

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

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**FORM 10-Q**

(Mark One)

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

**For the quarterly period ended March 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**

**CYTORI THERAPEUTICS, INC.**

(Exact name of Registrant as Specified in Its Charter)

**DELAWARE**

(State or Other Jurisdiction  
of Incorporation or Organization)

**33-0827593**

(I.R.S. Employer  
Identification No.)

**3020 CALLAN ROAD, SAN DIEGO, CALIFORNIA**

(Address of principal executive offices)

**92121**

(Zip Code)

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

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 ("the Exchange Act") during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark whether the registrant 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

As of April 30, 2008, there were 26,103,898 shares of the registrant's common stock outstanding.

**CYTORI THERAPEUTICS, INC.**

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**PART I. FINANCIAL INFORMATION**  
**Item 1. Financial Statements**

**CYTORI THERAPEUTICS, INC.**  
**CONSOLIDATED CONDENSED BALANCE SHEETS**  
**(UNAUDITED)**

	<u>As of</u> <u>March 31, 2008</u>	<u>As of</u> <u>December 31,</u> <u>2007</u>
<b>Assets</b>		
<b>Current assets:</b>		
Cash and cash equivalents	\$ 8,010,000	\$ 11,465,000
Accounts receivable, net of allowance for doubtful accounts of \$8,000 and \$1,000 in 2008 and 2007, respectively	146,000	9,000
Inventories, net	360,000	—
Other current assets	<u>782,000</u>	<u>764,000</u>
<b>Total current assets</b>	<b>9,298,000</b>	<b>12,238,000</b>
Property and equipment, net	3,270,000	3,432,000
Investment in joint venture	360,000	369,000
Other assets	507,000	468,000
Intangibles, net	1,023,000	1,078,000
Goodwill	<u>3,922,000</u>	<u>3,922,000</u>
<b>Total assets</b>	<b><u>\$ 18,380,000</u></b>	<b><u>\$ 21,507,000</u></b>
<b>Liabilities and Stockholders' Deficit</b>		
<b>Current liabilities:</b>		
Accounts payable and accrued expenses	\$ 6,707,000	\$ 7,349,000
Current portion of long-term obligations	<u>601,000</u>	<u>721,000</u>
<b>Total current liabilities</b>	<b>7,308,000</b>	<b>8,070,000</b>
Deferred revenues, related party	17,974,000	18,748,000
Deferred revenues	2,379,000	2,379,000
Option liability	1,200,000	1,000,000
Long-term deferred rent	399,000	473,000
Long-term obligations, less current portion	<u>184,000</u>	<u>237,000</u>
<b>Total liabilities</b>	<b>29,444,000</b>	<b>30,907,000</b>
<b>Commitments and contingencies</b>		
<b>Stockholders' deficit:</b>		
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; 26,976,732 and 25,962,222 shares issued and 25,103,898 and 24,089,388 shares outstanding in 2008 and 2007, respectively	27,000	26,000
Additional paid-in capital	136,108,000	129,504,000
Accumulated deficit	(140,405,000)	(132,132,000)
Treasury stock, at cost	(6,794,000)	(6,794,000)
Amount due from exercises of stock options	<u>—</u>	<u>(4,000)</u>
<b>Total stockholders' deficit</b>	<b><u>(11,064,000)</u></b>	<b><u>(9,400,000)</u></b>
<b>Total liabilities and stockholders' deficit</b>	<b><u>\$ 18,380,000</u></b>	<b><u>\$ 21,507,000</u></b>

SEE NOTES TO UNAUDITED CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

**CYTORI THERAPEUTICS, INC.**  
**CONSOLIDATED CONDENSED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS**  
**(UNAUDITED)**

	<b>For the Three Months Ended March 31,</b>	
	<b>2008</b>	<b>2007</b>
Product revenues:		
Related party	\$ —	\$ 280,000
Third party	153,000	—
	<u>153,000</u>	<u>280,000</u>
Cost of product revenues	<u>60,000</u>	<u>225,000</u>
Gross profit	<u>93,000</u>	<u>55,000</u>
Development revenues:		
Development, related party	774,000	—
Research grants and other	37,000	45,000
	<u>811,000</u>	<u>45,000</u>
Operating expenses:		
Research and development	4,963,000	4,996,000
Sales and marketing	958,000	546,000
General and administrative	3,111,000	3,166,000
Change in fair value of option liabilities	200,000	200,000
Total operating expenses	<u>9,232,000</u>	<u>8,908,000</u>
Operating loss	<u>(8,328,000)</u>	<u>(8,808,000)</u>
Other income (expense):		
Interest income	76,000	197,000
Interest expense	(23,000)	(52,000)
Other income (expense), net	11,000	(4,000)
Equity loss from investment in joint venture	(9,000)	(2,000)
Total other income, net	<u>55,000</u>	<u>139,000</u>
Net loss	<u>(8,273,000)</u>	<u>(8,669,000)</u>
Other comprehensive loss – unrealized loss	<u>—</u>	<u>(1,000)</u>
Comprehensive loss	<u>\$ (8,273,000)</u>	<u>\$ (8,670,000)</u>
Basic and diluted net loss per common share	<u>\$ (0.34)</u>	<u>\$ (0.43)</u>
Basic and diluted weighted average common shares	<u>24,442,655</u>	<u>20,063,750</u>

SEE NOTES TO UNAUDITED CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

**CYTORI THERAPEUTICS, INC.**  
**CONSOLIDATED CONDENSED STATEMENTS OF CASH FLOWS**  
**(UNAUDITED)**

	<b>For the Three Months Ended March 31,</b>	
	<b>2008</b>	<b>2007</b>
<b>Cash flows from operating activities:</b>		
Net loss	\$ (8,273,000)	\$ (8,669,000)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	392,000	397,000
Warranty provision	(11,000)	(17,000)
Increase in allowance for doubtful accounts	7,000	1,000
Change in fair value of option liabilities	200,000	200,000
Share-based compensation expense	554,000	548,000
Equity loss from investment in joint venture	9,000	2,000
Increases (decreases) in cash caused by changes in operating assets and liabilities:		
Accounts receivable	(144,000)	(9,000)
Inventories	(360,000)	(48,000)
Other current assets	(18,000)	(16,000)
Other assets	(39,000)	11,000
Accounts payable and accrued expenses	(631,000)	(511,000)
Deferred revenues, related party	(774,000)	—
Long-term deferred rent	(74,000)	(49,000)
	<u>(9,162,000)</u>	<u>(8,160,000)</u>
Net cash used in operating activities	<u>(9,162,000)</u>	<u>(8,160,000)</u>
<b>Cash flows from investing activities:</b>		
Proceeds from sale and maturity of short-term investments	2,239,000	16,060,000
Purchases of short-term investments	(2,239,000)	(14,846,000)
Purchases of property and equipment	(175,000)	(130,000)
	<u>(175,000)</u>	<u>(130,000)</u>
Net cash provided by (used in ) investing activities	<u>(175,000)</u>	<u>1,084,000</u>
<b>Cash flows from financing activities:</b>		
Principal payments on long-term obligations	(173,000)	(253,000)
Proceeds from exercise of employee stock options	55,000	227,000
Proceeds from sale of unregistered common stock	6,000,000	19,901,000
	<u>5,882,000</u>	<u>19,875,000</u>
Net cash provided by financing activities	<u>5,882,000</u>	<u>19,875,000</u>
Net increase (decrease) in cash and cash equivalents	(3,455,000)	12,799,000
Cash and cash equivalents at beginning of period	<u>11,465,000</u>	<u>8,902,000</u>
Cash and cash equivalents at end of period	<u>\$ 8,010,000</u>	<u>\$ 21,701,000</u>
<b>Supplemental disclosure of cash flow information:</b>		
Cash paid during period for:		
Interest	\$ 24,000	\$ 49,000
Taxes	—	2,000

SEE NOTES TO UNAUDITED CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

**CYTORI THERAPEUTICS, INC.**  
**NOTES TO CONSOLIDATED CONDENSED FINANCIAL STATEMENTS**  
**MARCH 31, 2008**  
**(UNAUDITED)**

**1. Basis of Presentation**

Our accompanying unaudited consolidated condensed financial statements as of March 31, 2008 and for the three months ended March 31, 2008 and 2007 have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information. Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States of America for annual financial statements. Our consolidated condensed balance sheet at December 31, 2007 has been derived from the audited financial statements at that date, but does not include all of the information and footnotes required by accounting principles generally accepted in the United States of America for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair presentation of the financial position and results of operations of Cytori Therapeutics, Inc., and our subsidiaries (the Company), have been included. Operating results for the three months ended March 31, 2008 are not necessarily indicative of the results that may be expected for the year ending December 31, 2008. For further information, refer to our consolidated financial statements for the year ended December 31, 2007 and footnotes thereto which were included in our Annual Report on Form 10-K, dated March 14, 2008.

**2. Use of Estimates**

The preparation of consolidated condensed 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. Actual results could differ from these estimates. Estimates and assumptions are reviewed periodically, and the effects of revisions are reflected in the consolidated condensed financial statements in the periods they are determined to be necessary.

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 12 and 13), determining the assumptions used in measuring share-based compensation expense, valuing our deferred tax assets, and assessing how to report our investment in Olympus-Cytori, Inc.

**3. Capital Availability**

We have a limited operating history and recorded the first sale of our products in 1999. We incurred losses of \$8,273,000 and \$8,670,000 for the three months ended March 31, 2008 and 2007, respectively, and have an accumulated deficit of \$140,405,000 as of March 31, 2008. Additionally, we have used net cash of \$9,162,000 and \$8,160,000 to fund our operating activities for the three months ended March 31, 2008 and 2007, respectively.

Management recognizes the need to generate positive cash flows in future periods and/or to obtain additional capital from various sources. In the continued absence of positive cash flows from operations, no assurance can be given that we can generate sufficient revenue to cover operating costs or that additional financing will be available to us and, if available, on terms acceptable to us in the future. See note 14 for discussion of financing arrangements completed subsequent to March 31, 2008.

The Company expects to utilize its cash and cash equivalents to fund its operations, including research and development of its products primarily for development and pre-clinical activities and for clinical trials. Additionally, the Company believes that without additional capital from operations and other accessible sources of financing it does not currently have adequate funding to complete the development, pre-clinical activities and clinical trials required to bring its future products to market, therefore, it will require significant additional funding. If the Company is unsuccessful in its efforts to raise additional funds through accessible sources of financing, strategic relationships or through revenue sources, it will be required to significantly reduce or curtail its research and development activities and other operations. Management actively monitors cash expenditures and projected expenditures as we progress toward our goals of product commercialization and sales in an effort to match projected expenditures to available cash flow.

#### 4. Segment Information

We manage our business based on two distinct operating segments – (a) Regenerative cell technology and (b) MacroPore Biosurgery.

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 three months ended March 31, 2008, we had no significant 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.

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:

	<b>For the three months ended March 31,</b>	
	<b>2008</b>	<b>2007</b>
<b>Revenues:</b>		
Regenerative cell technology	\$ 964,000	\$ 45,000
MacroPore Biosurgery	—	280,000
Total revenues	<u>\$ 964,000</u>	<u>\$ 325,000</u>
<b>Segment operating income (losses):</b>		
Regenerative cell technology	\$ (4,968,000)	\$ (5,351,000)
MacroPore Biosurgery	(49,000)	(91,000)
General and administrative expenses	(3,111,000)	(3,166,000)
Changes in fair value of option liabilities	(200,000)	(200,000)
Total operating loss	<u>\$ (8,328,000)</u>	<u>\$ (8,808,000)</u>
	<b>As of March 31,</b>	<b>As of December 31,</b>
	<b>2008</b>	<b>2007</b>
<b>Assets:</b>		
Regenerative cell technology	\$ 11,789,000	\$ 11,591,000
MacroPore Biosurgery	—	—
Corporate assets	6,591,000	9,916,000
Total assets	<u>\$ 18,380,000</u>	<u>\$ 21,507,000</u>

#### 5. 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 Accounting 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 considered cash equivalents as of March 31, 2008.

## **6. Summary of Significant Accounting Policies**

### ***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. We expense excess manufacturing costs, that is, costs resulting from lower than “normal” production levels.

Costs of materials capitalized on the balance sheet as of March 31, 2008 is representative of the cost of materials we had on hand as of March 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.

No inventory provisions were recorded during the first quarter of 2008 and 2007.

### ***Property and Equipment***

Property and equipment is stated at cost, net of accumulated depreciation. Depreciation expense is provided for on a straight-line basis over the estimated useful lives of the assets, or the life of the lease (as applicable), 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.

### ***Revenue Recognition***

#### ***Product Sales***

Beginning in March 2008, we began sales and shipments of our Celution® 800/CRS System to the European and Asia-Pacific reconstructive surgery market. Assuming all other applicable revenue recognition criteria have been met, revenue for these product sales will generally 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. 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”).

Before the disposal 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, under a Distribution Agreement dated January 5, 2000 and amended December 22, 2000 and October 8, 2002, as well as a Development and Supply Agreement dated January 5, 2000 and amended December 22, 2000 and September 30, 2002. 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.

#### ***License/Distribution Fees***

If separable under EITF Issue No. 00-21, “Revenue Arrangements with Multiple Deliverables” (“EITF 00-21”), 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 12), to a combined unit of accounting comprising a license we granted to Olympus-Cytori, Inc. (the "Joint Venture" or "JV"), 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 is non-refundable but may be applied towards any definitive commercial collaboration in the future. As part of this agreement, Olympus will conduct market research and pilot clinical studies in collaboration with us for the therapeutic area up to December 31, 2008 when this exclusive right will terminate. The \$1,500,000 payment was received in the second quarter of 2006 and recorded as deferred revenues, related party. The deferred revenues, related party will be recognized as revenue either (i) in connection with other consideration received as part of a definitive commercial collaboration in the future, or (ii) when the exclusive negotiation period expires.

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 have recorded the \$1,500,000 received as deferred revenues in the accompanying consolidated condensed 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.

No license/distribution fees have been recognized in the three month periods ended March 31, 2008 and 2007.

### *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 in our consolidated condensed statements of operations, 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 the consolidated condensed 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 condensed 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 12). 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, 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 will require the 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 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 \$0 in the three month periods ended March 31, 2008 and 2007, respectively. All related development costs are expensed as incurred and are included in research and development expense on the consolidated condensed statements 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 with respect to Senko, we did not recognize any development revenues in the three months ended March 31, 2008 and 2007, respectively. 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. 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 once commercialization is achieved. We will not recognize the potentially refundable portion of the fees until the right of refund expires.

## **7. Long-Lived Assets**

In accordance with SFAS No. 144, “Accounting for Impairment or Disposal of Long-Lived Assets,” we assess certain 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. During the three months ended March 31, 2008 and 2007, we had no impairment losses associated with our long-lived assets.

## **8. Share-Based Compensation**

Through December 31, 2007, we used the “simplified method” to estimate the expected term of our stock options, as outlined in SEC Staff Accounting Bulletin No. 107. Starting January 1, 2008, 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 will be estimated on the date of grant using the Black-Scholes-Merton option valuation model assuming an expected term of 5.0 years. The effect of this change on income from continuing operations and net income is immaterial.

During the first quarter of 2008, we issued to our officers and directors stock options to purchase an aggregate of up to 450,000 shares of our common stock, with four-year graded vesting for our officers and two-year graded vesting for our directors. The grant date fair value of 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.

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

We have excluded all potentially dilutive securities from the calculation of diluted loss per share attributable to common stockholders for the three months ended March 31, 2008 and 2007, as their inclusion would be antidilutive. Potentially dilutive common shares excluded from the calculations of diluted loss per share were 8,248,870 and 8,157,587 for the three month periods ended March 31, 2008 and 2007, respectively.

## **10. Commitments and Contingencies**

We have entered into agreements, which have provisions for cancellation, with various clinical research organizations for pre-clinical and clinical development studies. 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 is estimated based on current schedules of pre-clinical and clinical studies in progress. As of March 31, 2008, we have pre-clinical research study obligations of \$168,000 (which are expected to be fully completed within a year) and clinical research study obligations of \$8,970,000 (\$3,470,000 of which are expected to be completed 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 11 for a discussion of our commitments and contingencies related to our interactions with the University of California.

Refer to note 12 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.

## **11. License Agreement**

On October 16, 2001, StemSource, Inc. entered into an exclusive worldwide license agreement with the Regents of the University of California ("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 ("Patent 6,777,231") 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 effected milestone relates.

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 Patent 6,777,231 to the University of Pittsburgh. It was seeking a determination that its assignors, rather than UC's assignors, are the true inventors of Patent 6,777,231. This lawsuit has subjected us to and could continue to subject us to significant costs and, 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 we expect to have the trial court's final decision on the case sometime in the second or third quarter of 2008.

We are not named as a party to the lawsuit, but our president, Marc Hedrick, is one of the inventors identified on the patent and therefore is a named individual defendant. We are providing substantial financial and other assistance to the defense of the lawsuit.

During the three months ended March 31, 2008 and 2007, we expensed \$167,000 and \$92,000, respectively, for legal fees related to this license. These expenses have been classified as general and administrative expense in the accompanying financial statements. We believe that the amount accrued as of March 31, 2008 of \$2,058,000 is a reasonable estimate of our liability for the expenses incurred through March 31, 2008.

## 12. Transactions with Olympus Corporation

### *Initial Investment by Olympus Corporation in Cytori*

In the second quarter of 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 this 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 in accordance with EITF 00-19, "Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock" because from the date of grant through the expiration, we would have been required to deliver listed common stock to settle the option shares upon exercise.

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 was recorded as a component of deferred revenues, related party in the accompanying consolidated condensed 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. We will recognize development revenue upon achievement of related milestones, in accordance with proportional performance methodology. If and as such revenues are recognized, deferred revenue will be decreased (see note 5 under 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. As part of this agreement, Olympus will conduct market research and pilot clinical studies in collaboration with us for the therapeutic area up to December 31, 2008 when this exclusive right will terminate.

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 based on our closing price on August 9, 2006.

As of March 31, 2008, Olympus holds approximately 12% 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 Financial Accounting Standards Board (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 exert significant influence over the Joint Venture’s operations. At March 31, 2008, the carrying value of our investment in the Joint Venture is \$360,000.

We are under no obligation to provide additional funding to the Joint Venture, but may choose to do so. We made no contributions to the Joint Venture during the three months ended March 31, 2008 and 2007, respectively.

### 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 March 31, 2008 and December 31, 2007, the fair value of the Put was \$1,200,000 and \$1,000,000, respectively. Fluctuations in the Put value are recorded in the consolidated condensed 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 condensed 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:

	<u>March 31, 2008</u>	<u>December 31, 2007</u>	<u>November 4, 2005</u>
Expected volatility of Cytori	60.00%	60.00%	63.20%
Expected volatility of the Joint Venture	60.00%	60.00%	69.10%
Bankruptcy recovery rate for Cytori	21.00%	21.00%	21.00%
Bankruptcy threshold for Cytori	\$ 8,957,000	\$ 9,324,000	\$ 10,780,000
Probability of a change of control event for Cytori	2.33%	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	3.45%	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 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 March 31, 2008.

In August 2007 we entered into a License and Royalty Agreement ("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 system 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 quarter ended March 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 \$11,000 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 March 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 6). 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.

Pursuant to EITF 00-21, we have concluded that the license and development services must be accounted for as a single unit of accounting. Refer to note 6 for a full description of our revenue recognition policy.

### **13. Fair Value Measurements**

On January 1, 2008, we adopted certain provisions of Statement of Financial Accounting Standards ("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.

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:

	<b>Balance as of March 31, 2008</b>	<b>Basis of Fair Value Measurements</b>		
		<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
<b>Assets:</b>				
Cash equivalents	\$ 3,564,000	\$ 3,564,000	\$ —	\$ —
<b>Liabilities:</b>				
Put option liability	\$ (1,200,000)	\$ —	\$ —	\$ (1,200,000)

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 12) 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:

<b>Put option liability</b>	<b>Three months ended March 31, 2008</b>
Beginning balance January 1, 2008	\$ (1,000,000)
Increase in fair value recognized in operating expenses	(200,000)
Ending balance March 31, 2008	\$ (1,200,000)

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 March 31, 2008.

#### 14. Stockholders' Deficit

##### Common Stock

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 second payment of \$6,000,000.

## Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Our Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) includes the following sections:

- Overview that discusses our operating results and some of the trends that affect our business.
- Results of Operations that includes a more detailed discussion of our revenue and expenses.
- Liquidity and Capital Resources which discusses key aspects of our statements of cash flows, changes in our financial position and our financial commitments.
- Significant changes since our most recent Annual Report on Form 10-K in the Critical Accounting Policies and Estimates that we believe are important to understanding the assumptions and judgments underlying our financial statements.

You should read this MD&A in conjunction with the financial statements and related notes in Item 1 and our Annual Report on Form 10-K for the fiscal year ended December 31, 2007.

### **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 will 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 related to clinical research studies, the potential size of the market for our products, future expansion of our product launches in the reconstructive surgery market, our expected general and administrative expenses, and expansion 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: changes in laws or regulatory requirements, 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 also subject to a number of material risks and uncertainties, including but not limited to the risks described under the "Risk Factors" section in Part II below.*

*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.*

### **Overview**

#### ***Regenerative Cell Technology***

At Cytori, our goal is to become a global provider of medical technologies, helping doctors practice regenerative medicine. Regenerative medicine describes the emerging field that aims to repair or restore lost or damaged organ and cell function. Our commercial activities are currently focused on reconstructive surgery in Europe and Asia and stem and regenerative cell banking (cell preservation). Our product pipeline is focused on new treatments for cardiovascular disease, orthopedic damage, gastrointestinal disorders, and pelvic health conditions.

The foundation of our business is the Celution® System product platform. The platform products process the patients' cells at the bedside in real time so these cells may be re-transplanted into the same patient in the same surgical procedure. The Celution® System family of products consists of a central device and related single-use consumables that are used in every procedure. We are developing as many applications as possible for the cells, which are processed by the Celution® System family of products, in order to increase and maximize sales of the central device and related consumables to hospitals, clinics, and physicians.

The Celution® 800 and 900 are bedside systems that separate stem and regenerative cells residing naturally within adipose (fat tissue). We introduced the Celution® 800/CRS in Europe and Asia for the reconstructive surgery market in the first quarter of 2008 and marketing efforts are underway for the Celution® 900/MB as part of our comprehensive stem cell banking (cryopreservation) product offering. We believe these two markets offer the potential for revenue growth over the next few years until new products come out of our development pipeline. This product development pipeline includes applications for cardiovascular disease, for which two clinical trials are presently underway in Europe, spinal disc repair, gastrointestinal disorders, and pelvic health conditions.



In 2008, we will focus on the following initiatives:

- Launching the StemSource™ Cell Bank to hospitals in Japan through our commercialization partner, Green Hospital Supply, Inc.
- Launching the StemSource™ Cell Banks to hospitals in Asia-Pacific and Europe
- Continue commercialization of the Celution® 800/CRS in Europe and Asia-Pacific into the reconstructive surgery market to select physicians and hospitals through our specialized medical distribution network
- Completing our post-marketing study in Europe with the Celution® 800/CRS for the reconstruction of breast tissue following partial mastectomy to support expanded marketing efforts and reimbursement
- Advancing our cardiovascular disease product pipeline through clinical development
- Continue pursuing development and commercialization partnerships

During the first quarter of 2008, we received the first orders for Celution® System products, which were sold into the European and Asian reconstructive surgery market. A broader launch is expected following the successful completion of at least one breast reconstruction post-partial mastectomy post-marketing study designed to provide Cytori with additional clinical data to support broad physician adoption and reimbursement. Breast reconstruction is a niche market that we are pursuing because there is a significant medical need for viable reconstructive alternatives to partial mastectomy patients. This segment of the reconstructive surgery market may also be effectively addressed with targeted sales and distribution efforts.

There are an estimated 370,000 patients in Europe diagnosed each year with breast cancer, of which approximately 75% are eligible to undergo partial mastectomy. Based on this figure and the survival rate for breast cancer patients, there are already millions of women in Europe who have been treated for breast cancer, for which a percentage could be eligible for partial mastectomy defect reconstruction.

Reconstruction of partial mastectomy defects using adipose-derived stem and regenerative cells, processed with the Celution® 600 System (a predecessor to the Celution® 800 System), was reported in December 2007 to be safe and effective in a 21 patient, investigator-initiated study in Japan. While more clinical trials will be required, the study observed that combining adipose-derived stem and regenerative cells with additional adipose tissue in order to fill the defect area was safe and resulted in 79% patient satisfaction, with a statistically significant improvement and maintenance of tissue thickness six months following surgery. These results formed the basis for the design of our company-sponsored post-marketing study in Europe, RESTORE II, which was approved to begin in the second quarter of 2008.

In the third quarter of 2007, we entered into a partnership to commercialize the Celution® 900-based StemSource™ Cell Bank to hospitals throughout Japan. This partnership is important as it allows us to capitalize near-term in a scalable fashion on another application for the Celution® System platform, the cryopreservation of cells, which is estimated to be a large, untapped medical market in Japan. Additionally, Cytori will generate recurring revenues each time a patient preserves their cells, which will require a single-use consumable. Marketing and commercialization efforts are currently underway to hospitals in Japan, Asia and Europe.

In the United States, we are planning to expand the commercial efforts for the StemSource™ Cell Bank business starting in 2008 through limited marketing activities. Unlike in Japan, we will process and store cells from patients at our licensed cryopreservation facility in San Diego. Once established we may continue to commercialize on our own or license the U.S. StemSource™ business to a strategic partner.

The most advanced therapeutic application in our product development pipeline is cardiovascular disease. We currently have two clinical trials underway for adipose-derived stem and regenerative cells for the treatment of cardiovascular disease, one targeting a chronic form of heart disease and the other targeting heart attacks, an acute form of heart disease.

We identified this market as a priority because we believe there is significant need for new forms of cardiovascular disease treatment and because it represents one of the largest global 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.

#### 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 March 31, 2008, the fair value of the Put was \$1,200,000. 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 consolidated condensed balance sheets in the caption option liability.

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 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 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 ("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 until such time as the Joint Venture's products are commercially available for the same market served by 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 will conduct market research and pilot clinical studies in collaboration with us for the therapeutic area up to December 31, 2008 when this exclusive right will terminate.

#### MacroPore Biosurgery

##### Spine and orthopedic products

By selling our spine and orthopedic surgical implant business to Kensey Nash Corporation ("Kensey Nash") 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. 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. 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 (“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 three months ended March 31, 2008 and 2007, respectively.

### **Liquidity**

As our regenerative cell technology business is still in the development stage and requires large amounts of cash, it is important that we maintain sufficient liquidity to support our future cash needs. As of March 31, 2008, we had cash and cash equivalents and short-term investments on hand of \$8,010,000, which was primarily derived from:

- \$3,175,000 proceeds from the sale of our spine and orthopedic product line to Kensey Nash in May 2007,
- \$6,000,000 we received in the second quarter of 2007 from the sale of 1,000,000 shares of common stock to Green Hospital Supply, Inc., and
- \$6,000,000 we received in the first quarter of 2008 from the sale of 1,000,000 shares of common stock to Green Hospital Supply, Inc.

### **Results of Operations**

Our overall net loss for the three months ended March 31, 2008 was \$8,273,000, which was driven by \$4,963,000 in research and development expenses and \$3,111,000 in general and administrative expenses. This compares to a net loss for the first quarter of 2007 of \$8,669,000, which consisted of \$4,996,000 in research and development expenses and \$3,166,000 in general and administrative expenses. The net loss for the three months ended March 31, 2008 reflects expenses related to preparations for regenerative cell technology commercialization, including build-out of our manufacturing capability, as well as costs associated with clinical trials. The losses for these periods were offset in part by the recognition of development revenue as well as recognition of revenue on the first of our Celution® System product sales. We currently expect our net operating loss for 2008 will be approximately \$23,000,000.

## Product revenues

Product revenues in 2008 relate to our regenerative cell technology segment and consisted of revenues from our Celution® System products. Product revenues in 2007 relate to our MacroPore Biosurgery segment and consisted of revenues from our spine and orthopedic products. The following table summarizes the components for the three months ended March 31, 2008 and 2007:

	<u>For the three months ended March 31,</u>			
	<u>2008</u>	<u>2007</u>	<u>\$</u> <u>Differences</u>	<u>%</u> <u>Differences</u>
<b>Regenerative cell technology:</b>				
Celution® Systems	\$ 153,000	\$ —	\$ 153,000	—
<b>MacroPore Biosurgery:</b>				
Spine and orthopedic products	—	280,000	(280,000)	—
Total product revenues	<u>\$ 153,000</u>	<u>\$ 280,000</u>	<u>\$ (127,000)</u>	(45.4)%
% attributable to Medtronic	—	100%		

Beginning in March of 2008, we began sales and shipments of our Celution® 800/CRS System to the European and Asia-Pacific reconstructive surgery market. Assuming all other applicable revenue recognition criteria have been met, revenue for these product sales will generally 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. Shipping and handling costs that are billed to our customers are classified as revenue. As of March 31, 2008, we received orders and shipped products for \$954,000, \$801,000 of which we expect to recognize as revenue in the subsequent quarter upon these shipments reaching their final destination.

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

*The future.* 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.

We expect to generate product revenues during 2008 related to our regenerative cell therapy segment from the sale of our Celution® devices and single-use consumables related to breast reconstructive surgery as well as from our August 2007 commercialization agreement with Green Hospital Supply, Inc. for regenerative cell banking in Japan. In addition, we expect to generate revenues for regenerative cell banking in other countries in Asia and Europe.

## Cost of product revenues

Cost of product revenues for 2008 relates to Celution® System products in our regenerative cell technology segment and includes material, manufacturing labor, overhead costs, and an inventory provision, if applicable. Cost of product revenues for 2007 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 three months ended March 31, 2008 and 2007:

	<u>For the three months ended March 31,</u>			
	<u>2008</u>	<u>2007</u>	<u>\$</u> <u>Differences</u>	<u>%</u> <u>Differences</u>
<b>Regenerative cell technology:</b>				
Cost of product revenues	\$ 54,000	\$ —	\$ 54,000	—
Share-based compensation	6,000	—	6,000	—
Total regenerative cell technology	<u>60,000</u>	<u>—</u>	<u>60,000</u>	—
<b>MacroPore Biosurgery:</b>				
Cost of product revenues	—	215,000	(215,000)	—
Share-based compensation	—	10,000	(10,000)	—
Total MacroPore Biosurgery	<u>—</u>	<u>225,000</u>	<u>(225,000)</u>	—
Total cost of product revenues	<u>\$ 60,000</u>	<u>\$ 225,000</u>	<u>\$ (165,000)</u>	(73.3)%
Total cost of product revenues as % of product revenues	<u>39.2%</u>	<u>80.4%</u>		



*Regenerative cell technology:*

- The increase in cost of product revenues for the three months ended March 31, 2008 as compared to the same periods in 2007 was due to Celution® System product sales for which revenue was recognized during the first quarter of 2008. Cost of sales included an economic benefit of approximately \$35,000 related to inventory and labor/overhead previously expensed as research and development prior to commercialization date of March 1, 2008 that was sold during the first quarter.
- Cost of product revenues included approximately \$6,000 of share-based compensation expense for the three months ended March 31, 2008. For further details, see share-based compensation discussion below.

*MacroPore Biosurgery:*

- The decrease in cost of product revenues for the three months ended March 31, 2008 as compared to the same period in 2007 was due to a decrease in production of MacroPore Biosurgery spine and orthopedic products, followed by our sale of the product line in May 2007.
- Cost of product revenues included approximately \$10,000 of share-based compensation expense for the three months ended March 31, 2007. For further details, see share-based compensation discussion below.

*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 decreases. We expect to incur costs related to our MacroPore products once commercialization is achieved for our Japan Thin Film product line.

Development revenues

The following table summarizes the components of our development revenues for the three months ended March 31, 2008 and 2007:

	<b>For the three months ended March 31,</b>			
	<b>2008</b>	<b>2007</b>	<b>\$ Differences</b>	<b>% Differences</b>
<b>Regenerative cell technology:</b>				
Development (Olympus)	\$ 774,000	\$ —	\$ 774,000	—
Regenerative cell storage services and other	37,000	45,000	(8,000)	(17.8)%
<b>Total regenerative cell technology</b>	<b>811,000</b>	<b>45,000</b>	<b>766,000</b>	<b>1,702.2%</b>
<b>MacroPore Biosurgery:</b>				
Development (Senko)	—	—	—	—
<b>Total development revenues</b>	<b>\$ 811,000</b>	<b>\$ 45,000</b>	<b>\$ 766,000</b>	<b>1,702.2%</b>

*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 three months ended March 31, 2008, we recognized \$774,000 of revenue associated with our arrangements with Olympus.

*MacroPore Biosurgery:*

Under a distribution agreement with Senko we are entitled to earn payments based on achieving certain milestones. We did not recognize any revenue for the three months ended March 31, 2008 and 2007, respectively.

*The future.* We don't expect to recognize additional development revenues from our regenerative cell technology segment during the remainder of 2008, as the anticipated completion for the next phase of our Joint Venture and other Olympus product development performance obligations is 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 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 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 three months ended March 31, 2008 and 2007:

<b>For the three months ended March 31,</b>				
	<b>2008</b>	<b>2007</b>	<b>\$</b>	<b>%</b>
			<b>Differences</b>	<b>Differences</b>
<b>Regenerative cell technology:</b>				
Regenerative cell technology	\$ 3,976,000	\$ 3,235,000	\$ 741,000	22.9%
Development milestone (Joint Venture)	842,000	1,505,000	(663,000)	(44.1)%
Share-based compensation	140,000	152,000	(12,000)	(7.9)%
Total regenerative cell technology	<u>4,958,000</u>	<u>4,892,000</u>	<u>66,000</u>	1.3%
<b>MacroPore Biosurgery:</b>				
Bioresorbable polymer implants	5,000	102,000	(97,000)	(95.1)%
Development milestone (Senko)	—	1,000	(1,000)	—
Share-based compensation	—	1,000	(1,000)	—
Total MacroPore Biosurgery	<u>5,000</u>	<u>104,000</u>	<u>(99,000)</u>	(95.2)%
Total research and development expenses	<u>\$ 4,963,000</u>	<u>\$ 4,996,000</u>	<u>\$ (33,000)</u>	(0.7)%

### *Regenerative cell technology:*

- Regenerative cell technology expenses relate to the development of a technology platform that involves using adipose tissue as a source for 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 \$134,000 for the three months ended March 31, 2008, respectively as compared to the same period in 2007 primarily due to the decrease in headcount for 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 \$180,000 for the three months ended March 31, 2008 as compared to the same period in 2007. This was due to increased use of consultants and temporary labor during the current quarter. Pre-clinical and clinical study expense decreased by \$211,000 for the three months ended March 31, 2008 as compared to the same period in 2007. This fluctuation was due primarily to a transition in focus from pre-clinical studies to clinical studies, most of which are in the early stage of completion. Rent and utilities expense decreased by \$85,000 in the three months ended March 31, 2008 as compared to the same period in 2007 primarily due the termination of leases at our Top Gun location in San Diego, CA. However, expenses for other supplies increased by \$223,000 for the three months ended March 31, 2008, as compared to the same period in 2007, primarily due to purchases of production related supplies prior to our commercialization date.
- 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 based on our Celution® System. These development activities, which began in November 2005, include performing pre-clinical and clinical studies, seeking regulatory approval, and performing product development related to therapeutic applications for adipose regenerative cells for multiple large markets. For the three months ended March 31, 2008 and 2007, costs associated with the development of the device were \$842,000 and \$1,505,000, respectively. The decrease in the costs related to the Joint Venture with Olympus is primarily due to the completion of pre-clinical milestone activities. The three months ended March 31, 2008 and 2007 expenses were composed of \$484,000 and \$891,000 in labor and related benefits, \$150,000 and \$306,000 in consulting and other professional services, \$34,000 and \$190,000 in supplies and \$174,000 and \$118,000, respectively, in other miscellaneous expense.
- Share-based compensation for the regenerative cell technology segment of research and development was \$140,000 and \$152,000 for the three months ended March 31, 2008 and 2007, respectively. See share-based compensation discussion below for more details.

### MacroPore Biosurgery:

- Labor and related benefits expense, not including share-based compensation, decreased by \$60,000 for the three months ended March 31, 2008 as compared to the same period in 2007. This was due to a redistribution of labor resources from one business segment to the other, as well as to termination of spine and orthopedics product research upon sale of that 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 three months ended March 31, 2008 and 2007, we incurred \$0 and \$1,000, respectively, of expenses related to this regulatory and registration process.
- Share-based compensation for the MacroPore Biosurgery segment of research and development for the three months ended March 31, 2008 and 2007 was \$0 and \$1,000, respectively. See share-based compensation discussion below for more details.

*The future.* Our strategy is to continue our research and development efforts in the regenerative cell field and we anticipate expenditures in this area of research to total approximately \$22,000,000 to \$24,000,000 in 2008. We are working to develop therapies for cardiovascular disease as well as new approaches for aesthetic and reconstructive surgery, gastrointestinal disorders and spine and orthopedic conditions. We are also developing a regenerative cell banking platform for use in hospitals and clinics that will preserve harvested regenerative cells for potential future use. The expenditures have related and will continue to primarily relate to developing therapeutic applications and conducting pre-clinical and clinical studies on adipose-derived regenerative cells.

### 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 three months ended March 31, 2008 and 2007:

	<b>For the three months ended March 31,</b>			
	<b>2008</b>	<b>2007</b>	<b>\$</b>	<b>%</b>
			<b>Differences</b>	<b>Differences</b>
<b>Regenerative cell technology:</b>				
International sales and marketing	\$ 834,000	\$ 434,000	\$ 400,000	92.2%
Share-based compensation	80,000	70,000	10,000	14.3%
Total regenerative cell technology	<u>914,000</u>	<u>504,000</u>	<u>410,000</u>	<u>81.3%</u>
<b>MacroPore Biosurgery:</b>				
General corporate marketing	—	13,000	(13,000)	—
International sales and marketing	44,000	29,000	15,000	51.7%
Total MacroPore Biosurgery	<u>44,000</u>	<u>42,000</u>	<u>2,000</u>	<u>4.8%</u>
Total sales and marketing expenses	<u>\$ 958,000</u>	<u>\$ 546,000</u>	<u>\$ 412,000</u>	<u>75.5%</u>

### *Regenerative Cell Technology:*

- The increase in international sales and marketing expense for the three months ended March 31, 2008 as compared to same period in 2007 was mainly attributed to the increase in salary and related benefits expense of \$226,000, not including share-based compensation, increase in travel related expenses of \$56,000, and increase in printing, supplies, and postage of \$54,000, which are due to our emphasis in seeking strategic alliances and/or co-development partners for our regenerative cell technology.
- Share-based compensation for the regenerative cell segment of sales and marketing for the three months ended March 31, 2008 and 2007 was \$80,000 and \$70,000, respectively. See share-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 as we focused more on our regenerative cell technology business and exited 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.

*The future.* We expect sales and marketing expenditures related to the regenerative cell technology to increase as we continue to expand our pursuit of strategic alliances and co-development partners, as well as market our Celution® System.

#### 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 three months ended March 31, 2008 and 2007:

<b>For the three months ended March 31,</b>				
	<b>2007</b>	<b>2007</b>	<b>\$</b>	<b>%</b>
			<b>Differences</b>	<b>Differences</b>
General and administrative	\$ 2,783,000	\$ 2,851,000	\$ (68,000)	(2.4)%
Share-based compensation	328,000	315,000	13,000	4.1%
Total general and administrative expenses	<u>\$ 3,111,000</u>	<u>\$ 3,166,000</u>	<u>\$ (55,000)</u>	<u>(1.7)%</u>

- An overall decrease (excluding stock-based compensation) occurred during the three months ended March 31, 2008 as compared to the same period in 2007. This resulted primarily from a decrease in professional services of \$445,000, partially offset by an increase in labor-related expenses of \$191,000 for the three months ended March 31, 2008 as compared to the same period in 2007. The decrease in professional services was primarily due to a non-recurring fee of \$322,000 incurred during first quarter of 2007 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 the University of Pittsburgh wins the lawsuit, our license rights to the patent in question could be nullified or rendered non-exclusive. 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 three months ended March 31, 2008 and 2007, we expensed \$167,000 and \$92,000, respectively, for legal fees related to this license. Our legal expenses related to this lawsuit will fluctuate depending upon the activity incurred during each period.
- Share-based compensation related to general and administrative expense for the three months ended March 31, 2008 and 2007 was \$328,000 and \$315,000, respectively. See share-based compensation discussion below for more details.

*The future.* We expect general and administrative expenses of approximately \$10,000,000 to \$12,000,000 in 2008. We will seek ways to minimize the ratio of these expenses to research and development expenses.

#### Share-based compensation expenses

We adopted SFAS 123R on January 1, 2006. The following table summarizes the components of our share-based compensation for the three months ended March 31, 2008 and 2007:

<b>For the three months ended March 31,</b>				
	<b>2008</b>	<b>2007</b>	<b>\$</b>	<b>%</b>
			<b>Differences</b>	<b>Differences</b>
<b>Regenerative cell technology:</b>				
Cost of product revenues	\$ 6,000	\$ —	\$ 6,000	—
Research and development-related	140,000	152,000	(12,000)	(7.9)%
Sales and marketing-related	80,000	70,000	10,000	14.3%
Total regenerative cell technology	<u>226,000</u>	<u>222,000</u>	<u>4,000</u>	<u>1.8%</u>
<b>MacroPore Biosurgery:</b>				
Cost of product revenues	—	10,000	(10,000)	—
Research and development-related	—	1,000	(1,000)	—
Sales and marketing-related	—	—	—	—
Total MacroPore Biosurgery	<u>—</u>	<u>11,000</u>	<u>(11,000)</u>	<u>—</u>
General and administrative-related	328,000	315,000	13,000	4.1%
Total share-based compensation	<u>\$ 554,000</u>	<u>\$ 548,000</u>	<u>\$ 6,000</u>	<u>1.1%</u>

Most of the expenses in both periods related to the vesting of stock option awards to employees. 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.

*The future.* We expect to 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 March 31, 2008, the total compensation cost related to non-vested stock options not yet recognized for all our plans is approximately \$5,155,000. These costs are expected to be recognized over a weighted average period of 1.90 years.

#### Change in fair value of option liabilities

The following is a table summarizing the change in fair value of option liabilities for the three months ended March 31, 2008 and 2007:

	<b>For the three months ended March 31,</b>			
	<b>2008</b>	<b>2007</b>	<b>\$ Differences</b>	<b>% Differences</b>
Change in fair value of put option liability	\$ 200,000	\$ 200,000	—	—

- In reference to the Joint Venture, the Shareholders' Agreement between Cytori and Olympus provides that in certain specified circumstances of insolvency or if we experience a change in control, Olympus will have the 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 Put value 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:

	<b>March 31, 2008</b>	<b>December 31, 2007</b>	<b>November 4, 2005</b>
Expected volatility of Cytori	60.00%	60.00%	63.20%
Expected volatility of the Joint Venture	60.00%	60.00%	69.10%
Bankruptcy recovery rate for Cytori	21.00%	21.00%	21.00%
Bankruptcy threshold for Cytori	\$ 8,957,000	\$ 9,324,000	\$ 10,780,000
Probability of a change of control event for Cytori	2.33%	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	3.45%	4.04%	4.66%

On January 1, 2008, we adopted certain provisions of Statement of Financial Accounting Standards ("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.

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 March 31, 2008	Basis of Fair Value Measurements		
		Level 1	Level 2	Level 3
<b>Assets:</b>				
Cash equivalents	\$ 3,564,000	\$ 3,564,000	\$ —	\$ —
<b>Liabilities:</b>				
Put option liability	\$ (1,200,000)	\$ —	\$ —	\$ (1,200,000)

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 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	Three months ended March 31, 2008
Beginning balance January 1, 2008	\$ (1,000,000)
Increase in fair value recognized in operating expenses	(200,000)
Ending balance March 31, 2008	\$ (1,200,000)

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 sheets as of March 31, 2008.

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

#### Financing items

The following table summarizes interest income, interest expense, and other income and expense for the three months ended March 31, 2008 and 2007:

	For the three months ended March 31,			
	2008	2007	\$ Differences	% Differences
Interest income	\$ 76,000	\$ 197,000	\$ (121,000)	(61.4)%
Interest expense	(23,000)	(52,000)	29,000	(55.8)%
Other income (expense)	11,000	(4,000)	15,000	(375.0)%
Total	\$ 64,000	\$ 141,000	\$ (77,000)	(54.6)%

- Interest income decreased for the three months ended March 31, 2008 as compared to the same period in 2007 due to a decrease in interest rates and cash balance available for investment.
- Interest expense decreased for the three months ended March 31, 2008 as compared to the same period in 2007 due to lower principal balances on our long-term equipment-financed borrowings.
- The changes in other income (expense) in the three months ended March 31, 2008 as compared to the same periods in 2007 resulted primarily from changes in foreign currency exchange rates.

*The future.* Interest income earned in 2008 will be dependent on our levels of funds available for investment as well as general economic conditions. We expect interest expense to remain relatively consistent during the remainder of 2008.

#### Equity loss from investment in Joint Venture

The following table summarizes our equity loss from investment in joint venture for the three months ended March 31, 2008 and 2007:

	<b>For the three months ended March 31,</b>			
	<b>2008</b>	<b>2007</b>	<b>\$ Differences</b>	<b>% Differences</b>
Equity loss in investment	\$ (9,000)	\$ (2,000)	\$ (7,000)	350.0%

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. Though we have no obligation to do so, we and Olympus plan to jointly fund 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 March 31, 2008 and December 31, 2007:

	<b>March 31, 2008</b>	<b>December 31, 2007</b>	<b>\$ Differences</b>	<b>% Differences</b>
Cash and cash equivalents	\$ 8,010,000	\$ 11,465,000	\$ (3,455,000)	(30.1)%
Short-term investments, available for sale	—	—	—	—
Total cash and cash equivalents and short-term investments, available for sale	<u>\$ 8,010,000</u>	<u>\$ 11,465,000</u>	<u>\$ (3,455,000)</u>	(30.1)%
Current assets	\$ 9,298,000	\$ 12,238,000	\$ (2,940,000)	(24.0)%
Current liabilities	7,308,000	8,070,000	(762,000)	(9.4)%
Working capital	<u>\$ 1,990,000</u>	<u>\$ 4,168,000</u>	<u>\$ (2,178,000)</u>	(52.3)%

In order to provide greater financial flexibility and liquidity, and in view of the substantial cash requirements of our regenerative cell business during its development stage, we have an ongoing need to raise additional capital. In the first quarter of 2007, 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) under a shelf registration statement. In the second quarter of 2007, 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. Also, in the second quarter of 2007, we successfully divested our spine and orthopedic product line to Kensey Nash for gross proceeds of \$3,175,000.

With consideration of these endeavors as well as existing funds, additional capital will need to be raised during 2008 through the operations, and other accessible sources of financing, to provide us adequate cash to satisfy our working capital, capital expenditures, debt service and other financial commitments at least through March 31, 2009. On February 8, 2008, we entered into an agreement to sell 2,000,000 shares of common stock at \$6.00 per share to Green Hospital Supply, Inc. in a private 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 final installment payment of \$6,000,000.

We expect to utilize our cash and cash equivalents to fund our operations, including research and development of our products primarily, pre-clinical activities and for clinical trials. Additionally, we believe that without additional capital from operations and other accessible sources of financing we do not currently have adequate funding to complete the development, preclinical activities and clinical trials required to bring our future products to market, and therefore, we will require significant additional funding. If we are unsuccessful in our efforts to raise additional funds through accessible sources of financing, strategic relationships or through revenue sources, we will be required to significantly reduce or curtail research and development activities and other operations. Management actively monitors cash expenditures and projected expenditures as we progress toward our goals of product commercialization and sales in an effort to match projected expenditures to available cash flow.

From inception to March 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,
- 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, and
- Receiving \$6,000,000 in net proceeds from a private placement to Green Hospital Supply, Inc. in February 2008.

We don't expect significant capital expenditures during the remainder of 2008; however, if necessary, we may borrow under our Amended Master Security Agreement.

Any excess funds expected to be invested in short-term available-for-sale investments.

Our cash requirements for 2008 and beyond will depend on numerous factors, including the resources we devote to developing and supporting our investigational cell therapy products, market acceptance of any developed products, regulatory approvals and other factors. We expect to incur research and development expenses at high levels in our regenerative cell platform for an extended period of time and have therefore positioned ourselves to expand our cash position through actively pursuing co-development and marketing agreements, research grants, and licensing agreements related to our regenerative cell technology platform.

The following summarizes our contractual obligations and other commitments at March 31, 2008, and the effect such obligations could have on our liquidity and cash flow in future periods:

<b>Contractual Obligations</b>	<b>Payments due by period</b>				
	<b>Total</b>	<b>Less than 1 year</b>	<b>1 – 3 years</b>	<b>3 – 5 years</b>	<b>More than 5 years</b>
Long-term obligations	\$ 785,000	\$ 601,000	\$ 184,000	\$ —	\$ —
Interest commitment on long-term obligations	59,000	50,000	9,000	—	—
Operating lease obligations	3,542,000	1,618,000	1,924,000	—	—
Minimum purchase requirements	2,970,000	1,058,000	1,912,000	—	—
Pre-clinical research study obligations	168,000	168,000	—	—	—
Clinical research study obligations	8,970,000	3,470,000	5,100,000	400,000	—
<b>Total</b>	<b>\$ 16,494,000</b>	<b>\$ 6,965,000</b>	<b>\$ 9,129,000</b>	<b>\$ 400,000</b>	<b>\$ —</b>

Cash (used in) provided by operating, investing, and financing activities for the three months ended March 31, 2008 and 2007 is summarized as follows:

	<b>For the three months ended March 31,</b>	
	<b>2008</b>	<b>2007</b>
Net cash used in operating activities	\$ (9,162,000)	\$ (8,160,000)
Net cash provided by (used in) investing activities	(175,000)	1,084,000
Net cash provided by financing activities	5,882,000	19,875,000

#### Operating activities

Net cash used in operating activities for both 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 an operating loss of \$8,273,000 for the three months ended March 31, 2008. The operating cash impact of this loss was \$9,162,000, after adjusting for the recognition of non-cash development revenue of \$774,000, the consideration of non-cash share-based compensation of \$554,000, other adjustments for material non-cash activities, such as depreciation and amortization, change in fair value of option liabilities, 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 \$8,669,000 net loss for the three months ended March 31, 2007. The cash impact of this loss was \$8,160,000, after adjusting for the change in share-based compensation of \$548,000, other adjustments including material non-cash activities, such as depreciation and amortization, and changes in working capital due to timing of product shipments (accounts receivable) and payment of liabilities.

#### Investing activities

Net cash used in investing activities for the three months ended March 31, 2008 resulted primarily from purchases of property and equipment.

Net cash provided by investing activities for the three months ended March 31, 2007 resulted primarily from net proceeds from the purchase and sale and maturity of short-term investments.

Capital spending is essential to our product innovation initiatives and to maintain our operational capabilities. For the three months ended March 31, 2008 and 2007, we used cash to purchase \$175,000 and \$130,000, respectively, of property and equipment, primarily to support the research and development of the regenerative cell technology platform.

#### Financing Activities

The net cash provided by financing activities for the three months ended March 31, 2008 related mainly to the private issuance of 1,000,000 shares of unregistered common stock to Green Hospital Supply, Inc. for \$6,000,000.

The net cash provided by financing activities for the three months ended March 31, 2007 related mainly to the issuance of 3,746,000 shares of our common stock and 1,873,000 common stock warrants in exchange for approximately \$19,901,000 (net).

## Critical Accounting Policies and Significant Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires us to make estimates and assumptions that affect the reported amounts of our assets, liabilities, revenues, and expenses, and that affects 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 policies that require us to make our most significant judgments and, as a result, could have the greatest impact on our future financial results.

### **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. We expense excess manufacturing costs, that is, costs resulting from lower than "normal" production levels.

Costs of materials capitalized on the balance sheet as of March 31, 2008, is representative of the cost of materials we had on hand as of March 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 included as research and development expense during the period they were purchased.

No inventory provisions were recorded during the first quarter of 2008 and 2007.

### **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 National Institutes of Health (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
- Payments in the nature of royalties on future product sales made by Senko to its end customers.

Emerging Issues Task Force Issue No. 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 look to third party evidence 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).

Similarly, we have attributed the upfront fees received under the arrangements with Olympus Corporation, a related party, to a combined 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. 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
  - o Beginning in March of 2008, we began sales and shipments of our Celution® 800/CRS System to the European and Asia-Pacific reconstructive surgery market. Assuming all other applicable revenue recognition criteria have been met, revenue for these product sales will generally 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. Shipping and handling costs that are billed to our customers are classified as revenue, in accordance with Emerging Issues Task Force Issue No. 00-10, "Accounting for Shipping and Handling Fees and Costs" ("EITF 00-10).
- Upfront License Fees/Milestones
  - o 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.



o 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

o We are eligible to receive grants from the NIH related to our research on adipose derived cell therapy to treat myocardial infarctions. 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 is 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 March 31, 2008. As required by SFAS 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.

We estimated the fair value of our reporting units by using various estimation techniques. For example in 2006, we estimated the fair value of our MacroPore Biosurgery reporting unit based on an equal weighting of the market values of comparable enterprises and discounted projections of estimated future cash flows. Clearly, identifying comparable companies and estimating future cash flows as well as appropriate discount rates involve judgment. On the contrary, we estimated the fair value of our regenerative cell reporting unit solely using an income approach, as – at that time – we believed there were no comparable enterprises on which to base a valuation. The assumptions underlying this valuation method involve a substantial amount of judgment, particularly since our regenerative cell business has yet to generate any revenues and does not have a commercially viable product. The combined value of our goodwill is consistent with the market's valuation.

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 2007.

Also in 2007, we completed our goodwill impairment testing for our regenerative cell technology reporting unit using 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. 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 March 31, 2008 or for the three months 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.

### **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.

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.

## Recent Accounting Pronouncements

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 March 2008, FASB issued SFAS No. 161, "Disclosures about Derivative Instruments and Hedging Activities-an amendment of FASB Statement No. 133" ("SFAS 161"). SFAS 161 expands the current disclosure requirements of SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities," such that entities must now provide enhanced disclosures on a quarterly basis regarding how and why the entity uses derivatives; how derivatives and related hedged items are accounted for under SFAS No. 133 and how derivatives and related hedged items affect the entity's financial position, performance and cash flows. Pursuant to the transition provisions of the Statement, the company will adopt SFAS 161 in fiscal year 2009 and will present the required disclosures in the prescribed format on a prospective basis. The adoption of SFAS 161 will not impact the consolidated condensed financial statements as it is disclosure-only in nature.

### Item 3. Quantitative and Qualitative Disclosures about Market Risk

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

#### Interest Rate Exposure

We are not subject to market risk due to fluctuations in interest rates on our long-term obligations as they bear a fixed rate of interest. Our exposure relates primarily to short-term investments, including funds classified as cash equivalents. As of March 31, 2008, all excess funds were invested in money market funds and other highly liquid investments, therefore our interest rate exposure is not considered to be material.

## Foreign Currency Exchange Rate Exposure

Our exposure to market risk due to fluctuations in foreign currency exchange rates relates primarily to our activities in Europe and Japan. Transaction gains or losses resulting from cash balances and revenues have not been significant in the past and we are not engaged in any hedging activity in the Euro, the Yen or other currencies. Based on our cash balances and revenues derived from markets other than the United States for the year ended December 31, 2007, 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. Such sales and resulting royalties would be Yen denominated.

## Item 4. 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 Quarterly Report of Form 10-Q. 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 March 31, 2008.

### *Changes in Internal Control over Financial Reporting*

There has been no change in our internal control over financial reporting during the quarter ended March 31, 2008 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## PART II. OTHER INFORMATION

### Item 1. Legal Proceedings

From time to time, we have been involved in routine litigation incidental to the conduct of our business. As of March 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 (see note 11).

### 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 quarterly report on Form 10-Q. 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 quarterly report on Form 10-Q.*

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

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

We have almost always had negative cash flows from operations. Our business will continue to result in a substantial requirement for research and development expenses for several years, during which we may not be able to bring in sufficient cash and/or revenues to offset these expenses. There is no guarantee that adequate funds will be available when needed from operating revenues, additional debt or equity financing, arrangements with distribution partners, or from other sources, or on terms attractive to us. The inability to obtain sufficient funds would require us to delay, scale back, or eliminate some or all of our research or product development, manufacturing operations, clinical or regulatory activities, or to out-license commercial rights to products or technologies thus having a substantial negative effect on our results of operations and financial condition.

### 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. We 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, product development, and additional pre-clinical research.

### 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-Cytore, Inc. an exclusive license to manufacture future generation Celution® System devices. If Olympus-Cytore, 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-Cytore, 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-Cytore, Inc. will continue to require more money than its initial capitalization in order to complete development and production of future generation devices. If we are unable to help provide future financing for Olympus-Cytore, Inc., our relative equity interest in Olympus-Cytore, Inc. may decrease.

Furthermore, under a License/Joint Development Agreement among Olympus-Cytore, Inc., Olympus, and us, Olympus will have a primary role in the development of Olympus-Cytore, 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 intend to commercialize into the European reconstructive surgery and Japanese cell banking markets in 2008, additional market opportunities for our products and/or services are at least 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 will soon launch the Celution® 900-based StemSource™ Cell Bank in 2008 as we await the availability of the Joint Venture system, next generation Celution® device, 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 obtain additional patents, maintain trade secret protection, and operate without infringing on the proprietary rights of third parties.

Our recently amended regenerative cell technology license agreement with the Regents of the University of California (“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 naming all of the inventors who had not assigned their ownership interest in Patent 6,777,231 to the University of Pittsburgh, seeking a determination that its assignors, rather than UC’s assignors, are the true inventors of Patent 6,777,231. 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 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 which was completed in January 2008. We expect the court to make its final ruling on all of the other matters in the second or third quarter of 2008.

There can be no assurance that any of the 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. We have been incurring substantial legal costs as a result of the University of Pittsburgh lawsuit, and our president, Marc Hedrick, is a named individual defendant in that lawsuit because he is one of the inventors identified on the patent. 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 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. 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 ("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 county 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 ("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 2. Unregistered Sales of Equity Securities and Use of Proceeds**

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 in exchange for 1,000,000 unregistered shares of Cytori common stock. On April 30, 2008 we received the second \$6,000,000 payment from Green Hospital Supply, Inc. in exchange for 1,000,000 unregistered shares of Cytori common stock.

**Item 3. Defaults Upon Senior Securities**

None

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

None

**Item 5.****Other Information**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 a 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. For both properties, we pay an aggregate of approximately \$133,000 in rent per month.

Staff

As of March 31, 2008, we had 146 employees, including part-time and full-time employees. These employees are comprised of 22 employees in manufacturing, 71 employees in research and development, 12 employees in sales and marketing and 41 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 unit and we have never experienced an organized work stoppage. A breakout by segment is as follows:

	<u>Regenerative Cell Technology</u>	<u>Corporate</u>	<u>Total</u>
Manufacturing	22	—	22
Research & Development	71	—	71
Sales and Marketing	12	—	12
General & Administrative	—	41	41
<b>Total</b>	<u>105</u>	<u>41</u>	<u>146</u>

## Item 6. Exhibits

- |         |   |
|---------|---|
| 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).                             |
| 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).   |

# Indicates management contract or compensatory plan or arrangement.

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized, in San Diego, California, on May 09, 2008.

**CYTORI THERAPEUTICS, INC.**

Dated: May 09, 2008

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

Dated: May 09, 2008

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



**Certification of Chief 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, the Chief Executive Officer of Cytori Therapeutics, Inc., certify that:

1. I have reviewed this quarterly report on Form 10-Q 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 the Exchange Act Rules 13a-15(e) and 15d-15(e)) 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) 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
  - (c) 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 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: May 09, 2008

/s/ Christopher J. Calhoun

Christopher J. Calhoun,  
Chief Executive Officer



**Certification of Chief 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, the Chief Financial Officer of Cytori Therapeutics, Inc., certify that:

1. I have reviewed this quarterly report on Form 10-Q 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 the Exchange Act Rules 13a-15(e) and 15d-15(e)) 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) 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
  - (c) 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 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: May 09, 2008

/s/ Mark E. Saad

Mark E. Saad

Chief Financial Officer

**CERTIFICATION 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 Quarterly Report on Form 10-Q of Cytori Therapeutics, Inc. for the quarterly period ended March 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-Q 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-Q 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: May 09, 2008

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

Dated: May 09, 2008

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