Fee (Check the appropriate box):

☒ No fee required

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

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

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

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

☐ Fee paid previously with preliminary materials.

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

(1) Amount Previously Paid:

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

(3) Filing Party:

(4) Date Filed:

CYTORI THERAPEUTICS, INC.
3020 CALLAN ROAD
SAN DIEGO, CALIFORNIA 92121

NOTICE OF 2009 ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON AUGUST 13, 2009

Dear Cytori Therapeutics, Inc. Stockholder:

You are cordially invited to attend the 2009 Annual Meeting of the stockholders of Cytori Therapeutics, Inc. The Annual Meeting will be held in the United States, at the Company's headquarters located at 3020 Callan Road, San Diego, California 92121 on August 13, 2009, commencing at 9:00 a.m., San Diego local time. I look forward to meeting with as many of our stockholders as possible.

The meeting will be webcast live for those who are unable to attend in person. To access the webcast of the meeting please visit our website at www.cytoritx.com and follow the link in our Investor Relations section. To place your vote over the Internet, please see the instructions on the accompanying proxy card.

At the meeting, you will be asked to elect our Board of Directors and to ratify our Audit Committee's selection of the independent registered public accounting firm. The Board of Directors recommends that you vote "FOR" these proposals. In addition, we will address any other business properly brought before the meeting.

We have attached a Proxy Statement that contains more information about these items and the meeting. Stockholders that own stock at the close of business on June 15, 2009, can vote at the meeting. A list of our stockholders entitled to vote will be available for inspection by any stockholder at our offices in San Diego, during normal business hours for ten business days prior to the meeting. This list will also be available during the meeting.

This year, in accordance with new rules adopted by the U.S. Securities and Exchange Commission, we are using the Internet as our primary means of furnishing proxy materials to our stockholders. Accordingly, most stockholders will not receive paper copies of our proxy materials. We will instead send our stockholders a notice with instructions for accessing the proxy materials and voting electronically over the Internet or by telephone.

The notice also provides information on how stockholders may request paper copies of our proxy materials. We believe this new rule will help us reduce the environmental impact and costs of printing and distributing paper copies and improve the speed and efficiency by which our stockholders can access these materials. For those stockholders who elect to receive their proxy materials in the mail, please review the Proxy Statement and Annual Report and vote using the enclosed proxy card.

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

By Order of the Board of Directors,

CHRISTOPHER J. CALHOUN
Chief Executive Officer

San Diego, California, USA
July 2, 2009

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

PROXY STATEMENT

2009 ANNUAL MEETING OF STOCKHOLDERS

This Proxy Statement is being furnished in connection with the solicitation of proxies by and on behalf of our Board of Directors to be used at our Annual Meeting of stockholders to be held on August 13, 2009, and at any postponement of the Annual Meeting, for the purposes set forth in the accompanying notice of Annual Meeting. Our annual report for the year ended December 31, 2008 accompanies this Proxy Statement.

We have fixed the close of business on June 15, 2009 as the record date for the determination of the stockholders entitled to notice of and to vote at the Annual Meeting. Only holders of record of shares of our common stock on that date are entitled to notice of and to vote at the Annual Meeting. On April 15, 2009, there were 34,088,915 shares of our common stock outstanding.

Questions and Answers about the Meeting and Voting

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

A Proxy Statement is a document that the U.S. Securities and Exchange Commission ("SEC") regulations require us to give you when we ask you to sign a proxy card with regard to voting on proposals at the Annual Meeting. Among other things, a Proxy Statement describes those proposals and provides information about us. Our Board of Directors is soliciting the accompanying proxy to be used at the Annual Meeting and at any postponement of the Annual Meeting. The Annual Meeting will be held at our headquarters located at 3020 Callan Road, San Diego, California 92121. We will use the proxies received in connection with proposals to:

- Elect directors;
- Ratify the Audit Committee's selection of KPMG LLP as our independent registered public accounting firm for the 2009 fiscal year; and
- Transact any other business that is proposed in accordance with our by-laws before the Annual Meeting is finally adjourned.

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

We are now providing access to our proxy materials over the Internet. On or about July 2, 2009, we mailed a Notice of Internet Availability of Proxy Materials to our stockholders of record and beneficial owners. The Notice explains how you may access the proxy materials on the Internet and how you may vote your proxy. If you received a Notice by mail and would like to receive a printed copy of our proxy materials, you should follow the instructions for requesting printed materials included in the Notice.

3. What is a proxy?

A proxy is your legal designation of another person to vote the stock you own. That other person is called a proxy holder. Designation of a particular proxy holder can be effected by completion of a written proxy card, such as the one accompanying this Proxy Statement. Our Chief Executive Officer and Member of the Board of Directors, Christopher J. Calhoun, and our President and Member of the Board of Directors, Marc H. Hedrick, M.D., have each been designated as the proxy holders for the Annual Meeting.

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

The vast majority of our stockholders are represented on our share register in the name of a bank, broker or other third party institution and not in their own name. These stockholders are referred to as beneficial owners who hold their shares in street name. (In this situation, the banks, brokers, etc. are the stockholders of record.) If you have elected to hold your shares in certificate form, your name will appear directly on our register as a stockholder of record.

5. What different methods can I use to vote?

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

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

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

Only proxy cards and voting instruction forms that have been signed, dated and timely returned and only proxies that have been timely voted electronically will be counted in the quorum and voted. *The Internet and telephone voting facilities will close at 11:59 p.m. Eastern Time, August 12, 2009.*

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

You may also vote your shares in person at the Annual Meeting. If you are a registered holder, you may request a ballot at the Annual Meeting. If your shares are held in street name and you wish to vote in person at the meeting, you must obtain a proxy issued in your name from the record holder (e.g., your

broker) and bring it with you to the Annual Meeting. We recommend that you vote your shares in advance as described above so that your vote will be counted if you later decide not to attend the Annual Meeting.

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

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

The record date for the 2009 Annual Meeting is June 15, 2009. The record date is established by our Board of Directors as required by Delaware General Corporation law. Owners of our common stock at the close of business on the record date are entitled to receive notice of the meeting and to vote at the meeting and any postponements of the meeting.

7. How can I change my vote?

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

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

In voting on the election of director nominees to serve until the 2010 Annual Meeting, stockholders may vote in favor of each nominee, or may withhold votes as to each nominee. In addition, if any other candidates are properly nominated at the meeting, stockholders of record who attend the meeting could vote for the other candidates. Directors will be elected by a plurality. Stockholders are not entitled to cumulative voting rights with respect to the election of directors.

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

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

In voting on the ratification of the selection of our independent registered public accounting firm, stockholders may vote in favor of the selection or against the selection, or may abstain from voting on the selection. The affirmative vote of a majority of the shares of common stock present or represented by proxy and voting at the meeting is required to approve this proposal. Abstentions have the same effect as votes against the proposal.

The Board recommends a vote "FOR" ratification.

10. How will a proxy get voted?

If you properly fill in and return the accompanying proxy card, the designated proxy holders (the individuals named on your proxy card) will vote your shares as you have directed. If you sign the proxy card but do not make specific choices, the designated proxy holders will vote your shares as recommended by the Board of Directors as follows:

- "**FOR**" the election of each listed nominee for director; and
- "**FOR**" ratification of KPMG LLP as our independent registered public accounting firm for the 2009 fiscal year.

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

Abstentions and broker non-votes will count toward establishing a quorum. Broker non-votes occur when brokers holding shares in street name for beneficial owners do not receive instructions from the beneficial owners about how to vote the shares. An abstention occurs when a stockholder withholds his or her vote by checking the "abstain" box on the proxy card or (if present and voting at the meeting) a ballot.

Because custodians will have discretionary voting authority with respect to election of directors and the ratification of the independent registered public accounting firm, broker non-votes will have no effect with respect to the election of directors or ratification of the appointment of the independent registered public accounting firm. The outcome of these proposals is determined by a majority of votes cast, and abstentions and broker non-votes will have no effect on the outcome because they are not counted as votes cast for or against the proposal.

12. Who pays for the solicitation of proxies?

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

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

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

13. What constitutes a quorum?

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

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

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

PROPOSAL #1. ELECTION OF DIRECTORS

The Board of Directors, upon recommendation of our Governance and Nominating Committee, has nominated the following persons listed below for election as directors. Effective upon the Annual Meeting, our Board of Directors will be composed of seven members. The names of the seven nominees for election as directors are set forth below (the ages shown are as of August 13, 2009). Each of the nominees is currently serving as a member of our Board of Directors. All directors are elected annually and serve a one-year term until the next Annual Meeting, or until their respective successors are duly elected. All of the nominees listed below are expected to serve as directors if they are elected. If any nominee should decline or be unable to accept such nomination or to serve as a director, an event which our Board of Directors does not now expect, our Board of Directors reserves the right to nominate another person or to vote to reduce the size of our Board of Directors. If another person is nominated, the proxy holders intend to vote the shares to which the proxy relates for the election of the person nominated by our Board of Directors.

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

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

Nominees and Business Experience

Name	Age	Position
Ronald D. Henriksen	70	Chairman of the Board of Directors
Christopher J. Calhoun	43	Chief Executive Officer and Director
Marc H. Hedrick, MD	46	President and Director
Richard J. Hawkins	60	Director
Paul W. Hawran	57	Director
E. Carmack Holmes, MD	71	Director
David M. Rickey	53	Director

Ronald D. Henriksen joined us as a Director in October 2002 and was appointed Chairman of the Board in April 2007. Mr. Henriksen was previously a board member of our predecessor, StemSource, Inc., and has more than 30 years of experience in healthcare, pharmaceutical, biotechnology and consulting and venture capital industries. He currently serves as Chief Investment Officer of Twilight Ventures, LLC, Chairman of the Board of Angel Learning, Inc., and President and board member of EndGenitor Technologies, Inc. In addition, he is on the Board of Directors of Semafore Pharmaceuticals and Biostorage Technologies, Inc. For more than 20 years, Mr. Henriksen held executive positions with Eli Lilly, where he served as Managing Director for Brazil, Mexico and Central America, and negotiated international contracts through Lilly Business Development. He earned a B.S. in Industrial Administration at Iowa State University and an M.B.A. with distinction from Harvard Business School. Mr. Henriksen also served as an officer for four years in the U.S. Navy.

Christopher J. Calhoun is a co-founder of the Company and has served as Chief Executive Officer and Director since 1997. Mr. Calhoun also served as our President from April 2002 to May 2005, and from 1996 to 1998. He is a co-inventor on multiple U.S. and international patents for medical devices and implant instrumentation, and was involved in research and management for the Plastic Surgery Bone Histology and Histometry Laboratory at the University of California, San Diego. Mr. Calhoun is a co-founder and Chairman of the Board of Leonardo MD, and previously served on the Board of Directors of our predecessor, StemSource, Inc. Mr. Calhoun earned a B.A. from the University of California, San Diego and an M.B.A from the University of Phoenix.

Marc H. Hedrick, M.D. was appointed President of the Company in May 2004, and joined us as Chief Scientific Officer, Medical Director and Director in October 2002. In December 2000, Dr. Hedrick co-founded and served as President and Chief Executive Officer of StemSource, Inc., a company specializing in stem cell research and development. He is a plastic surgeon, and is a former Associate Professor of Surgery and Pediatrics at the University of California, Los Angeles (UCLA). From 1998 until 2005, he directed the Laboratory of Regenerative Bioengineering and Repair for the Department of Surgery at UCLA. Dr. Hedrick earned his M.D. degree from University of Texas Southwestern Medical School, Dallas and an M.B.A. from UCLA Anderson School of Management.

Richard J. Hawkins joined us as a Director in December 2007. Since 2004, he has served as the Chairman and CEO of LabNow Inc., a diagnostic device company developing rapid, point-of-care, physician office-based diagnostic testing systems. Mr. Hawkins previously founded and guided the growth of Pharmaco, a clinical drug development services company, where he served as Chairman, President, and Chief Executive Officer. After selling Pharmaco, Mr. Hawkins founded id2, a pharmaceutical and biotechnology research management company; Sensus Drug Development Corporation, a biotechnology company that was sold to Pfizer; and Covance Biotechnology Services, Inc. Mr. Hawkins previously served on the Board of Directors of Synarc, Inc., and as Chairman of the Board for LoopOne, Inc. In addition to his role as Chairman of the Board for LabNow Inc., Mr. Hawkins also currently serves on the Board of Directors of SciClone Pharmaceuticals Inc. He served on the Presidential Advisory Committee for the Center for Nano and Molecular Science and Technology at the University of Texas in Austin, and was inducted into the Hall of Honor for the College of Natural Sciences at the University of Texas. Mr. Hawkins holds a B.S. in biology from Ohio University.

Paul W. Hawran joined us as a Director in February 2005. Mr. Hawran has been Chief Financial Officer of Sequenom, Inc., a genetics company, since April 2007. In addition, he served on the Board of Directors of Sequenom from August 2006 to February 2007. Mr. Hawran served as Executive Vice President and Chief Financial Officer of Neurocrine Biosciences, Inc. from January 2001 through September 2006, and as a Senior Advisor to Neurocrine from September 2006 through April 2007. Before that, he served as Senior Vice President and Chief Financial Officer of Neurocrine from 1996 to 2001 and as Vice President and Chief Financial Officer from 1993 to 1996. Mr. Hawran was employed by SmithKline Beecham (now Glaxo SmithKline) from July 1984 to May 1993, most recently as Vice President and Treasurer. Prior to joining SmithKline in 1984, he held various financial positions at Warner Communications (now Time Warner) involving corporate finance, financial planning and domestic and international budgeting and forecasting. Mr. Hawran earned a B.S. in finance from St. John's University and an M.S. in taxation from Seton Hall University. He is a Certified Public Accountant and is a member of the American Institute of Certified Public Accountants.

E. Carmack Holmes, M.D. joined us as a Director in August 2003. Dr. Holmes served as the Surgeon-in-Chief of the University of California Los Angeles (UCLA) Medical Center and held the position of William P. Longmire, Jr. Professor and Chairman, Department of Surgery, UCLA School of Medicine, from 1994 to 2004. He joined UCLA in 1973 and has held professorial positions in the Divisions of Cardiothoracic Surgery and Surgical Oncology for over 30 years. He served as Vice-Chairman for five years prior to holding the positions of Chairman and Surgeon-in-Chief for the past ten years. Dr. Holmes is the recipient of numerous awards and grants and professional memberships including the American Surgical Association, the American College of Surgeons and the Association for Academic Surgeons. He has authored 250 medical publications throughout his career and has been an internationally invited lecturer for over 25 years. His surgical training was conducted at Johns Hopkins University and the National Cancer Institute at the National Institutes of Health (NIH). Dr. Holmes graduated from Duke University and holds an M.D. from the University of North Carolina Medical School.

David M. Rickey has served as Director of the Company since November 1999. Mr. Rickey has been a principal of Rickey Enterprises, a family investment firm, since 2005. From 1996 to 2005, he was

President and Chief Executive Officer of Applied Micro Circuits Corporation, which provides high-performance, high-bandwidth silicon solutions for optical networks. Mr. Rickey also served as a Director and Chairman of the Board of Applied Micro Circuits Corporation and as a Director of AMI Semiconductor, Inc., and Netlist, Inc. He holds a B.S. from Marietta College, a B.S. from Columbia University and an M.S. from Stanford University.

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

PROPOSAL #2. RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Our Audit Committee has selected KPMG LLP ("KPMG") as our independent registered public accounting firm for the fiscal year ending December 31, 2009, and has further directed that we submit the selection of the independent registered public accounting firm for ratification by our stockholders at the Annual Meeting. KPMG was our independent registered public accounting firm for the fiscal year ended December 31, 2008. The selection of the independent registered public accounting firm is not required to be submitted for stockholder approval. However, if the stockholders do not ratify this selection, the Audit Committee will reconsider its selection of KPMG. Even if the selection is ratified, our Audit Committee may direct the appointment of a different independent accounting firm at any time during the year if the Audit Committee determines that the change would be in the Company's best interests.

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

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

YOUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE RATIFICATION OF THE SELECTION OF KPMG LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR FISCAL YEAR 2009.

CORPORATE GOVERNANCE

The Board of Directors held six meetings and action was taken via unanimous written consent four times during 2008. The Audit Committee met five times and took action via unanimous written consent once; the Compensation Committee met two times and took action via unanimous written consent four times; the Governance and Nominating Committee met once and took action via unanimous written consent two times; the Special Pricing Committee met twice; and the Executive Committee took action via unanimous written consent four times.

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

Board Independence

The Board of Directors has determined that Messrs. Henriksen, Hawkins, Hawran, Rickey, and Dr. Holmes are "independent" under the rules of the Nasdaq Stock Market. Under applicable SEC and the Nasdaq Global Market rules, the existence of certain "related person" transactions above certain thresholds between a director and the company are required to be disclosed and preclude a finding by the Board that the director is independent.

Board Committees

The Board of Directors has standing Audit, Compensation, Executive, and Governance and Nominating Committees. All members of the Compensation Committee, Audit Committee, and Governance and Nominating Committee are independent directors.

Compensation Committee.

The Compensation Committee consists of David M. Rickey (Chairman), Ronald D. Henriksen and Paul W. Hawran, each of whom is independent as defined by NASDAQ, a "Non-Employee Director" as defined by rule 16b-3(b)(3)(i) of the Securities Exchange Act of 1934, as amended, and an "outside director" as defined by Section 162(m) of the Internal Revenue Code of 1986, as amended. The Committee Chairman is responsible for setting the Committee's calendar and meeting agenda.

The Compensation Committee is responsible for developing and implementing compensation programs for our executive officers and other employees, subject only to the discretion of the full Board. More specifically, our Compensation Committee administers our Amended and Restated 1997 Stock Option and Stock Purchase Plan and 2004 Equity Incentive Plan, and our Executive Management Incentive Compensation Plan. This Committee establishes the compensation and benefits for our Chief Executive Officer and other executive officers, including annually reviewing the relationship between our performance and our compensation policies. In addition, this Committee reviews and advises the Board concerning regional and industry-wide compensation practices and trends in order to assess the adequacy of our executive compensation programs. The charter of the Compensation Committee has been established and approved by the Board of Directors, and a copy of the charter has been posted on our website at www.cytoritx.com.

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

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

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

Audit Committee. Mr. Hawran (chairman), Mr. Henriksen, Mr. Hawkins and Mr. Rickey are the members of our Audit Committee. The Audit Committee is comprised solely of independent directors, as that term is defined by Rule 4200 of the Nasdaq Marketplace Rules. The Audit Committee selects our auditors, reviews the scope of the annual audit, approves the audit fees and non-audit fees to be paid to our auditors, and reviews our financial accounting controls with the staff and the auditors. The Board of Directors has determined that Mr. Hawran is an "audit committee financial expert" within the meaning of Item 407(d)(5) of SEC Regulation S-K. The charter of the Audit Committee has been established and approved by the Board of Directors, and a copy of the charter has been posted on our website at www.cytoritx.com.

Governance and Nominating Committee. Mr. Henriksen (chairman), Mr. Hawkins, Mr. Hawran and Dr. Holmes are the members of our Governance and Nominating Committee. The Governance and Nominating Committee is comprised solely of independent directors, as that term is defined by Rule 4200 of the Nasdaq Marketplace Rules. The Governance and Nominating Committee interviews, evaluates, nominates and recommends individuals for membership on the Board, evaluates the effectiveness of the Board, and recommends the structure, responsibility and composition of the committees of the Board. The committee is also responsible for recommending guidelines and policies for corporate governance for adoption by the Board, and for evaluating and making recommendations to the Board with respect to the compensation of the non-employee directors of the Board. The charter of the Governance and Nominating Committee has been established and approved by the Board of Directors, and a copy of the charter has been posted on our website at www.cytoritx.com.

Executive Committee. Mr. Henriksen (chairman), and Mr. Calhoun are the members of our Executive Committee. The Executive Committee evaluates and approves or rejects corporate expenditures equal to or greater than $250,000 up to a single transaction maximum of $1,000,000, with certain additional budgetary guidelines.

DIRECTOR NOMINATIONS

Criteria for Board Membership. In selecting candidates for appointment or re-election to the Board, the Governance and Nominating Committee considers the appropriate balance of experience, skills and characteristics required of the Board of Directors, and seeks to insure that at least a majority of the directors are independent under the rules of the Nasdaq Stock Market, and that members of the Company's Audit Committee meet the financial literacy and sophistication requirements under the rules of the Nasdaq Stock Market, and at least one of them qualifies as an "audit committee financial expert" under the rules of the Securities and Exchange Commission. Nominees for director are selected on the basis of their relevance, depth and breadth of experience, reputation among our various constituencies and communities, integrity, ability to make independent analytical inquiries, understanding of the Company's business environment, and willingness to devote adequate time to Board duties, but there are no other pre-established qualifications, qualities or skills at this time that any particular director nominee must possess.

Stockholder Nominees. The Governance and Nominating Committee is responsible for the consideration of any director candidates recommended by security holders, provided such nominations are made pursuant to the Company's Bylaws and applicable law. The Committee does not have a specific protocol with regard to the consideration of any director candidates recommended by security holders, because no such candidates have ever been proposed. However, any recommendations received from the security holders will be evaluated in the same manner that potential nominees suggested by Board members, management or other parties are evaluated. Any such nominations should be submitted to the Governance and Nominating Committee c/o the Secretary of the Company and should include the following information: (a) all information relating to such nominee that is required to be disclosed pursuant to Regulation 14A under the Securities Exchange Act of 1934 (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected); (b) the names and addresses of the stockholders making the nomination and the number of shares of the Company's common stock which are owned beneficially and of record by such stockholders; and (c) other appropriate biographical information and a statement as to the qualification of the nominee, and should be submitted no later than the deadlines described in the Bylaws of the Company and under the caption, "Stockholder Proposals for 2010 Annual Meeting" below.

STOCKHOLDER COMMUNICATION WITH THE BOARD

The Board of Directors has appointed Paul W. Hawran as Chairman of the Audit Committee. In addition, he is a member of the Governance and Nominating Committee and is responsible for facilitating compliance with our Code of Business Conduct and Ethics. Stockholders and other parties interested in communicating directly with Mr. Hawran or with the non-management directors as a group may do so by writing to Paul W. Hawran, 3020 Callan Road, San Diego, CA 92121, USA. If the communication so requests and Mr. Hawran determines that it is appropriate to do so, he will share the communication with the entire Board of Directors.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

The Compensation Committee consists of Messrs. Rickey (Chair), Henriksen and Hawran, each of whom is an independent director, and none of whom is a current or former employee of the Company. During 2008, none of our executive officers served as a director or member of the Compensation Committee or any Board committee performing equivalent functions for another entity that has one or more executive officers serving on our Board of Directors.

CODE OF ETHICS

We have adopted a code of business conduct and ethics that applies to all officers and employees, including our principal executive officer, principal financial officer and controller. This code of business conduct and ethics has been posted on our website at www.cytoritx.com.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information regarding ownership of our Common Stock as of April 15, 2009 (or earlier date for information based on filings with the Securities and Exchange Commission) by (a) each person known to us to own more than 5% of the outstanding shares of the Common Stock, (b) each director and nominee for director, (c) our Chief Executive Officer, Chief Financial Officer and each other executive officer named in the compensation tables appearing later in this Proxy Statement and (d) all directors and executive officers as a group. The information in this table is based solely on statements in filings with the Securities and Exchange Commission (the "SEC") or other reliable information. A total of 34,088,915 shares of our common stock were issued and outstanding as of April 15, 2009.

Name and Address of Beneficial Owner [1]	Number of Shares of Common Stock Owned [2]	Number of Shares of Common Stock Subject to Options Exercisable Within 60 Days [3]	Total Number of Shares of Common Stock Beneficially Owned [4]	Percent Ownership
Olympus Corporation Shinjuku Monolith, 3-1 Nishi-Shinjuku 2-Chome, Shinjuku-ku, Tokyo 163-0914, Japan	4,013,043	594,406	4,607,449	13.3%
Neil Gagnon [5] 1370 Avenue of the Americas, Suite 2400, New York, NY 10019	2,806,724	266,925	3,073,649	8.9%
Green Hospital Supply, Inc. 3-20-8 Kasuga Suita-City Osaka 565-0853, Japan	3,000,000	—	3,000,000	8.8%
Christopher J. Calhoun	120,000	1,001,872	1,121,872	3.2%
Marc H. Hedrick, MD	440,038	407,707	847,745	2.5%
Mark E. Saad	76,500	370,623	447,123	1.3%
Bruce A. Reuter	4,193	300,102	304,295	*
Seijiro N. Shirahama	8,700	257,915	266,615	*
David M. Rickey	168,558	99,374	267,932	*
Ronald D. Henriksen	23,161	238,542	261,703	*
E. Carmack Holmes, MD	15,161	184,374	199,535	*
Paul W. Hawran	—	114,374	114,374	*
Richard J. Hawkins	—	38,750	38,750	*
All executive officers and directors as a group (13)	865,511	3,285,737	4,151,248	11.1%

* Represents beneficial ownership of less than one percent (1%) of the outstanding shares as of April 15, 2009.

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

(2) Represents shares of outstanding common stock owned by the named parties as of April 15, 2009.

(3) Shares of common stock subject to stock options currently exercisable or exercisable within 60 days of April 15, 2009 are deemed to be outstanding for computing the percentage ownership of the person holding such options and the percentage ownership of any group of which the holder is a member, but are not deemed outstanding for computing the percentage of any other person.

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

security. A person is also deemed to be a beneficial owner of any securities for which that person has a right to acquire beneficial ownership within 60 days.

(5) Information reported is based on a Schedule 13G as filed with the Securities and Exchange Commission on February 18, 2009. According to the Schedule 13G, Mr. Gagnon has (i) sole power to vote or to direct the vote of 1,542,925 shares; (ii) shared power to vote or to direct the vote of 1,431,091 shares; (iii) sole power to dispose or to direct the disposition of 1,542,925 shares; and (iv) shared power to dispose or to direct the disposition of 1,530,724 shares. Mr. Gagnon is the managing member and the principal owner of Gagnon Securities LLC. In its role as investment manager to certain funds (the "Funds"), Gagnon Securities LLC shares investment and/or voting power with Mr. Gagnon over certain securities of the Company that are owned by the Funds and may be deemed to be the beneficial owner of these securities.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Related Person Transactions

We consider Green Hospital Supply, Inc. ("GHS") to be a "related person" inasmuch as it is currently a holder of our securities covered by Item 403(a) of Regulation S-K.

GHS Stock Purchase

In February 2008, we entered into a Common Stock Purchase Agreement to sell 2,000,000 shares of common stock at $6.00 per share to GHS in a private placement. On February 29, 2008 we closed the first half of the private placement with GHS and received the initial $6,000,000, and on April 30, 2008 we closed the second half of the private placement with GHS and received the remaining $6,000,000.

Other Transactions

Change of Control Agreements. In January 2008, we entered into individual change of control agreements with Mr. Calhoun, Dr. Hedrick, and Mr. Saad (filed as Exhibits 10.52, 10.53, and 10.54 to our Annual Report on Form 10-K, as filed with the SEC on March 14, 2008). These agreements are described below in the "Compensation Discussion & Analysis".

Procedures for Approval of Related Person Transactions

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

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

We expect our directors, officers and employees to act and make decisions that are in the Company's best interests and encourage them to avoid situations which present a conflict between our interests and their own personal interests. Our directors, officers and employees are prohibited from taking any action that may make it difficult for them to perform their duties, responsibilities and services to the Company in an objective and fair manner. Exceptions are only permitted in the reasonable discretion of the Board of Directors or the Corporate Governance and Nominating Committee, consistent with the best interests of the Company. In addition, we are strictly prohibited from extending personal loans to, or guaranteeing the personal obligations of, any director or officer.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934 requires our directors, executive officers, and persons or entities who own more than ten percent of our common stock, to file with the Securities and Exchange Commission reports of beneficial ownership and changes in beneficial ownership of our common stock. Those directors, officers, and stockholders are required by regulations to furnish us with copies of all forms they file under Section 16(a). Based solely upon a review of the copies of such reports furnished to us and written representations from such directors, officers, and stockholders, we believe that all such reports required to be filed during 2008 or prior fiscal years were filed on a timely basis, except in instances disclosed in our proxy statements for prior annual stockholders meetings.

COMPENSATION AND OTHER INFORMATION CONCERNING DIRECTORS AND EXECUTIVE OFFICERS

Biographical Information

The following table sets forth biographical information regarding our executive officers as of April 30, 2009 (the ages shown are as of August 13, 2009).

Name	Age	Position(s)
Christopher J. Calhoun	43	Chief Executive Officer
Marc H. Hedrick, MD	46	President
Mark E. Saad	39	Chief Financial Officer
Seijiro N. Shirahama	55	President — Asia Pacific
Bruce A. Reuter	60	Senior Vice President — International Sales, Marketing & Distribution
Douglas Arm, Ph.D.	40	Sr. Vice President — Operations
Alexander M. Milstein, MD	50	Vice President — Clinical Development
Kenneth K. Kleinhenz	45	Vice President — Quality & Regulatory Affairs

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

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

Bruce A. Reuter was appointed Senior Vice President – International Sales, Marketing & Distribution in November 2006. He had served as our Senior Vice President of Business Development from January 2004 to July 2006 and as Senior Vice President International Business from September 2002 to January 2004. From September 2001 to September 2002, he served as our Vice President and General Manager of Bone Fixation Products, and from January 2001 to September 2001, he served as Vice President - Market Development. Before joining us, from January 1990 to October 2000, Mr. Reuter served as the Vice President and Managing Director of Mentor Corporation, a multi-national marketer of medical devices. He holds a B.A. from the University of Rhode Island and an M.B.A. from Memphis State University (now known as University of Memphis).

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

Douglas Arm, PhD was appointed Sr. Vice President, Operations in April 2009, and previously served as Vice President of Development – Regenerative Cell Technology since February 2005. Prior to joining us, Dr. Arm spent more than eight years at Interpore Cross International, the last several years as Director of Biologics Research. Before joining Interpore, he completed a post-doctoral fellowship with Dr. Arnold Caplan at the Skeletal Research Center at Case Western Reserve University, examining

various aspects of mesenchymal stem cells. Dr. Arm earned his B.S. in Biomedical Engineering from Johns Hopkins University in 1990, followed by his Ph.D. in Bioengineering from the University of Washington in 1995.

Alexander M. Milstein, MD joined us as Vice President – Clinical Development in June 2005. Before joining us, Dr. Milstein held the position of Director of Clinical Research at Medtronic, Inc., and as Director of Clinical Research and Development from November 2004 through May 2005. From 2000 to 2003, he was employed by Guidant Corporation as Manager, Clinical Trials, where he developed and managed implementation of worldwide clinical development strategies for several device/drug combination cardiovascular products. Before joining Guidant, he was Manager of Clinical Operations at Acusphere, Inc., a specialty pharmaceutical company. Dr. Milstein earned his M.D. degree from Moscow Medical Institute No. 2 (Pirogov) in Moscow, Russia.

Kenneth K. Kleinhenz was appointed Vice President of Quality & Regulatory Affairs in November 2007. He had served as our Director of Regulatory Affairs since joining us in 1999. From September 1998 to June 1999, Mr. Kleinhenz was the Technical Director of IFM Manufacturing. He served as Chief Microbiologist for Becton Dickenson from June 1997 to September 1998, and as Manager of Quality Assurance and Regulatory Affairs at Pacific Pharmaceuticals from September 1993 to June 1997. Mr. Kleinhenz is a veteran of the United States Navy, where he served as a Clinical Microbiologist for six years at the Naval Hospital, San Diego. He earned his B.S. in Microbiology at the University of California, San Diego (UCSD) and his M.B.A. in Technology Management at the University of Phoenix.

Compensation Discussion and Analysis

Compensation Philosophy for the Named Executive Officers

In September of 2007, our Compensation Committee engaged J. Thelander Consulting to conduct a comprehensive review of our compensation program for our Chief Executive Officer, President, Chief Financial Officer and our next two most highly compensated executive officers, collectively, the "Named Executive Officers" (or "NEOs"), for the fiscal year 2008. Acting at the request of the Compensation Committee, and without obligation to or influence by any other Company representatives, Ms. Thelander:

- Evaluated our total executive compensation structure (base pay, bonus and equity) by reference to proxy statements and other public company information for the peer groups described below;
- Generated a report identifying market compensation practices our comparability to those practices for each executive position; and
- Made recommendations to the Committee regarding compensation strategies for the Company.

As a result of the analysis and discussion with the consultant, we determined to shift our compensation objectives slightly to the following:

- Focus on "pay for performance" - align executive compensation with the overall short and long-term company objectives and with individual functional objectives;
- Attract, motivate and retain key talent – remain competitive while attracting and retaining the executive talent required to successfully implement our business strategy; and
- Align the financial interests of our executives with those of our stockholders – place a significant amount of total direct compensation "at risk" dependent upon performance of the Company. Thus a large portion of the executive compensation is tied directly to the long-term and short-term performance goals of the Company and the value it creates for our stockholders.

In comparison to our historical NEO compensation objectives, this represents an increased emphasis on performance-based pay component, and compensation linked to value it created for our stockholders.

2008 NEO Compensation

Benchmarking

The Committee, working with Ms. Thelander, identified two peer groups of U.S. public companies and reviewed benchmark data from their most recently filed proxy statements. The first peer group selected consisted of companies similar in size to us, which we defined as having a market capitalization of $50 million - $350 million, and in our industry, which we broadly defined as the healthcare industry. This group consisted of: ViaCell, Inc., StemCells, Inc. GenVec, Inc., Artes Medical, Inc., Aastrom Biosciences, Inc., Sequenom Inc., and Cardium Therapeutics. The second group identified consisted of healthcare/biotechnology companies which were deemed similar to us without regard to market capitalization, but instead based on similarity in business focus. This group consisted of ViaCell, Inc., Orthovita, Inc., XTENT, Inc., Artes Medical, Inc., Aastrom Biosciences, Inc., Osteotech, Inc., Thermogenesis Corp., and Cardium Therapeutics. We believe that by using two peer groups, even though there is some overlap, we obtained a reasonable analysis of the competitive marketplace for our management talent and relevant compensation data.

The Committee reviewed the ranking of total compensation, consisting of base salary, bonus and value of annual equity grant, for the CEO position, the President/CFO (2^{nd} level executives), and the Sr. Vice President positions as compared to that of the peer groups. The Company's CEO and Sr. Vice Presidents' compensation ranked at or near the middle of the peer groups for those positions, while the President and CFO compensation ranked at or near the top in the ranking of 2^{nd} level executives. The Committee did not set a specific target or specific compensation based on this data, but also considered recommendations from management and Ms. Thelander, individual executive performance and compensation history. This benchmarking affected our determinations regarding base salaries, annual incentive bonuses, and long-term equity compensation as described below.

Base Salary

Our Compensation Committee establishes NEO salaries based upon each executive's responsibilities, overall performance, and compensation history, as well as a desire to maintain internal equity among our management group and among our executives and other non-executive employees, in addition to our budgetary guidelines, labor market conditions and recommendations from Mr. Calhoun (other than with respect to his own salary). In addition, base salary for each executive is benchmarked to the range of salaries for executives in similar positions at peer group companies, as described above. After consideration of all the data and input noted above in "*Benchmarking,*" the Committee determined that it was appropriate to move towards a more heavily weighted 'pay-for-performance" compensation philosophy and did not adjust 2008 base salary for Mr. Calhoun, Dr. Hedrick and Mr. Saad from 2007 levels.

In November 2007, Mr. Reuter was given a base salary increase from $210,000 to $230,000 and Mr. Shirahama was given a base salary increase from $235,000 to $260,000.

Executive Management Incentive Compensation Plan

Our Compensation Committee adopted the Cytori Therapeutics Executive Management Incentive Compensation Plan (EMIC) to increase the performance-based component of NEO compensation by linking NEO bonus payments to achievement of shorter-term performance goals. Target bonuses are reviewed annually and established as a percentage of the executive's base salary, generally based upon seniority of the officer and targeted at or near the median of the peer group data described above. Each year the Committee establishes corporate and individual objectives and respective target percentages, taking into account recommendations from Mr. Calhoun as it relates to executive positions other than the CEO. Our 2008 target bonus percentages remained as adjusted in late 2007, reflecting our shift in

compensation objectives more toward "Pay for Performance". After fiscal year-end Mr. Calhoun provides the Committee with a written evaluation showing actual performance as compared to the objectives, and the Committee uses that information to determine what percentage of each NEO's bonus target will be paid out as a bonus for that year.

For 2008, the general Company objectives were determined by the Committee to weight as a possible maximum of 50% of the overall target bonus amounts, and those objectives were determined to be:

- Financial Objectives
  - Raise capital of targeted amount
  - Manage loss to prescribed level
  - Manage stock performance
  - Achieved prescribed cash balance and improved liquidity
  - Close a commercialization partnership
  - Achieve at least joint ownership of '231 patent

- Commercial and Operational Objectives
  - Initiate EU introduction for Celution and achieve target revenue
  - Initiate StemSource sales in Japan and install target number of cell banks

- Clinical and Regulatory Objectives
  - Achieve enrollment goals for clinical trials
  - Achieve expanded product claims in EU and regulatory filings in U.S.
  - Prepare and submit regulatory filings in various Asian countries

- Research and Development Objectives
  - Achieve improved manufacturing efficiency that results in lower cost of goods sold
  - Achieve key research objectives to support clinical priorities, partnerships and device development
  - Develop next generation prototype

The individual executives' objectives expanded upon their particular function in the overall Company objectives and were also weighted as 50% of the target bonus amount. Reflecting his overall responsibility for corporate performance, Mr. Calhoun's individual objectives were the same as the overall Company objectives.

The 2008 target bonus as a percentage of annual base salary remained as increased in 2007 to 50% for Mr. Calhoun; 40% for Dr. Hedrick and 35% for Mr. Saad. Mr. Reuter was given a target bonus increase from 20% to 25%, and Mr. Shirahama was given a target bonus increase from 20% to 25%.

Overall, we attempt to set the corporate and personal goals such that they are highly challenging yet attainable. Our corporate financial objectives are intended to be more difficult to achieve than our actual expected results, such that their attainment would require exceptional performance and dedication from our management team. However, as a result of the extreme financial market instability and the resulting challenging fiscal circumstances for the Company and based on the recommendation of our executive management team, the Board of Directors determined in its January 2009 session that it was in the best interests of the corporation that no bonuses under the 2008 EMIC Plan be paid to the management team, or throughout the rest of the organization.

Long-Term Equity Compensation

We designed our long-term equity grant program to further align the interests of our executives with those of our stockholders and to reward the executives' longer-term performance. The Committee

determines individual option grant awards based on its judgment as to whether the complete compensation packages to our executives, including prior equity awards, are sufficient to retain and incentivize the executives and whether the grants balance long-term vs. short-term compensation. In particular, the Compensation Committee reviewed the benchmark information provided by Ms. Thelander comparing our equity compensation to executives to the peer groups. The Committee considered our overall performance as well as the individual performance of each NEO and the potential dilutive and overhang effect of the option grant awards as well as recommendations from Mr. Calhoun (other than with respect to his own option grants).

After this review, the Compensation Committee granted 85,000 stock options to Mr. Calhoun; 60,000 to Dr. Hedrick; 55,000 to Mr. Saad and Mr. Shirahama, and 30,000 to Mr. Reuter in January 2008. While these grants represent a relatively small increase over 2007 grants, given our increased focus on performance-based compensation, in future periods the Committee intends to shift NEO compensation to include more equity compensation as a percentage of total compensation. You can find more information regarding these grants by referring to our Grants of Plan-Based Awards table on page 22.

Our policy is to grant stock options to the executives only at a regularly-scheduled Compensation Committee meeting in the first quarter of the year, or as new-hire or promotion grants. All stock options are granted with an exercise price equal to 100% of grant-date common stock fair market value. The Compensation Committee meeting dates are not related to dates for release of Company information.

Personal Benefits and Perquisites

All of our executives are eligible to participate in our employee benefit plans, including medical, dental, vision, life insurance, short-term and long-term disability insurance, flexible spending accounts, and 401(k). These plans are available to all full-time employees. In keeping with our philosophy to provide total compensation that is competitive within in our industry we do offer limited personal benefits and perquisites to executive officers that include supplemental long-term disability insurance and a tax preparation fee allowance. We also provide a supplemental life insurance policy for Mr. Calhoun. During a portion of 2008 Dr. Hedrick and Mr. Reuter were relocated to Italy in connection with their work assignments. We provided benefits to them, such as cost-of-living allowance, temporary housing expenses including maintenance of their existing homes in the U.S., family travel expenses, and automobile reimbursement. You can find more information on the amounts paid for these perquisites in our Summary Compensation Table on page 21.

Company Acquisition / Post-Termination Compensation

On November 1, 2007 the Committee resolved, based upon recommendations from and discussions with J. Thelander Consulting, that the Company should enter into change of control agreements with Mr. Calhoun, Dr. Hedrick, and Mr. Saad. The Committee reviewed benchmarking information, prepared by Ms. Thelander, of the change of control and severance packages for executives of the peer group of healthcare/biotechnology companies which were deemed similar to us based on similarity in business focus, without regard to market capitalization. (See "2008 NEO Compensation – Benchmarking" above on page 16 for a listing of those companies). The change of control terms approved by the Committee were generally consistent with those of the peer group and were implemented to enable the Company to stay competitive, as well as to retain key executives.

On January 31, 2008, we entered into individual change of control agreements (the "Agreements") with Mr. Calhoun, Dr. Hedrick, and Mr. Saad (filed as Exhibits 10.52, 10.53, and 10.54 to our Annual Report on Form 10-K, as filed with the SEC on March 14, 2008). The Agreements will provide for certain severance benefits to be paid to each of these executives in the event of his involuntary termination without cause, or due to the executive's resignation for good reason (including the Company's material breach of its obligations, material reduction in duties, responsibilities, compensation or benefits, or relocation by more than 30 miles without prior consent), provided such termination or resignation occurs in connection with an acquisition of the Company. Upon such termination or

resignation in the event of an acquisition, Mr. Calhoun would receive a lump sum payment of 18 times his monthly base salary, and 18 times his monthly COBRA payments, and Dr. Hedrick and Mr. Saad would each receive a lump sum payment of 12 times his monthly base salary, and 12 times his monthly COBRA payments. Notwithstanding the foregoing, these executives' employment may be terminated for cause (including extended disability, repudiation of the Agreement, conviction of a plea of no contest to certain crimes or misdemeanors, negligence that materially harms the company, failure to perform material duties without cure, drug or alcohol use that materially interferes with performance, and chronic unpermitted absence) without triggering an obligation for the Company to pay severance benefits under the Agreements.

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

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

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

Review of NEO Compensation for 2008/2009

In October of 2008, our Compensation Committee again evaluated our NEO compensation structure to establish base pay rates and target bonus percentages in connection with our Executive Management Incentive Compensation Plan (EMIC). The Committee considered compensation data including proxy statements from peer group of public companies similar in size to us, which we defined as having a market capitalization of $15 - $550 million, and in our industry, which we defined as stem cell or cell therapy companies traded on NASDAQ or the American Stock Exchange. The group consisted of Aastrom Biosciences; Athersys, Inc.; GenVec, Inc.; Geron; Isolagen; Osiris Therapeutics, StemCells, Inc. and Thermogenesis. The Committee also compared benchmark data for the 50th percentile base salary and target annual bonus in the 2008 Radford Biotechnology Executive Survey.

Despite this review, the Committee was informed by the executive management team of its recommendation that the Committee agree to freeze all salaries on a company wide basis at the 2008 level. The Committee agreed that the overall economic conditions in the United States and countries abroad made it imperative that the Company (which is not yet profitable) protect it's liquidity as much as possible. The Committee reviewed a number of plans to respond to the extraordinary financial situation and the Committee ultimately concluded that base salaries for 2009 should remain the same as the base salaries for 2008. The Committee also determined that no bonuses would be paid out under the 2008 EMIC Plan and that the 2009 EMIC Plan (including all potential bonuses thereunder) would be suspended until such time as the Committee determines that the financial conditions have become adequately stabilized. The Committee recognized that such actions could potentially result in the loss of some personnel and requested management to closely monitor the employees and the financial performance of the Company to quickly determine if further corrective measures must be taken.

In view of the company-wide base salary freeze for 2008/2009 (in addition to the base salary freeze for the CEO, President and CFO in 2007/2008); the elimination of all bonuses payable for 2008, and the suspension of the incentive bonus program for 2009, the Committee determined that an increase in equity incentives would be appropriate. It has been the Committee's purpose for the last few years to move more toward "pay for performance" in both the long term and short term compensation, and to

better align the financial interests of the executives with those of our stockholders. Due to the fact that the cash bonus targets under the 2009 EMIC Plan have been suspended due to the financial crisis, a greater emphasis on the long-term equity based compensation (stock option grants) was determined to be in the best interests of the Company. Therefore, the Committee determined that the annual stock option grants to the NEO's would be significantly increased in 2009. Thus, the Committee granted 100,000 stock options to Mr. Calhoun; 75,000 to Dr. Hedrick; 70,000 to Mr. Saad; 65,000 to Mr. Shirahama, and 40,000 to Mr. Reuter.

Summary Compensation Table

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

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Name and Principal Position	Year	Salary	Bonus [1]	Stock Awards	Option Awards[2]	Non-Equity Incentive Plan Comp.[3]	Change in Pension Value and NQ Deferred Comp.	All Other Comp-ensation	Total
Christopher J. Calhoun, Chief Executive Officer (PEO)	2008	$ 420,012	—	—	$ 256,339	—	—	$ 14,821 [4]	$ 691,172
	2007	$ 420,012	—	—	$ 228,601	$172,200	—	$ 10,501 [4]	$ 831,314
	2006	$ 395,002	—	—	$ 250,952	$121,800	—	$ 18,588 [4]	$ 786,342
Marc H. Hedrick, President	2008	$ 384,478	—	—	$ 180,645	—	—	$116,985 [7]	$ 682,108
	2007	$ 372,312	—	—	$ 160,098	$124,100	—	— [5]	$ 656,510
	2006	$ 331,669	—	—	$ 170,767	$ 84,863	—	$ 13,764 [6]	$ 601,063
Mark E. Saad, Chief Financial Officer (PFO)	2008	$ 350,015	—	—	$ 181,678	—	—	— [5]	$ 531,693
	2007	$ 350,015	—	—	$ 193,890	$ 99,225	—	— [5]	$ 643,130
	2006	$ 329,169	—	—	$ 232,433	$ 63,438	—	$ 10,838 [7]	$ 635,878
Seijiro N. Shirahama, President – Asia Pacific	2008	$ 260,000	—	—	$ 161,854	—	—	— [5]	$ 421,854
	2007	$ 239,167	—	—	$ 151,606	$ 55,250	—	— [5]	$ 446,023
	2006	$ 214,810	—	—	$ 227,636	$ 36,425	—	— [5]	$ 478,871
Bruce A. Reuter, Sr. Vice President – Int'l Sales Marketing & Distribution	2008	$ 254,830	—	—	$ 104,910	—	—	$91,991 [8]	$ 451,731
	2007	$ 219,469	—	—	$ 81,780	$ 46,575	—	— [5]	$ 347,824
	2006	$ 210,001	—	—	$ 192,198	—	—	$10,274 [8]	$ 412,473

(1) Column (d) is used to record non-equity discretionary (non-incentive based) bonuses made to our NEOs. We did not provide such bonuses in the fiscal years presented, therefore nothing is reflected in this column. Cash bonuses paid under our EMIC Plan are disclosed in column (g).

(2) This column represents the dollar amount recognized for financial statement reporting purposes during the fiscal years presented for the fair value of stock options granted to each of the named executives, in 2008 as well as prior fiscal years, in accordance with FAS 123R. Pursuant to the SEC rules, the amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. For additional information on the valuation assumptions with respect to the 2008 grants, refer to note 16 of the financial statements in our Annual Report on Form 10-K, as filed with the SEC on March 13, 2009.

(3) The amounts in column (g) reflect the cash awards under the 2008 EMIC Plan, which is discussed in further detail in the CD&A under the heading "2008 NEO Compensation – *Executive Management Incentive Compensation Plan*."

(4) All Other Compensation for Mr. Calhoun for 2008 includes supplemental long-term disability insurance premiums ($9,591) and supplemental term life insurance premiums ($3,230), and a tax preparation fee allowance ($2,000). All Other Compensation for Mr. Calhoun for 2007 includes supplemental long-term disability insurance premiums ($4,058), supplemental term life insurance premiums ($3,494), a tax preparation fee allowance ($2,000), and airfare for Mr. Calhoun's spouse to attend the Company's offsite management conference ($949). All Other Compensation for Mr. Calhoun for 2006 includes supplemental long-term disability insurance premiums ($3,433), supplemental term life insurance premiums ($2,155), an automobile allowance ($11,000), and a tax preparation fee allowance ($2,000).

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

(6) All Other Compensation for Dr. Hedrick for 2008 includes supplemental long-term disability insurance premiums ($9,035), a tax preparation fee allowance ($2,000), and foreign relocation reimbursement for temporary housing ($51,000), automobile cost reimbursement and personal and family travel expenses ($54,950). All Other Compensation for Dr. Hedrick for 2006 includes supplemental long-term disability insurance premiums ($1,764), an automobile allowance ($10,000), and a tax preparation fee allowance ($2,000).

(7) All Other Compensation for Mr. Saad for 2006 includes supplemental long-term disability insurance premiums ($838), an automobile allowance ($8,000), and a tax preparation fee allowance ($2,000).

(8) All Other Compensation for Mr. Reuter for 2008 includes supplemental long-term disability insurance premiums ($3,208), a tax preparation fee allowance ($2,000), and foreign relocation reimbursement for temporary housing and home maintenance ($76,443) and automobile cost reimbursement and personal and family travel expenses ($10,340). All Other Compensation for Mr. Reuter for 2006 includes supplemental long-term disability insurance premiums ($2,674), an automobile allowance ($5,600), and a tax preparation fee allowance ($2,000).

Grants of Plan-Based Awards

The following table sets forth information regarding grants of stock and option awards made to our Named Executive Officers during fiscal 2008:

(a)	(b)	(c-e)			(f-h)			(i)	(j)	(k)	(l)	(m)
		Potential 2008 Payouts Under Non-Equity Incentive Plan Awards			Estimated Future Payouts Under Equity Incentive Plan Awards			All Other Stock Awards: Number of Shares of Stock or Units	All Other Option Awards: Number of Securities Underlying Options	Exercise or Base Price of Option Awards	Market Price on Date of Grant	Full Grant Date Fair Value of Stock and Option Awards
Named Officers	Grant Date	Threshold ($)	Target ($)	Maximum ($)	Threshold (#)	Target (#)	Maximum (#)	(#)	(#)	($/Sh)	($/Sh)	($)[1]
Christopher J. Calhoun, Chief Executive Officer	1/31/2008	–	$210,000	–	–	–	–	–	85,000	$5.14	$5.14	$231,692
Marc H. Hedrick, President	1/31/2008	–	$146,000	–	–	–	–	–	60,000	$5.14	$5.14	$163,548
Mark E. Saad, Chief Financial Officer	1/31/2008	–	$122,500	–	–	–	–	–	55,000	$5.14	$5.14	$149,919
Seijiro N. Shirahama, President – Asia Pacific	1/31/2008	–	$65,000	–	–	–	–	–	55,000	$5.14	$5.14	$149,919
Bruce A. Reuter, Sr. Vice President – Int'l Sales, Marketing & Distribution	1/31/2008	–	$57,500	–	–	–	–	–	30,000	$5.14	$5.14	$81,774

(1) Computed in accordance with FAS 123R. See note 16 of the financial statements in our Annual Report on Form 10-K, as filed with the SEC on March 13, 2009 regarding assumptions underlying valuation of equity awards.

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

The stock options granted to the NEOs during 2008 have an exercise price of $5.14, which was the closing sale price of the Company's common stock on the Nasdaq Global Market on the date of grant. The option awards have a contractual term of 10 years and vest in equal monthly installments over a period of four years, subject to the NEO's continued service to the Company.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information regarding outstanding equity awards held by our Named Executive Officers as of December 31, 2008. All of such awards are stock options.

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
		Option Awards					Stock Awards			
Name	Option Grant Date [1]	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Un-Exercisable [2]	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price ($)	Option Ex-piration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ($)
Christopher J. Calhoun, Chief Executive Officer	1/1/2000	62,500	—	—	$3.00	1/1/2010	—	—	—	—
	1/3/2001	200,000	—	—	$7.06	1/3/2011	—	—	—	—
	2/8/2002	205,000	—	—	$3.09	2/8/2012	—	—	—	—
	1/28/2003	200,000	—	—	$4.40	1/28/2013	—	—	—	—
	6/2/2004	75,000	—	—	$4.16	6/2/2014	—	—	—	—
	2/2/2005	95,832	4,168	—	$3.12	2/2/2015	—	—	—	—
	1/24/2006	72,916	27,084	—	$7.04	1/24/2016	—	—	—	—
	2/26/2007	32,083	37,917	—	$5.44	2/26/2017	—	—	—	—
	1/31/2008	19,479	65,521	—	$5.14	1/31/2018	—	—	—	—
Marc H. Hedrick, President	11/14/2002	150,000	—	—	$4.15	11/14/2012	—	—	—	—
	1/28/2003	25,000	—	—	$4.40	1/28/2013	—	—	—	—
	6/2/2004	50,000	—	—	$4.16	6/2/2014	—	—	—	—
	2/2/2005	67,082	2,918	—	$3.12	2/2/2015	—	—	—	—
	1/24/2006	51,041	18,959	—	$7.04	1/24/2016	—	—	—	—
	2/26/2007	22,916	27,084	—	$5.44	2/26/2017	—	—	—	—
	1/31/2008	13,750	46,250	—	$5.14	1/31/2018	—	—	—	—
Mark E. Saad, Chief Financial Officer	6/21/2004	190,000	—	—	$4.12	6/21/2014	—	—	—	—
	2/2/2005	67,082	2,918	—	$3.12	2/2/2015	—	—	—	—
	1/24/2006	51,041	18,959	—	$7.04	1/24/2016	—	—	—	—
	2/26/2007	22,916	27,084	—	$5.44	2/26/2017	—	—	—	—
	1/31/2008	12,604	42,396	—	$5.14	1/31/2018	—	—	—	—
Seijiro N. Shirahama, President – Asia Pacific	10/28/2002	75,000	—	—	$4.14	10/28/2012	—	—	—	—
	6/2/2004	25,000	—	—	$4.16	6/2/2014	—	—	—	—
	2/2/2005	33,541	1,459	—	$3.12	2/2/2015	—	—	—	—
	12/8/2005	37,499	12,501	—	$6.86	12/8/2015	—	—	—	—
	1/24/2006	25,520	9,480	—	$7.04	1/24/2016	—	—	—	—
	2/26/2007	13,750	16,250	—	$5.44	2/26/2017	—	—	—	—
	11/15/2007	6,771	18,229	—	$5.35	11/15/2017	—	—	—	—
	1/31/2008	12,604	42,396	—	$5.14	1/31/2018	—	—	—	—
Bruce A. Reuter, Sr. Vice President – Int'l Sales, Marketing & Distribution	1/2/2001	100,000	—	—	$7.34	1/2/2011	—	—	—	—
	9/17/2001	35,000	—	—	$2.51	9/17/2011	—	—	—	—
	2/8/2002	30,000	—	—	$3.09	2/8/2012	—	—	—	—
	1/28/2003	29,895	—	—	$4.40	1/28/2013	—	—	—	—
	6/2/2004	13,020	—	—	$4.16	6/2/2014	—	—	—	—
	2/2/2005	12,396	—	—	$3.12	2/2/2015	—	—	—	—
	1/24/2006	4,375	—	—	$7.04	1/24/2016	—	—	—	—
	11/9/2006	36,458	33,542	—	$4.68	11/9/2016	—	—	—	—
	2/26/2007	13,750	16,250	—	$5.44	2/26/2017	—	—	—	—
	1/31/2008	6,875	23,125	—	$5.14	1/31/2018	—	—	—	—

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

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

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

Option Exercises and Stock Vested

The following table sets forth information regarding options exercised and shares of common stock acquired upon vesting by our Named Executive Officers during the fiscal ended December 31, 2008:

(a)	(b)	(c)	(d)	(e)
	Option Awards		Stock Awards	
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise ($)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting ($)
Christopher J. Calhoun, Chief Executive Officer	53,190	$471,010	—	—
Marc H. Hedrick, President	—	—	—	—
Mark E. Saad, Chief Financial Officer	—	—	—	—
Seijiro N. Shirahama, President – Asia Pacific	—	—	—	—
Bruce A. Reuter, Sr. Vice President – Int'l Sales, Marketing & Distribution	—	—	—	—

Pension Benefits

We did not have a pension plan nor did we provide pension benefits to our Named Executive Officers (or any other employees) during fiscal 2008.

Nonqualified Deferred Compensation

We did not permit compensation deferral by our Named Executive Officers (or any other employees) during fiscal 2008.

Potential Payments Upon Termination or Change In Control

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

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

	Acquisition[2]	Forced Separation Due to Acquisition[3]
PAYMENTS DUE UPON ACQUISITION / TERMINATION[1]:		
Cash Severance		
Base Salary[4]	$ —	$ 630,000
Benefits		
COBRA Premiums	—	$ 29,374
Long-Term Incentives		
Value of Accelerated Stock Options[5]	2,042	2,042
TOTAL VALUE	**$ 2,042**	**$ 661,416**

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

	Acquisition[2]	Forced Separation Due to Acquisition[3]
PAYMENTS DUE UPON ACQUISITION / TERMINATION[1]:		
Cash Severance		
Base Salary[4]	$ —	$ 365,000
Benefits		
COBRA Premiums	—	19,582
Long-Term Incentives		
Value of Accelerated Stock Options[5]	1,430	1,430
TOTAL VALUE	**$ 1,430**	**$ 386,012**

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

	Acquisition[2]	Forced Separation Due to Acquisition[3]
PAYMENTS DUE UPON ACQUISITION / TERMINATION[1]:		
Cash Severance		
Base Salary[4]	$ —	$ 350,000
Benefits		
COBRA Premiums	—	19,582
Long-Term Incentives		
Value of Accelerated Stock Options[5]	1,430	1,430
TOTAL VALUE	**$ 1,430**	**$ 371,012**

(1) Assumes a triggering event occurred on December 31, 2008.

(2) Based on the occurrence of an acquisition of the Company, provided that the executive is at that time still in the service of the Company.

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

(4) Based on the executive's annual base salary on December 31, 2008, which was $420,000 for Mr. Calhoun; $365,000 for Dr. Hedrick; and $350,000 for Mr. Saad.

(5) Based on the difference between the aggregate exercise price of all accelerated in-the-money stock options and the aggregate market value of the underlying shares, calculated based on the per-share closing market price of our common stock on December 31, 2008, $3.61.

Director Compensation

The following table summarizes director compensation during fiscal year 2008.

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Director Name[1]	Fees Earned or Paid in Cash[2] ($)	Stock Awards ($)	Option Awards[3][4] ($)	Non-Equity Incentive Plan Compensation ($)	Change in Pension Value and Nonqualified Deferred Compensation Earnings ($)	All Other Compensation ($)	Total ($)
Ronald D. Henriksen, Chairman	$65,500	–	$126,637	–	–	–	$192,137
Richard J. Hawkins	$34,500	–	$76,036	–	–	–	$110,536
Paul W. Hawran	$52,000	–	$121,420	–	–	–	$173,420
E. Carmack Holmes, MD	$30,500	–	$120,392	–	–	–	$150,892
David M. Rickey	$48,000	–	$120,392	–	–	–	$168,392

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

(2) In fiscal 2008, each non-employee director received a $5,000 quarterly retainer, a fee of $2,000 per quarterly meeting attended, and a fee of $2,000 per special meeting attended in person. Attendance of telephonic meetings was compensated at $500 per meeting. Compensation Committee members received $2,000 per meeting attended, Governance and Nominating Committee members received $2,000 per meeting attended, Audit Committee members received $2,000 per meeting attended, and Special Pricing Committee members received $500 per meeting attended. The Chairman of the Board received an additional annual stipend of $15,000, the Chairman of the Audit Committee received an additional annual stipend of $10,000, and the Chairmen of the Compensation Committee and the Governance and Nominating Committee each received an additional annual stipend of $7,500.

(3) Column (d) represents the dollar amount recognized for financial statement reporting purposes with respect to the 2008 fiscal year for the fair value of stock options previously granted to the directors, in 2008 as well as prior fiscal years, in accordance with FAS 123R. Pursuant to the SEC rules, the amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. For additional information on the valuation assumptions with respect to the 2008 grants, refer to note 16 of the financial statements in our Annual Report on Form 10-K, as filed with the SEC on March 13, 2009.

(4) As of December 31, 2008, the following directors held options to purchase the respective number of shares of our common stock: Richard J. Hawkins 50,000; Paul W. Hawran 125,000; Ronald D. Henriksen 250,000; E. Carmack Holmes 195,000; David M. Rickey 110,000.

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

The stock options granted to the non-employee directors during 2008 have an exercise price of $5.14, which was the closing sale price of the Company's common stock on the Nasdaq Global Market on the date of grant. The option awards have a contractual term of 10 years and vest in equal monthly installments over a period of two years, subject to the director's continued service to the Company

Equity Compensation Paid to Directors for Fiscal Year 2008

(a)	(b)	(c)	(d)		(e)	(f)	(g)
Director Name	**Grant Date**	**Option Awards (#)**	**Grant Date Fair Value of Option Awards ($)**		**Stock Awards (#)**	**Grant Date Fair Value of Stock Awards ($)**	**Total Value of Equity Awards for 2008 ($)**
Ronald D. Henriksen	1/31/2008	25,000	$ 68,145	(1)	–	–	$ 68,145
Richard J. Hawkins	–	–	–	(2)	–	–	–
Paul W. Hawran	1/31/2008	20,000	$ 54,516	(1)	–	–	$ 54,516
E. Carmack Holmes, MD	1/31/2008	20,000	$ 54,516	(1)	–	–	$ 54,516
David M. Rickey	1/31/2008	20,000	$ 54,516	(1)	–	–	$ 54,516

(1) The grant date fair value of the option award granted was $2.73 per share.

(2) Mr. Hawkins was not granted stock options in 2008, as he received a grant upon his appointment to the Board in December 2007.

Equity Compensation Plan Information

The following table summarizes information, as of December 31, 2008, relating to our equity compensation plans pursuant to which grants of options, restricted stock or other rights to acquire shares may be granted from time to time.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders[1]	3,810,395	$4.65	—
Equity compensation plans not approved by security holders[2]	2,118,312	$5.68	2,190,450
Total	5,928,707	$5.02	2,190,450

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

(2) 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.

On August 24, 2004, the 2004 Equity Incentive Plan of MacroPore Biosurgery, Inc. (the "Plan") became effective upon approval by our Board of Directors. (MacroPore Biosurgery, Inc. is our former corporate name.) The Plan is designed to provide 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 Compensation Committee of the Board shall administer the Plan and determine the number of shares underlying each award, the vesting of such shares and other important terms of awards pursuant to the terms of the Plan. Awards may be granted under the Plan over a ten-year period and the Board has initially reserved 3,000,000 shares of common stock for issuance under the Plan. The maximum number of shares reserved for issuance under the Plan may be cumulatively increased (subject to Board discretion) on an annual basis beginning January 1, 2005, as provided in the footnote to the Equity Compensation Plan Information table.

REPORT OF THE COMPENSATION COMMITTEE

The Compensation Committee provided the following statement:

"The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management. Based on these reviews and discussions, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in the Company's Annual Report on Form 10-K and in the annual meeting proxy statement on Schedule 14A.

Respectfully submitted,

Compensation Committee of the Board of Directors
David M. Rickey, Chair
Paul W. Hawran
Ronald D. Henriksen

April 30, 2009"

Notwithstanding anything to the contrary set forth in any of the Company's previous filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, that incorporate future filings, including this Proxy Statement, in whole or in part, the foregoing Compensation Committee Report and the following Audit Committee Report and the Comparative Stock Performance Graph shall not be incorporated by reference into any such filings.

AUDIT MATTERS

Report of the Audit Committee

Under the guidance of a written charter adopted by the Board of Directors, the purpose of the Audit Committee is to oversee the accounting and financial reporting processes of the Company and audits of its financial statements. The responsibilities of the Audit Committee include appointing and providing for the compensation of the Company's registered public accounting firm. Each of the members of the Audit Committee meets the independence requirements of Nasdaq.

Management has primary responsibility for the system of internal controls over financial reporting, disclosure controls and procedures, and for preparing the Company's consolidated financial statements. The independent registered public accounting firm has the responsibility to express an opinion on the financial statements based on an audit conducted in accordance with generally accepted auditing standards.

In this context and in connection with the audited financial statements contained in the Company's Annual Report on Form 10-K, the Audit Committee provided the following report:

"The Audit Committee has reviewed and discussed the Company's audited financial statements for the year ended December 31, 2008 with the Company's management and the Company's independent registered public accounting firm, KPMG LLP ("KPMG"). The Audit Committee has discussed with KPMG the matters required to be discussed by Statement of Auditing Standards No. 61, Communication with Audit Committees, as amended. The Audit Committee has received the written disclosures and the letter from KPMG required by Public Company Accounting Oversight Board Rule 3526, Communication with Audit Committees Concerning Independence, discussed with the auditors their independence, and concluded that the non-audit services performed by KPMG are compatible with maintaining their independence.

Based upon the Audit Committee's review and discussions as noted above, the Audit Committee recommended to the Board of Directors that the Company's audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2008 for filing with the Securities and Exchange Commission.

Respectfully submitted,

Audit Committee of the Board of Directors
Paul W. Hawran, Chair
Richard J. Hawkins
Ronald D. Henriksen
David M. Rickey

April 30, 2009"

Principal Accountant Fees and Services

The Audit Committee has appointed KMPG LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2009. The Audit Committee reviews and must pre-approve all audit and non-audit services performed by KPMG LLP as well as the fees charged by KPMG LLP for such services. No fees were approved under the Regulation S-X Rule 2.01(c)(7)(i)(C) exception to the pre-approval requirement. In its review of non-audit service fees, the Audit Committee considers, among other things, the possible impact of the performance of such services on the accounting firm's independence.

The following table shows the aggregate fees paid or accrued by the Company for the audit and other services provided by KPMG LLP for fiscal years ended December 31, 2008 and December 31, 2007.

	2008	2007
Audit fees [1]	$ 684,152	$ 630,746
Audit related fees [2]	—	—
Tax Fees [3]	—	$ 4,775
All other fees [4]	—	—
Total	$ 684,152	$ 635,521

(1) Audit fees consist of fees for professional services performed by KPMG LLP for the integrated audit of our annual financial statements (and internal control over financial reporting) included in our Form 10-K filing and review of financial statements included in our quarterly Form 10-Q filings, reviews of registration statements and issuances of consents, and services that are normally provided in connection with statutory and regulatory filings or engagements.

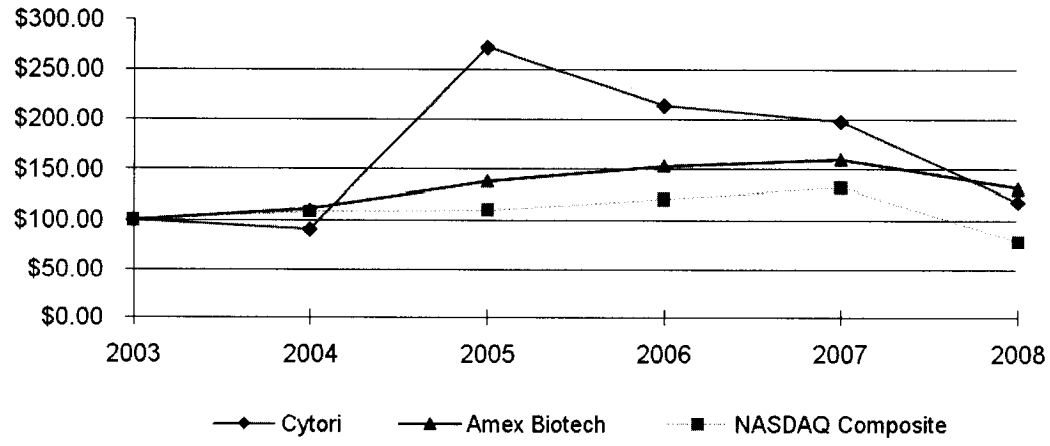
(2) Audit related fees consist of fees for assurance and related services performed by KPMG LLP that are reasonably related to the performance of the audit or review of our financial statements. No such fees were incurred in 2008 or 2007.

(3) Tax fees consist of fees for professional services performed by KPMG LLP with respect to tax compliance, tax advice and tax planning. In 2007, these fees were related to support services provided in connection with the transition of tax return preparation, tax advice and consultation, to another firm. No such fees were incurred in 2008.

(4) All other fees consist of fees for other permissible work performed by KPMG LLP that does not meet with the above category descriptions. No such fees were incurred in 2008 or 2007.

COMPARATIVE STOCK PERFORMANCE GRAPH

The following graph shows how (assuming reinvestment of all dividends) an initial investment of $100 in our common stock would have compared to an equal investment in the Nasdaq Composite Index and the Amex Biotechnology Index during the period from December 31, 2003, through December 31, 2008. The performance shown is not necessarily indicative of future price performance.



OTHER MATTERS

Stockholders Sharing the Same Address

In accordance with notices previously sent to many stockholders who hold their shares through a bank, broker or other holder of record (a "street-name stockholder") and share a single address, only one annual report and proxy statement is being delivered to that address unless contrary instructions from any stockholder at that address were received. This practice, known as "householding," is intended to reduce the Company's printing and postage costs. However, any such street-name stockholder residing at the same address who wishes to receive a separate copy of this Proxy Statement or accompanying Annual Report to Stockholders may request a copy by contacting the bank, broker or other holder of record, or the Company by telephone at: (858) 458-0900. The voting instruction sent to a street-name stockholder should provide information on how to request (1) householding of future Company materials or (2) separate materials if only one set of documents is being sent to a household. If it does not, a stockholder who would like to make one of these requests should contact the Company as indicated above.

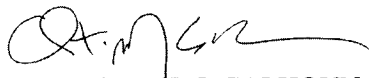
Stockholder Proposals for the 2010 Meeting

Stockholders are hereby notified that, if they intend to submit proposals for inclusion in our Proxy Statement and proxy for our 2010 Annual Meeting of stockholders, such proposals must be received by us no later than March 10, 2010 and must otherwise be in compliance with applicable Securities and Exchange Commission regulations. If our annual meeting date is substantially earlier or later in 2010 than in 2009, we have the right to change this deadline and give notice of the new deadline in a report filed with the Securities and Exchange Commission.

MISCELLANEOUS

Our Board of Directors knows of no other business to be presented at our Annual Meeting. If other matters properly come before our Annual Meeting, it is intended that the proxies in the accompanying form will be voted thereon in accordance with the judgment of the person or persons holding such proxies.

By Order of the Board of Directors,



CHRISTOPHER J. CALHOUN
Chief Executive Officer

CORPORATE OFFICERS

CHRISTOPHER J. CALHOUN
Chief Executive Officer

MARC H. HEDRICK, M.D.
President

MARK E. SAAD
Chief Financial Officer

SEIJIRO N. SHIRAHAMA
President Asia Pacific

BRUCE A. REUTER
Senior Vice President International Sales, Marketing and Distribution

DOUGLAS M. ARM, Ph.D.
Senior Vice President of Operations

KENNETH K. KLEINHENZ
Vice President Regulatory Affairs & Quality Assurance

ALEXANDER M. MILSTEIN, M.D.
Vice President Clinical Development

BOARD OF DIRECTORS

RONALD D. HENRIKSEN [A] [B] [C]
Chairman of the Board

DAVID M. RICKEY [A] [B]
Director

E. CARMACK HOLMES, M.D. [C]
Director

PAUL W. HAWRAN [A] [B] [C]
Director

RICHARD J. HAWKINS [A] [C]
Director

CHRISTOPHER J. CALHOUN
Chief Executive Officer, Vice-Chairman and Director

MARC H. HEDRICK, M.D.
President and Director

[A] Member of the Audit Committee
[B] Member of the Compensation Committee
[C] Member of the Nominating and Corporate Governance Committee

CORPORATE HEADQUARTERS

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STOCKHOLDER INFORMATION

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KPMG LLP
San Diego, California

TRANSFER AGENT
Computershare
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Canton, MA 02021
Tel. +1.800.962.4284

NOTICE OF ANNUAL MEETING
Cytori Therapeutics, Inc.
3020 Callan Road
San Diego, CA 92121
August 13, 2009, 9 AM PDT

STOCK SYMBOL NASDAQ: CYTX

cytoritx.com

Cytori Therapeutics, Inc.

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