SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q/A
(Amendment No. 1)

(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, 2007

OR

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

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

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 o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer" and "large accelerated filer" in Rule 12b-2 of the Exchange Act. Large Accelerated Filer o Accelerated Filer o Non-Accelerated Filer ☒

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

As of April 30, 2007, there were 23,583,622 shares of the registrant's common stock outstanding.

EXPLANATORY NOTE

This Amendment No. 1 on Form 10-Q/A ("Amendment") to the Cytori Therapeutics, Inc. (the "Issuer") Quarterly Report on Form 10-Q for the quarter ended March 31, 2007, filed with the Securities and Exchange Commission on May 11, 2007 (the "Form 10-Q"), is being filed solely to correct the inadvertent omission of the conforming signatures of the Chief Executive Officer and the Chief Financial Officer on the electronically-filed certification pursuant to 18 U.S.C. Section 1350 provided in Exhibit 32.1.

Except for correcting the error noted above, no information included in the Form 10-Q is amended by this Amendment. This Amendment speaks only as of the date of the Form 10-Q and, except as noted above, we have not undertaken to amend, supplement or update any information contained in the Form 10-Q to give effect to subsequent events. This Amendment amends and restates the Form 10-Q in its entirety.

In addition, in accordance with Rule 12b-15 promulgated under the Securities and Exchange Act of 1934, as amended, this Amendment includes current dated certifications from the Company's Chief Executive Officer and Chief Financial Officer as required by Sections 302 and 906 of the Sarbanes-Oxley Act of 2002. Such certifications are attached to this Amendment as Exhibits 31.1, 31.2 and 32.1.

CYTORI THERAPEUTICS, INC.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

Report of Independent Registered Public Accounting Firm

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

We have reviewed the accompanying consolidated condensed balance sheet of Cytori Therapeutics, Inc. and subsidiaries (the Company) as of March 31, 2007, the related consolidated condensed statements of operations and comprehensive loss for the three- month periods ended March 31, 2007 and 2006, and the statements of cash flows for the three-month periods ended March 31, 2007 and 2006. These consolidated condensed financial statements are the responsibility of the Company's management.

We conducted our review in accordance with the standards of the Public Company Accounting Oversight Board (United States of America). A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the Public Company Accounting Oversight Board (United States of America), the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

Based on our review, we are not aware of any material modifications that should be made to the consolidated condensed financial statements referred to above for them to be in conformity with U.S. generally accepted accounting principles.

We have previously audited, in accordance with standards of the Public Company Accounting Oversight Board (United States of America), the consolidated balance sheet of Cytori Therapeutics, Inc. and subsidiaries as of December 31, 2006, and the related consolidated statements of operations and comprehensive loss, stockholders' deficit, and cash flows for the year then ended (not presented herein); and in our report dated March 29, 2007, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying consolidated condensed balance sheet as of December 31, 2006 is fairly stated in all material respects, in relation to the consolidated balance sheet from which it has been derived.

Note 2 of the Company's audited financial statements as of December 31, 2006 and for the year then ended discloses that the Company derives a substantial portion of its revenues from related parties, and effective January 1, 2006, adopted Statement of Financial Accounting Standards No. 123(R), "Share-based Payment." Our auditors' report on those financial statements dated March 29, 2006 includes an explanatory paragraph referring to the matters in note 2 of those consolidated financial statements. Note 6 of the Company's unaudited interim financial statements as of March 31, 2007 and for the three month periods ended March 31, 2007 and 2006 discloses that the Company derives a substantial portion of its revenues from related parties.

/s/ KPMG LLP

San Diego, California
May 9, 2007

CYTORI THERAPEUTICS, INC.
CONSOLIDATED CONDENSED BALANCE SHEETS

	As of March 31, 2007 (unaudited)	As of December 31, 2006
Assets		
Current assets:		
Cash and cash equivalents	$ 21,701,000	$ 8,902,000
Short-term investments, available-for-sale	2,761,000	3,976,000
Accounts receivable, net of allowance for doubtful accounts of $3,000 and $2,000 in 2007 and 2006, respectively	233,000	225,000
Inventories, net	212,000	164,000
Other current assets	742,000	711,000
Total current assets	25,649,000	13,978,000
Property and equipment held for sale, net	460,000	457,000
Property and equipment, net	4,028,000	4,242,000
Investment in joint venture	74,000	76,000
Other assets	417,000	428,000
Intangibles, net	1,244,000	1,300,000
Goodwill	4,387,000	4,387,000
Total assets	$ 36,259,000	$ 24,868,000
Liabilities and Stockholders' Equity (Deficit)		
Current liabilities:		
Accounts payable and accrued expenses	$ 5,059,000	$ 5,587,000
Current portion of long-term obligations	949,000	999,000
Total current liabilities	6,008,000	6,586,000
Deferred revenues, related party	23,906,000	23,906,000
Deferred revenues	2,389,000	2,389,000
Option liability	1,100,000	900,000
Long-term deferred rent	692,000	741,000
Long-term obligations, less current portion	956,000	1,159,000
Total liabilities	35,051,000	35,681,000
Commitments and contingencies		
Stockholders' equity (deficit):		
Preferred stock, $0.001 par value; 5,000,000 shares authorized; (0) shares issued and outstanding in 2007 and 2006	—	—
Common stock, $0.001 par value; 95,000,000 shares authorized; 25,428,778 and 21,612,243 shares issued and 22,555,944 and 18,739,409 shares outstanding in 2007 and 2006, respectively	25,000	22,000
Additional paid-in capital	123,726,000	103,053,000
Accumulated deficit	(112,129,000)	(103,460,000)
Treasury stock, at cost	(10,414,000)	(10,414,000)
Accumulated other comprehensive income	—	1,000
Amount due from exercises of stock options	—	(15,000)
Total stockholders' equity (deficit)	1,208,000	(10,813,000)
Total liabilities and stockholders' equity (deficit)	$ 36,259,000	$ 24,868,000

SEE NOTES TO UNAUDITED CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

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

	For the Three Months Ended March 31,	
	2007	**2006**
Product revenues, related party	$ 280,000	$ 502,000
Cost of product revenues	225,000	454,000
Gross profit	55,000	48,000
Development revenues:		
Development, related party	—	683,000
Development	—	142,000
Research grants and other	45,000	5,000
	45,000	830,000
Operating expenses:		
Research and development	4,996,000	5,176,000
Sales and marketing	546,000	501,000
General and administrative	3,166,000	3,216,000
Change in fair value of option liabilities	200,000	(475,000)
Total operating expenses	8,908,000	8,418,000
Operating loss	(8,808,000)	(7,540,000)
Other income (expense):		
Interest income	197,000	197,000
Interest expense	(52,000)	(58,000)
Other expense, net	(4,000)	(6,000)
Equity loss from investment in joint venture	(2,000)	(49,000)
Total other income, net	139,000	84,000
Net loss	(8,669,000)	(7,456,000)
Other comprehensive loss - unrealized loss	(1,000)	(14,000)
Comprehensive loss	$ (8,670,000)	$ (7,470,000)
Basic and diluted net loss per common share	$ (0.43)	$ (0.48)
Basic and diluted weighted average common shares	20,063,750	15,427,971

SEE NOTES TO UNAUDITED CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

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

	For the Three Months Ended March 31,	
	2007	**2006**
Cash flows from operating activities:		
Net loss	$ (8,669,000)	$ (7,456,000)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:		
Depreciation and amortization	397,000	508,000
Warranty provision	(17,000)	—
Increase in allowance for doubtful accounts	1,000	—
Change in fair value of option liabilities	200,000	(475,000)
Share-based compensation expense	548,000	804,000
Equity loss from investment in joint venture	2,000	49,000
Increases (decreases) in cash caused by changes in operating assets and liabilities:		
Accounts receivable	(9,000)	348,000
Inventories	(48,000)	35,000
Other current assets	(16,000)	(206,000)
Other assets	11,000	(16,000)
Accounts payable and accrued expenses	(511,000)	(814,000)
Deferred revenues, related party	—	10,317,000
Deferred revenues	—	(142,000)
Long-term deferred rent	(49,000)	208,000
Net cash (used in) provided by operating activities	(8,160,000)	3,160,000
Cash flows from investing activities:		
Proceeds from sale and maturity of short-term investments	16,060,000	22,218,000
Purchases of short-term investments	(14,846,000)	(24,647,000)
Purchases of property and equipment	(130,000)	(1,895,000)
Investment in joint venture	—	(150,000)
Net cash provided by (used in) investing activities	1,084,000	(4,474,000)
Cash flows from financing activities:		
Principal payments on long-term obligations	(253,000)	(213,000)
Proceeds from exercise of employee stock options and warrants	227,000	506,000
Proceeds from sale of common stock and warrants	19,901,000	—
Net cash provided by financing activities	19,875,000	293,000
Net increase (decrease) in cash and cash equivalents	12,799,000	(1,021,000)
Cash and cash equivalents at beginning of period	8,902,000	8,007,000
Cash and cash equivalents at end of period	$ 21,701,000	$ 6,986,000
Supplemental disclosure of cash flow information:		
Cash paid during period for:		
Interest	$ 49,000	$ 54,000
Taxes	2,000	1,000
Supplemental schedule of non-cash investing and financing activities:		
Receivable, related party, included in deferred revenues, related party	$ —	$ 1,500,000
Additions to leasehold improvements included in accounts payable and accrued expenses	—	504,000

SEE NOTES TO UNAUDITED CONSOLIDATED CONDENSED FINANCIAL STATEMENTS

CYTORI THERAPEUTICS, INC.
NOTES TO CONSOLIDATED CONDENSED FINANCIAL STATEMENTS
MARCH 31, 2007
(UNAUDITED)

1. Basis of Presentation

Our accompanying unaudited consolidated condensed financial statements as of March 31, 2007 and for the three months ended March 31, 2007 and 2006 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, 2006 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, have been included. Operating results for the three months ended March 31, 2007 are not necessarily indicative of the results that may be expected for the year ending December 31, 2007. For further information, refer to our consolidated financial statements for the year ended December 31, 2006 and footnotes thereto which were included in our Annual Report on Form 10-K, dated April 2, 2007.

2. Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America 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 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 the Put option, determining the assertions used in share-based compensation expense, valuing our deferred tax assets, and assessing how to report our investment in Olympus-Cytori, Inc.

3. Segment Information

We operate as two distinct operating segments - (a) Regenerative cell technology and (b) MacroPore Biosurgery, which manufactures bioresorbable implants. In the past, our resources were managed on a consolidated basis. However, in an effort to better reflect our focus and significant progress in the development of regenerative therapies, we evaluate and report our financial results in two segments.

Our regenerative cell technology segment is developing and seeks to commercialize stem and regenerative cell therapies for cardiovascular disease, reconstructive surgery, and many other serious, chronic, and life-threatening conditions and disorders. We plan to commercialize these therapies through the sale of the Celution™ System, a device that quickly removes stem and regenerative cells from a patient’s own adipose tissue, and its related single-use consumables.

Our MacroPore Biosurgery unit manufactures and distributes the HYDROSORB™ family of bioresorbable spine and orthopedic implants, which have been cleared by the Food & Drug Administration (“FDA”); it also 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.

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, changes in fair value of our option liabilities, and restructuring charges, if applicable.

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

	For the three months ended March 31,	
	2007	2006
Revenues:		
Regenerative cell technology	$ 45,000	$ 688,000
MacroPore Biosurgery	280,000	644,000
Total revenues	$ 325,000	$ 1,332,000
Segment losses:		
Regenerative cell technology	$ (5,351,000)	$ (4,469,000)
MacroPore Biosurgery	(91,000)	(330,000)
General and administrative expenses	(3,166,000)	(3,216,000)
Change in fair value of option liabilities	(200,000)	475,000
Total operating loss	$ (8,808,000)	$ (7,540,000)

	As of March 31, 2007	As of December 31, 2006
Assets:		
Regenerative cell technology	$ 10,131,000	$ 9,792,000
MacroPore Biosurgery	1,768,000	1,758,000
Corporate assets	24,360,000	13,318,000
Total assets	$ 36,259,000	$ 24,868,000

4. Assets Held for Sale

We have begun to focus our efforts primarily on the regenerative cell therapy segment of our business. As a result, in 2006, the Board of Directors decided to divest and is actively pursuing a buyer (or buyers) for our spine and orthopedic MacroPore Biosurgery assets as a means to fund our continuing efforts in our regenerative cell therapy segment. This decision is based on the change in our strategic focus as well as the continuing losses being realized from the MacroPore Biosurgery segment. We expect to complete the disposal no later than the third quarter of 2007. As of March 31, 2007, the remaining assets were comprised of machinery and equipment used for manufacturing, with a net book value of $460,000.

5. Short-Term Investments

We invest excess cash in highly liquid debt instruments of financial institutions and corporations with strong credit ratings and in United States of America government obligations. We have established guidelines relative to diversification and maturities that maintain safety and liquidity. These guidelines are periodically reviewed and modified to take advantage of trends in yields and interest rates.

We evaluate our investments in accordance with the provisions of Statement of Financial Standards (“SFAS”) No. 115, “Accounting for Certain Investments in Debt and Equity Securities.” Based on our intent, our investment policies, and our ability to liquidate debt securities, we classify short-term investment securities within current assets. Available-for-sale securities are carried at fair value, with unrealized gains and losses reported as accumulated other comprehensive income (loss) within stockholders’ equity. The amortized cost basis of debt securities is periodically adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization is included as a component of interest income or interest expense. The amortized cost basis of securities sold is based on the specific identification method and all such realized gains and losses are recorded as a component within other income (expense). Based on such evaluation, management has determined that all investment securities (other than those classified as cash equivalents) are properly classified as available-for-sale.

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.

At March 31, 2007, the excess of carrying cost over the fair value of our short-term investments is immaterial.

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.

No inventory provisions were recorded during the first quarter of 2007 or 2006.

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, whichever is shorter, and range from three to seven 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. Leasehold improvements are amortized on a straight-line basis over the shorter of the estimated useful life of the asset or the lease term. Maintenance and repairs are charged to operations as incurred.

Revenue Recognition

Product Sales

We sell 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. These revenues are classified as product revenues, related party in our statements of operations.

We recognize revenue on product sales to Medtronic only after both (a) the receipt of a purchase order from Medtronic and (b) shipment of ordered products to Medtronic, as title and risk of loss pass upon shipment.

On occasion, we will offer Medtronic extended payment terms. In these circumstances, we do not recognize revenues under these arrangements until the payment becomes due or is received, if that occurs earlier. Moreover, we warrant that our products are free from manufacturing defects at the time of shipment. We have recorded a reserve for the estimated costs we may incur under our warranty program.

License/Distribution Fees

If separable under Emerging Issues Task Force Issue 00-21, “Revenue Arrangements with Multiple Deliverables” (“EITF 00-21”), we recognize any upfront payments received from license/distribution agreements as revenues ratably 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, 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.

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 over a 12 to 18 month period for the therapeutic area. 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 in the statement of operations 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 a component of deferred revenues in the accompanying 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.

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 statements of operations, depending on the nature of the arrangement. The costs associated with earning these revenues are typically recorded as research and development expense.

We received a total of $22,000,000 from Olympus and Olympus-Cytori, Inc. during 2005 in two separate but related transactions (see note 13). 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™ System. 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 and certain related intellectual property, and (b) perform future development services related to commercializing the Celution™ System (see note 13). As noted above, the license and development services are not separable under EITF 00-21. Accordingly, we will recognize the $28,311,000 allocated to deferred revenues, related party, using a proportional performance methodology, that is, as we complete substantive milestones related to the development component of the combined accounting unit. As of March 31, 2007, we have recognized $5,905,000 of the deferred revenues, related party as development revenues. All related development costs are expensed as incurred and are included in research and development expense on the statement of operations. No milestones were met related to the future development services during the first quarter of 2007 and therefore, no revenues were recognized.

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

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

Of the amounts received and deferred, we recognized development revenues of $0 and $142,000 in the three months ended March 31, 2007 and 2006, respectively, representing the fair value of the completed milestones relative to the fair value of the total efforts expected to be necessary to achieve regulatory approval by the MHLW. 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 $1,139,000 (consisting of $889,000 in deferred revenues plus a non-refundable payment of $250,000 to be received upon commercialization) in revenues associated with this milestone arrangement in 2007. 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, 2007 and 2006, we had no impairment losses associated with our long-lived assets.

8. Share-Based Compensation

During the first quarter of 2007, we issued to our officers and directors stock options to purchase up to 410,000 shares of our common stock, with 48-month vesting for our officers and 24-month vesting for our directors. The grant date fair value of option awards granted to our officers and directors was $3.82 and $3.70 per share, respectively. The resulting share-based compensation expense of $1,480,000, net of estimated forfeitures, will be recognized as expense over the respective vesting period.

9. Income Taxes

On July 13, 2006, the Financial Accounting Standards Board ("FASB") issued Financial Interpretation No. 48 ("FIN 48"), "Accounting for Uncertainty in Income Taxes - An Interpretation of FASB Statement No. 109." FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an entity's financial statements in accordance with SFAS No. 109 ("SFAS 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. FIN 48 is effective for fiscal years beginning after December 15, 2006.

We adopted the provisions of FIN 48 on January 1, 2007. There were no unrecognized tax benefits as of the date of adoption. As a result of the implementation of FIN 48, we did not recognize an increase in the liability for unrecognized tax benefits. There are no unrecognized tax benefits included in the balance sheet that would, if recognized, affect the effective tax rate.

Our practice is to recognize interest and/or penalties related to income tax matters in income tax expense. We had $0 accrued for interest and penalties on our balance sheet as of March 31, 2007 and December 31, 2006, and have recognized $0 in interest and/or penalties in our statement of operations for the first quarter of 2007.

With limited exception, we are subject to taxation in the U.S. and California jurisdictions. Our tax years for 1997 and forward are subject to examination by the U.S. and California tax authorities due to the carryforward of unutilized net operating losses and research and development credits.

The adoption of FIN No. 48 did not impact our financial condition, results of operations, or cash flows. At January 1, 2007, we had net deferred tax assets of $38,505,000. The deferred tax assets are primarily composed of federal and state tax net operating loss carryforwards and federal and state research and development ("R&D") credit carryforwards. Due to uncertainties surrounding our ability to generate future taxable income to realize these assets, a full valuation allowance has been established to offset our deferred tax asset. Additionally, the future utilization of our net operating loss and R&D credit carryforwards to offset future taxable income may be subject to a substantial annual limitation as a result of ownership changes that may have occurred previously or that could occur in the future. We are in the process of updating our Section 382/383 analysis through the period ending December 31, 2006. We have not yet determined whether such an ownership change has occurred, however, the Company is currently working to complete a Section 382/383 analysis regarding the limitation of the net operating losses and research and development credits. Similarly, we plan to complete an R&D credit analysis regarding the calculation of the R&D credit. When these analyses are completed, we plan to update our unrecognized tax benefits under FIN No. 48. Therefore, we expect that the unrecognized tax benefits may change within 12 months of this reporting date. At this time, we cannot estimate how much the unrecognized tax benefits may change. Due to the existence of the valuation allowance, future changes in our unrecognized tax benefits will not impact our effective tax rate.

10. Loss per Share

We compute loss per share based on the provisions of SFAS No. 128, "Earnings per Share." Basic per share data is computed by dividing net income or loss available to common stockholders by the weighted average number of common shares outstanding during the period. Diluted per share data is computed by dividing net income or loss available to common stockholders by the weighted average number of common shares outstanding during the period increased to include, if dilutive, the number of additional common share equivalents that would have been outstanding if potential common shares had been issued using the treasury stock method. Potential common shares were related entirely to outstanding but unexercised options 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 first quarter ended March 31, 2007 and 2006, as their inclusion would be antidilutive. Potentially dilutive common shares excluded from the calculations of diluted loss per share were 6,284,764 and 8,249,001 for the first quarter of 2007 and 2006, respectively.

11. 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, 2007, we have pre-clinical research study obligations of $382,000 (all of which are expected to be completed within a year) and clinical research study obligations of $6,411,000 ($5,220,000 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 12 for a discussion of our commitments and contingencies related to our interactions with the University of California.

Refer to note 13 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.

12. 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 the fourth year. 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.

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

Additionally, we are obligated to reimburse UC for patent prosecution and other legal costs on any patent applications contemplated by the agreement. In particular, the University of Pittsburgh filed a lawsuit in the fourth quarter of 2004, naming all of the inventors who had not assigned their ownership interest in 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. Accordingly, it could have a negative effect on us if the University of Pittsburgh were to win the lawsuit.

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.

In the three months ended March 31, 2007 and 2006, we expensed $62,000 and $505,000, respectively, for legal fees related to this license. These expenses have been classified as general and administrative expense in the accompanying consolidated financial statements. We believe that the amount accrued as of March 31, 2007 is a reasonable estimate of our liability for the expenses incurred to date.

13. 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 under which we received $11,000,000 in cash proceeds.

Under this agreement, we issued 1,100,000 newly issued 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 grant 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.

At the time we entered into the Purchase Agreement, we estimated the fair value of the option liability to be $186,000 based on the following assumptions:

- Contractual term of 1.67 years,
- Risk-free interest rate of 3.46%, and
- Estimated share-price volatility of 59.7%.

The $11,000,000 in total proceeds we received in the second quarter of 2005 exceeded the sum of (i) the market value of our stock as well as (ii) the fair value of the option at the time we entered into the share purchase agreement. The $7,811,000 difference between the proceeds received and the fair values of our common stock and option liability is recorded as a component of deferred revenues, related party, in the accompanying balance sheet.

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

As of March 31, 2007, Olympus holds approximately 13.36% 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 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 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 in January 2006, we received an additional $11,000,000 development milestone payment from the Joint Venture.

We have determined that the Joint Venture is a variable interest entity ("VIE") pursuant to FASB Interpretation No. 46 (revised 2003), "Consolidation of Variable Interest Entities - An Interpretation of ARB No. 51" ("FIN 46R"), but that Cytori is not the VIE's primary beneficiary. Accordingly, we have accounted for our interests in the Joint Venture using the equity method of accounting, since we can exert significant influence over the Joint Venture's operations. At March 31, 2007, the carrying value of our investment in the Joint Venture is $74,000.

We are under no obligation to provide additional funding to the Joint Venture, but may choose to do so. In the first quarter of 2006, we contributed $150,000 to the Joint Venture.

Put/Calls and Guarantees

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

As of November 4, 2005, the fair value of the Put was determined to be $1,500,000. At March 31, 2007 and December 31, 2006, the fair value of the Put was $1,100,000 and $900,000, respectively. Fluctuations in the Put value are recorded in the statements of operations as a component of change in fair value of option liabilities. The Put itself, which is perpetual, has been recorded as a long-term liability in the caption Option liability in the balance sheet.

The valuations of the Put were completed by an independent valuation firm 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:

	March 31, 2007	December 31, 2006	November 4, 2005
Expected volatility of Cytori	63.00%	66.00%	63.20%
Expected volatility of the Joint Venture	63.00%	56.60%	69.10%
Bankruptcy recovery rate for Cytori	21.00%	21.00%	21.00%
Bankruptcy threshold for Cytori	$ 10,660,000	$ 10,110,000	$ 10,780,000
Probability of a change of control event for Cytori	2.23%	1.94%	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	4.65%	4.71%	4.66%

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

Olympus-Cytori Joint Venture

The Joint Venture has exclusive access to our technology for the development, manufacture, and supply of the devices (second generation and beyond) for all therapeutic applications. Once a second 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 generation devices for all therapeutic applications of adipose stem and regenerative cells.

As part of the various agreements with Olympus, we will be required, following commercialization of the Celution™ System, 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, 2007.

Deferred revenues, related party

As of March 31, 2007, the deferred revenues, related party account primarily consists of the consideration we have received in exchange for future services that we have agreed to perform on behalf of Olympus and the Joint Venture. These services include completing pre-clinical and clinical studies, product development and seeking regulatory approval for the treatment of various therapeutic conditions with adult stem and regenerative cells residing

in adipose tissue. These services also include providing an exclusive and perpetual license to our device technology, including the Celution™ System 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.

14. Common Stock and Warrant Offering

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

15. Subsequent Event

In March 2007, we entered into a Common Stock Purchase Agreement to sell 1,000,000 shares of unregistered common stock to Green Hospital Supply, Inc. for $6,000,000 cash. We agreed to seek Securities and Exchange Commission registration of the shares for resale if so requested. The closing of the purchase and sale of the shares occurred on April 12, 2007.

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

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This report contains certain statements that may be deemed "forward-looking statements" within the meaning of United States of America securities laws. All statements, other than statements of historical fact, that address activities, events or developments that we intend, expect, project, believe or anticipate 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. 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 those 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

Cytori is developing the Celution™ System, an innovative medical device that removes a patient's own stem and regenerative cells from their fat tissue so that these cells can be delivered to the same patient in about an hour. The commercialization model will be based on the sale of the system and related single-use therapeutic sets that are tailored to each therapeutic application. We are focused initially on bringing applications to market for reconstructive surgery and cardiovascular disease. Success is dependent on conducting well-designed clinical trials that demonstrate patient benefit and support reimbursement and physician adoption, gaining regulatory clearance for the Celution™ System, and building out our commercialization and manufacturing infrastructure.

The Celution™ System may potentially be applied to other important therapeutic areas, which include gastrointestinal disorders, peripheral vascular disease, spinal disc repair, renal failure, and urinary incontinence. For this reason, a significant part of our strategy is to seek commercialization partnerships with medical device or pharmaceutical companies that possess development expertise and have sales forces dedicated to specific therapeutic areas. The goal is to broaden the number of applications for which the Celution™ System may be sold, accelerate the development of applications outside of our core expertise, and bring in capital through partnering agreements that will offset development costs of reconstructive surgery and cardiovascular disease applications.

Breast Reconstruction

During the first quarter of 2007, we continued to make progress toward commercializing the Celution™ System in Europe in early 2008 for reconstructive surgery. This is the first therapeutic application for which we will commercialize the Celution™ System. In February, we entered into an agreement with our first distributor, who will be responsible for selling the system in Italy, Spain, and Portugal. We expect to add distributors for other countries throughout Europe during 2007 to further build out the distribution network. In parallel, we are building out our internal manufacturing capabilities so that we will be able to meet anticipated demand in 2008 until the Olympus-Cytori Joint Venture, described below, will assume device manufacturing.

Also, this year we will initiate a company-sponsored clinical study to evaluate efficacy in breast reconstruction following partial mastectomy. The results of this study are intended to primarily support reimbursement for the product as used in this procedure as well as allow us to market the Celution™ System specifically for this application, which represents a narrow subset of the reconstructive surgery market. In Europe, there are 300,000 patients diagnosed with breast cancer each year and an estimated 60% are considered eligible for a partial mastectomy. Approximately 3 million women in Europe alive today have already been diagnosed with breast cancer. This includes women who are newly diagnosed, in active treatment, have completed active treatment, and those living with progressive symptoms of their disease.

Cardiovascular Disease

In January of 2007, we started a clinical trial for chronic ischemia, a severe form of coronary artery disease. It is a 36-patient safety and feasibility study evaluating adipose stem and regenerative cells as a treatment for chronic ischemia. The patients' cells are extracted from their adipose tissue using the Celution™ System, and then injected into the injured oxygen-deprived areas of their hearts through a specially designed catheter. The patients will be evaluated for six months after treatment. The study is being conducted at Gregorio Marañón Hospital in Madrid, Spain and led by Drs. Francisco J. Fernández-Avilés and Emerson Perin. Enrollment for this trial remains on track and full results are expected to be reported in the second half of 2008.

We expect to start a clinical trial in heart attack patients in the second quarter of 2007. This trial will be a 48-patient safety and feasibility study to evaluate adipose stem and regenerative cells as a treatment for heart attacks. The patients' cells will be extracted from their adipose tissue using the Celution™ System and injected into their coronary artery. The patients will be evaluated six months after treatment. Full results are expected to be reported in the fourth quarter of 2008. The study will be conducted at Thoraxcenter, Erasmus Medical Center Hospital in Rotterdam, the Netherlands, and is being led by Dr. Patrick Serruys.

The American Heart Association estimates that in the United States of America alone, there are approximately 1.2 million heart attacks each year and more than 5.2 million people suffer from a form of chronic heart disease. Given the size of this market and the pre-clinical data demonstrating functional improvement, cardiovascular disease represents a very important application for our Celution™ System and we believe that outcome of the clinical data from these safety and feasibility studies could have a significant impact on our future operations.

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.

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 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 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 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.

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

Olympus-Cytori Joint Venture

The Joint Venture has exclusive access to our technology for the development, manufacture, and supply of the devices (second generation and beyond) for all therapeutic applications. Once a second 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 generation devices for all therapeutic applications of adipose stem and regenerative cells.

In 2006, we worked closely with Olympus' team of scientists and engineers to design future generations of the Celution™ System that contain certain product enhancements and that can be manufactured in a streamlined manner. For the remainder of 2007, the Joint Venture will continue its efforts with the goal of scale-up manufacturing available in late 2008.

Other Related-Party Transactions

In a separate agreement entered into on February 23, 2006, we granted Olympus an exclusive right to negotiate 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 $1.5 million payment from Olympus. As part of this agreement, Olympus will conduct market research and pilot clinical studies in collaboration with us over a 12 to 18 month period for the therapeutic area.

In the third quarter of 2006, we received net proceeds of $16,219,000 from the sale of common stock pursuant to a shelf registration statement, of which Olympus purchased $11,000,000.

MacroPore Biosurgery

Spine and orthopedic products

We manufacture bioresorbable implants used in spine and orthopedic procedures. Medtronic is the sole distributor of these products but due to a substantial decrease in their orders of this product, we experienced losses for our MacroPore Biosurgery segment for the first quarter of 2007 and are actively pursuing a buyer (or buyers) for this line of business.

Thin Film Japan Distribution Agreement

In 2004, we sold the majority of our Thin Film business to MAST, Biosurgery, AG ("MAST").

Even after consummation of the 2004 Thin Film asset sale to MAST, we retained all rights to Thin Film business in Japan (subject to a purchase option of MAST, as described later below), 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
- 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." In simplest terms, commercialization occurs 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 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 recognized $0 and $142,000 in development revenues in the first quarter of 2007 and 2006, respectively.

The previously mentioned 2004 sale agreement granted MAST a "Purchase Right" to acquire, at any time before May 31, 2007, our Thin Film-related interests and rights for Japan. If MAST chooses to exercise the Purchase Right between now and May 31, 2007, the exercise price of the Purchase Right will be equal to the fair market value of the Japanese business, but in no event will be less than $3,000,000. Moreover, until May 31, 2007, MAST has a right of first refusal to match the terms of any outside offer to buy our Japanese Thin Film business.

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. We ended the first quarter of 2007 with $21.7 million in cash and cash equivalents, which included approximately $20 million that was raised from an equity offering in February 2007, net of fees and expenses. After the end of the quarter, we received $6.0 million from the sale of 1.0 million shares to Green Hospital Supply, Inc. under a strategic equity agreement.

Results of Operations

The net loss for the first quarter of 2007 was $8.7 million, which consists of $5.0 million in research and development expenses and $3.2 million in general and administrative expenses. This compares to a net loss of $7.5 million in the first quarter of 2006. The increased net loss for the first quarter of 2007 reflects expenses related to preparations for commercialization, including build-out of our manufacturing capability, as well as costs associated with clinical trials. We believe that our operating losses will be greater in the first half of the year and continue to expect our net operating loss for 2007 will be approximately $25 million.

Product revenues

Product revenues relate to our MacroPore Biosurgery segment and include revenues from our spine and orthopedic products. The following table summarizes the components for the three months ended March 31, 2007 and 2006:

	For the three months ended March 31,			
	2007	2006	$ Differences	% Differences
Spine and orthopedics products	$ 280,000	$ 502,000	$ (222,000)	(44.2)%
% attributable to Medtronic	100%	100%		

Spine and orthopedic product revenues represent sales of bioresorbable implants used in spine and orthopedic surgical procedures. These revenues were primarily related to orders during the three months ended March 31, 2007 for our radiographically identifiable Spine System products, marketed under the name MYSTIQUE™, which Medtronic, our sole distributor of spine and orthopedic products, launched in the third quarter of 2005. Subsequent to the product launch, Medtronic has substantially decreased its orders of this product. We experienced losses for our MacroPore Biosurgery segment for the three months ended March 31, 2007.

Note that Medtronic owns approximately 4.43% of our outstanding common stock as of March 31, 2007.

The future. Our revenue from spine and orthopedic products is dependent upon the market's adoption of our technology, which is largely dependent upon Medtronic's marketing efforts and pricing strategies. Therefore our visibility of the size and timing of HYDROSORB™ and MYSTIQUE™ orders is limited. Since we rely on Medtronic's ability and commitment to build and expand the market share for our products and we have been disappointed in the past by their effort at such, it is possible that we will not receive more than minimal orders for the MYSTIQUE™ portion of the HYDROSORB™ product line during the remainder of 2007. Since it is unlikely that we will see significant sales of the current non-MYSTIQUE™ products any time in the future, it is likely that we will see losses in our Medtronic-dependent MacroPore Biosurgery business going forward. We have decided to divest this business line and are actively pursuing a buyer (or buyers) for this business line.

All product revenues are currently attributable to Medtronic as domestic Thin Film revenues ceased in 2004. This may change when commercialization of the Thin Film products in Japan occurs and we begin Thin Film shipments to Senko, which we believe will happen in the latter part of 2007.

Cost of product revenues

Cost of product revenues 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, 2007 and 2006:

	For the three months ended March 31,			
	2007	2006	$ Differences	% Differences
Cost of product revenues	$ 215,000	$ 428,000	$ (213,000)	(49.8)%
Share-based compensation	10,000	26,000	(16,000)	(61.5)%
Total cost of product revenues	$ 225,000	$ 454,000	(229,000)	(50.4)%
Total cost of product revenues as % of product revenues	80.4%	90.4%		

MacroPore Biosurgery:

- Our product revenues are currently generated only through sales of bioresorbable products and therefore, cost of revenues is related only to our MacroPore Biosurgery segment.

- The decrease in cost for the three months ended March 31, 2007 as compared to the same period in 2006 was due to a decrease in production of MacroPore Biosurgery products. This was, however, partially offset by fixed labor and overhead costs that were incurred regardless of the level of production. As MacroPore Biosurgery product revenues have declined, gross margins have been negatively affected by fixed costs.

- Cost of product revenues includes approximately $10,000 and $26,000 of share-based compensation expense for the three months ended March 31, 2007 and 2006, respectively. For further details, see share-based compensation discussion below.

The future. Ceasing to manufacture the Craniomaxillofacial (“CMF”) product line and the non-Japan bioresorbable Thin Film product line, combined with the poor rate of orders from Medtronic, deprives us of economies of scale and has and will continue to negatively impact our margins. We do not expect demand for our HYDROSORB™ MYSTIQUE™ products, which depends largely on Medtronic’s marketing efforts, to increase in the future.

In an effort to reduce overhead costs related to the MacroPore Biosurgery segment, we have accelerated termination of two of our building leases. As a result, one of our leases terminated in April 2007 and we will be renting only a small portion of the other building during the first half of 2007.

As mentioned above, it appears that the spine and orthopedics business is not succeeding under our stewardship. As a result, our Board of Directors has decided to divest and is actively pursuing a buyer (or buyers) for these assets.

Development revenues

The following table summarizes the components of our development revenues for the three months ended March 31, 2007 and 2006:

	For the three months ended March 31,			
	2007	2006	$ Differences	% Differences
Regenerative cell technology:				
Development (Olympus)	$ —	$ 683,000	$ (683,000)	—
Research grant (NIH)	—	4,000	(4,000)	—
Regenerative cell storage services and other	45,000	1,000	44,000	4,400.0%
Total regenerative cell technology	45,000	688,000	(643,000)	(93.5)%
MacroPore Biosurgery:				
Development (Senko)	—	142,000	(142,000)	—
Total development revenues	$ 45,000	$ 830,000	$ (785,000)	(94.6)%

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, 2007 and 2006, we recognized $0 and $683,000, respectively, of revenue associated with our arrangements with Olympus. The revenue recognized in the first quarter of 2006 was a result of completion of a pre-clinical study and a milestone payment upon receipt of a CE Mark for the first generation Celution™ System.

- The research grant revenue relates to an agreement with NIH. Under this arrangement, the NIH reimburses us for "qualifying expenditures" related to research on Adipose-Derived Cell Therapy for Myocardial Infarction. To receive funds under the grant arrangement, we are required to (i) demonstrate that we incurred "qualifying expenses," as defined in the grant agreement between the NIH and us, (ii) maintain a system of controls, whereby we can accurately track and report all expenditures related solely to research on Adipose-Derived Cell Therapy for Myocardial Infarction, and (iii) file appropriate forms and follow appropriate protocols established by the NIH.

  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.

  We recorded a total of $4,000 in revenues for the three months ended March 31, 2006, which include allowable grant fees as well as cost reimbursements. During the three months ended March 31, 2006, we incurred $4,000 of costs, of which all were qualified. Our work under this NIH agreement was completed in 2006; as a result, there were no comparable revenues or costs in 2007.

MacroPore Biosurgery:

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

- Upon notifying Senko of completion of the initial regulatory application to the MHLW for the Thin Film product, we were entitled to a nonrefundable payment of $1,250,000. We so notified Senko on September 28, 2004, received payment in October 2004, and recorded deferred revenues of $1,250,000. As of March 31, 2007, of the amount deferred, we have recognized development revenues of $358,000 ($0 in 2007, $149,000 in 2006, $51,000 in 2005, and $158,000 in 2004).

- Under this agreement, we also received a $1,500,000 license fee that was recorded as a component of deferred revenues in the accompanying balance sheet. We are also entitled to a nonrefundable payment of $250,000 once we achieve commercialization. Because the $1,500,000 in license fees is potentially refundable, such amounts will not be recognized as revenues until the refund rights expire. Specifically, half of the license fee is refundable if the parties agree commercialization is not achievable and a proportional amount is refundable if we terminate the arrangement, other than for material breach by Senko, before three years post-commercialization.

The future. We expect to recognize revenues from our regenerative cell technology segment during 2007 as we complete certain pre-clinical studies and certain phases of our product development performance obligations. If we are successful in achieving certain milestone points related to these activities, we will recognize approximately $2,500,000 in revenues during the remainder of 2007. The exact timing of when amounts will be reported in revenue will depend on internal factors (for instance, our ability to complete the service obligations we have agreed to perform) as well as external considerations, including obtaining the necessary regulatory approvals for various therapeutic applications related to the Celution™ System. The cash for these performance 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 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. Obtaining regulatory clearance from the MHLW for initial commercialization is expected in 2007. Accordingly, we expect to recognize approximately $1,139,000 (consisting of $889,000 in deferred revenues plus a non-refundable payment of $250,000 to be received upon commercialization) in revenues associated with this milestone arrangement in 2007. 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, 2007 and 2006:

	For the three months ended March 31,			
	2007	2006	$ Differences	% Differences
Regenerative cell technology:				
Regenerative cell technology	$ 3,235,000	$ 3,067,000	$ 168,000	5.5%
Development milestone (Joint Venture)	1,505,000	1,353,000	152,000	11.2%
Research grants (NIH)	—	69,000	(69,000)	—
Share-based compensation	152,000	279,000	(127,000)	(45.5)%
Total regenerative cell technology	4,892,000	4,768,000	124,000	2.6%
MacroPore Biosurgery:				
Bioresorbable polymer implants	102,000	317,000	(215,000)	(67.8)%
Development milestone (Senko)	1,000	78,000	(77,000)	(98.7)%
Share-based compensation	1,000	13,000	(12,000)	(92.3)%
Total MacroPore Biosurgery	104,000	408,000	(304,000)	(74.5)%
Total research and development expenses	$ 4,996,000	$ 5,176,000	$ (180,000)	(3.5)%

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. Labor-related expenses, not including share-based compensation, decreased by $52,000 for the three months ended March 31, 2007 as compared to the same period in 2006. Professional services expense, which includes pre-clinical study costs, decreased by $210,000 for the three months ended March 31, 2007 as compared to the same period in 2006. This was due to decreases in temporary labor and the use of consultants. Clinical study costs increased by $194,000 for the quarter ended March 31, 2007 as compared to the same period in 2006. Rent and utilities expense decreased by $32,000 in the three months ended March 31, 2007 as compared to 2006 due to the new lease terms at our Top Gun location. Other supplies increased by $151,000 during the three months ended March 31, 2007 as compared to 2006. Other notable increases included an increase in the category of repairs and maintenance of $147,000 and depreciation expense increases of $14,000 for the three months ended March 31, 2007, as compared to the same period in 2006.

- 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 stem and regenerative cells for multiple large markets. For the three months ended March 31, 2007 and 2006, costs associated with the development of the device were $1,505,000 and $1,353,000, respectively. These expenses were composed of $891,000 and $699,000 in labor and related benefits, $306,000 and $358,000 in consulting and other professional services, $190,000 and $225,000 in supplies and $118,000 and $71,000, respectively, in other miscellaneous expense.

- In 2004, we entered into an agreement with the NIH to reimburse us for up to $950,000 (Phase I $100,000 and Phase II $850,000) in “qualifying expenditures” related to research on Adipose-Derived Cell Therapy for Myocardial Infarction. For the three months ended March 31, 2006, we incurred $69,000 of direct expenses relating entirely to Phase II ($65,000 of which were not reimbursed). Our work under this NIH agreement was completed during 2006; as a result, there were no comparable costs in 2007.

- Share-based compensation for the regenerative cell technology segment of research and development was $152,000 and $279,000 for the three months ended March 31, 2007 and 2006, respectively. See share-based compensation discussion below for more details.

MacroPore Biosurgery:

- Our bioresorbable polymer surgical implants platform technology is used for development of spine and orthopedic products. The decrease in research and development costs associated with bioresorbable polymer implants for the three months ended March 31, 2007 as compared with the same period in 2006 was due primarily to our shift in focus to our regenerative cell technology segment. Labor and related benefits expense, not including share-based compensation, decreased by $89,000 for the three months ended March 31, 2007, respectively, as compared to the same periods in 2006. This was due to a redistribution of labor resources from one segment to the other as well as a reduction in force in the third quarter of 2006.

- Under a Distribution Agreement with Senko, we are responsible for the completion of the initial regulatory application to the MHLW and commercialization of the Thin Film product line in Japan. Commercialization occurs when one or more Thin Film product registrations are completed with the MHLW. During the three months ended March 31, 2007 and 2006, we incurred $1,000 and $78,000, 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, 2007 and

2006 was $1,000 and $13,000, respectively. See share-based compensation discussion below for more details.

The future. Our strategy is to continue to increase 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 2007. We are researching therapies for cardiovascular disease as well as new approaches for aesthetic and reconstructive surgery, gastrointestinal disorders and spine and orthopedic conditions. The expenditures have and will continue to primarily relate to developing therapeutic applications and conducting pre-clinical and clinical studies on adipose-derived stem and regenerative cells.

We continue to reduce research and development expenditures in the bioresorbable technology platform. We anticipate minimal further expenditures in this area of research in 2007. We are currently pursuing a buyer (or buyers) for this segment of our business.

Sales and marketing expenses

Sales and marketing expenses include costs of marketing personnel, tradeshows, and promotional activities and materials. Medtronic is 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, 2007 and 2006:

	For the three months ended March 31,			
	2007	2006	$ Differences	% Differences
Regenerative cell technology:				
International sales and marketing	$ 434,000	$ 287,000	$ 147,000	51.2%
Share-based compensation	70,000	102,000	(32,000)	(31.4)%
Total regenerative cell technology	504,000	389,000	115,000	29.6%
MacroPore Biosurgery:				
General corporate marketing	13,000	82,000	(69,000)	(84.1)%
International sales and marketing	29,000	23,000	6,000	26.1%
Share-based compensation	—	7,000	(7,000)	—
Total MacroPore Biosurgery	42,000	112,000	(70,000)	(62.5)%
Total sales and marketing expenses	$ 546,000	$ 501,000	$ 45,000	9.0%

Regenerative Cell Technology:

- International sales and marketing expenditures for the three months ended March 31, 2007 and 2006 relate primarily to salaries expense for employees involved in business development. The main emphasis of these newly-formed functions is to seek strategic alliances and/or co-development partners for our regenerative cell technology, which we began to focus on in the third quarter of 2005.

- Share-based compensation for the regenerative cell segment of sales and marketing for the three months ended March 31, 2007 and 2006 was $70,000 and $102,000, 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 continue to decrease as we focus more on our regenerative cell technology 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.

- Share-based compensation for the MacroPore Biosurgery segment of sales and marketing for the three months ended March 31, 2007 and 2006 was $0 and $7,000, respectively. See share-based compensation discussion below for more details.

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, which is expected to be commercialized in 2008.

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, 2007 and 2006:

	For the three months ended March 31,			
	2007	2006	$ Differences	% Differences
General and administrative	$ 2,851,000	$ 2,839,000	$ 12,000	0.4%
Share-based compensation	315,000	377,000	(62,000)	(16.4)%
Total general and administrative expenses	$ 3,166,000	$ 3,216,000	$ (50,000)	(1.6)%

- Salaries and other related benefits (not including share-based compensation) increased by $140,000 for the three months ended March 31, 2007, as compared to the same period in 2006. Travel and entertainment expense increased by $24,000 for the three months ended March 31, 2007 as compared to the same period in 2006. Shipping and postage expense decreased by $31,000 for the three months ended March 31, 2007.

- We have incurred substantial legal expenses in connection with the University of Pittsburgh's 2004 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 and our regenerative cell strategy could be affected. The amended UC license agreement signed in the third quarter of 2006 clarified that we are responsible for all patent prosecution and litigation costs related to this lawsuit. For the three months ended March 31, 2007 and 2006, we expensed $62,000 and $505,000, respectively, related to this lawsuit. 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, 2007 and 2006 was $315,000 and $377,000, respectively. See share-based compensation discussion below for more details.

The future. We expect general and administrative expenses of approximately $9,000,000 to $11,000,000 in 2007. We are seeking ways to minimize the ratio of these expenses to research and development expenses. As a result, we have begun efforts to restrain general and administrative expenses.

We expect to continue to incur substantial legal expenses in connection with the University of Pittsburgh's 2004 lawsuit.

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, 2007 and 2006:

	For the three months ended March 31,			
	2007	2006	$ Differences	% Differences
Regenerative cell technology:				
Research and development-related	$ 152,000	$ 279,000	$ (127,000)	(45.5)%
Sales and marketing-related	70,000	102,000	(32,000)	(31.4)%
Total regenerative cell technology	222,000	381,000	(159,000)	(41.7)%
MacroPore Biosurgery:				
Cost of product revenues	10,000	26,000	(16,000)	(61.5)%
Research and development-related	1,000	13,000	(12,000)	(92.3)%
Sales and marketing-related	—	7,000	(7,000)	—
Total MacroPore Biosurgery	11,000	46,000	(35,000)	(76.1)%
General and administrative-related	315,000	377,000	(62,000)	(16.4)%
Total share-based compensation	$ 548,000	$ 804,000	$ (256,000)	(31.8)%

Most of the expenses in both periods related to the vesting of stock option awards to employees. In the first quarter of 2006, we granted 2,500 shares of restricted common stock to a non-employee scientific advisor. Because the shares granted are not subject to additional future vesting or service requirements, the share-based compensation expense of $18,000 recorded in the first quarter of 2006 constitutes the entire expense related to these grants, and no future period charges will be reported. The stock is restricted only in that it cannot be sold for a specified period of time. There are no vesting requirements. The scientific advisor also receives cash consideration as services are performed.

The future. We will continue to grant options (which will result in an expense) to our employees and, as appropriate, to non-employee service providers. In addition, previously -granted options will continue to vest in accordance with their original terms. As of March 31, 2007, the total compensation cost related to non-vested stock options not yet recognized for all our plans is approximately $5,102,000. These costs are expected to be recognized over a weighted average period of 1.88 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, 2007 and 2006:

	For the three months ended March 31,			
	2007	2006	$ Differences	% Differences
Change in fair value of option liability	$ —	$ (375,000)	$ 375,000	—
Change in fair value of put option liability	200,000	(100,000)	300,000	300.0%
Total change in fair value of option liabilities	$ 200,000	$ (475,000)	$ 675,000	142.1%

- We granted Olympus an option to acquire 2,200,000 shares of our common stock which expired December 31, 2006. The exercise price of the option shares was $10 per share. We had accounted for this grant as a liability because had the option been exercised, we would have been required to deliver listed shares of our common stock to settle the option shares. In accordance with EITF 00-19, the fair value of this option was re-measured at the end of each quarter, using the Black-Scholes option pricing model, with the movement in fair value reported in the statement of operations as a change in fair value of option liabilities.

- 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 by an independent valuation firm 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:

	March 31, 2007	December 31, 2006	November 4, 2005
Expected volatility of Cytori	63.00%	66.00%	63.20%
Expected volatility of the Joint Venture	63.00%	56.60%	69.10%
Bankruptcy recovery rate for Cytori	21.00%	21.00%	21.00%
Bankruptcy threshold for Cytori	$ 10,660,000	$ 10,110,000	$ 10,780,000
Probability of a change of control event for Cytori	2.23%	1.94%	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	4.65%	4.71%	4.66%

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.

Income taxes

On July 13, 2006, the FASB issued FIN 48, which clarifies the accounting for uncertainty in income taxes recognized in an entity's financial statements in accordance with SFAS 109, 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. FIN 48 is effective for fiscal years beginning after December 15, 2006.

We adopted the provisions of FIN 48 on January 1, 2007. There were no unrecognized tax benefits as of the date of adoption. As a result of the implementation of FIN 48, we did not recognize an increase in the liability for unrecognized tax benefits. There are no unrecognized tax benefits included in the balance sheet that would, if recognized, affect the effective tax rate.

Our practice is to recognize interest and/or penalties related to income tax matters in income tax expense. We had $0 accrued for interest and penalties on our balance sheet as of March 31, 2007 and December 31, 2006, and have recognized $0 in interest and/or penalties in our statement of operations for the first quarter of 2007.

With limited exception, we are subject to taxation in the U.S. and California jurisdictions. Our tax years for 1997 and forward are subject to examination by the U.S. and California tax authorities due to the carryforward of unutilized net operating losses and research and development credits.

The adoption of FIN No. 48 did not impact our financial condition, results of operations or cash flows. At January 1, 2007, we had net deferred tax assets of $38,505,000 million. The deferred tax assets are primarily composed of federal and state tax net operating loss carryforwards and federal and state R&D credit carryforwards. Due to uncertainties surrounding our ability to generate future taxable income to realize these assets, a full valuation allowance has been established to offset our deferred tax asset. Additionally, the future utilization of our net operating loss and R&D credit carryforwards to offset future taxable income may be subject to a substantial annual limitation as a result of ownership changes that may have occurred previously or that could occur in the future.

We are in the process of updating our Section 382/383 analysis through the period ending December 31, 2006. We have not yet determined whether such an ownership change has occurred, however, the Company is currently working to complete a Section 382/383 analysis regarding the limitation of the net operating losses and research and development credits. Similarly, we plan to complete an R&D credit analysis regarding the calculation of the R&D credit. When these analyses are completed, we plan to update our unrecognized tax benefits under FIN No. 48. Therefore, we expect that the unrecognized tax benefits may change within 12 months of this reporting date. At this time, we cannot estimate how much the unrecognized tax benefits may change. Due to the existence of the valuation allowance, future changes in our unrecognized tax benefits will not impact our effective tax rate.

Financing items

The following table summarizes interest income, interest expense, and other income and expense for the three months ended March 31, 2007 and 2006:

	For the three months ended March 31,			
	2007	2006	$ Differences	% Differences
Interest income	$ 197,000	$ 197,000	$ —	—
Interest expense	(52,000)	(58,000)	6,000	(10.3)%
Other income (expense)	(4,000)	(6,000)	2,000	(33.3)%
Total	$ 141,000	$ 133,000	$ 8,000	6.0%

- There was no change to interest income in the first quarter of 2007 as compared with the same period in 2006. This was due to similar amounts of funds available for investment during the respective quarters.

- Interest expense decreased in 2007 as compared to 2006 due to lower principal balances on our long-term equipment-financed borrowings offset by an additional promissory note of approximately $600,000 executed in December 2006.

- The changes in other income (expense) in the first quarter of 2007 as compared to the same period in 2006 resulted primarily from changes in foreign currency exchange rates.

The future. Interest income earned in 2007 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 2007.

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, 2007 and 2006:

	For the three months ended March 31,			
	2007	2006	$ Differences	% Differences
Equity loss in investment	$ (2,000)	$ (49,000)	$ 47,000	(95.9)%

The losses in 2007 and 2006 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 modest general and administrative expenses, offset by royalty income expected to begin in 2008 when Cytori commercializes the Celution™ System in Europe. 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, 2007 and December 31, 2006:

	March 31, 2007	December 31, 2006	$ Differences	% Differences
Cash and cash equivalents	$ 21,701,000	$ 8,902,000	$ 12,799,000	143.8%
Short-term investments, available for sale	2,761,000	3,976,000	(1,215,000)	(30.6)%
Total cash and cash equivalents and short-term investments, available for sale	$ 24,462,000	$ 12,878,000	$ 11,584,000	90.0%
Current assets	$ 25,649,000	$ 13,978,000	$ 11,671,000	83.5%
Current liabilities	6,008,000	6,586,000	(578,000)	(8.8)%
Working capital	$ 19,641,000	$ 7,392,000	$ 12,249,000	165.7%

In order to provide greater financial flexibility and liquidity, and in view of the substantial cash needs of our regenerative cell business during its development stage, we have an ongoing need to raise additional capital. In the third quarter of 2006, we received net proceeds of $16,219,000 from the sale of common stock pursuant to a shelf registration statement, of which Olympus purchased $11,000,000; the remaining shares were purchased by other institutional investors. Additionally, 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 the shelf registration statement. Also, near the end of the first quarter of 2007, we entered into an agreement to sell 1,000,000 shares of common stock to Green Hospital Supply, Inc. in a private placement. We received $6,000,000 related to this sale in April 2007.

We also implemented certain cost containment measures and are actively pursuing a buyer (or buyers) for our spine and orthopedics business. With consideration of these endeavors as well as existing funds, cash generated by operations, and other accessible sources of financing, we believe our cash position is adequate to satisfy our working capital, capital expenditures, debt service, and other financial commitments at least through March 31, 2008.

From inception to March 31, 2007, we have financed our operations primarily by:

- Issuing our stock in pre-IPO transactions, in our 2000 initial public offering in Germany, and upon 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,
- Entering into a Distribution Agreement for the distribution rights to Thin Film in Japan, in which we received 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,
- Issuing 1,100,000 shares of common stock to Olympus under a Stock Purchase Agreement which closed in May 2005,
- Entering into a collaborative arrangement with Olympus in November 2005, including the formation of a joint venture called Olympus-Cytori, Inc.,
- Receiving funds in exchange for granting Olympus an exclusive right to negotiate in February 2006,
- Receiving net proceeds of $16,219,000 from the sale of common stock under our shelf registration statement in August 2006,
- Receiving net proceeds of $19,901,000 from the sale of common stock and common stock warrants under the shelf registration statement in February 2007.
- Receiving net proceeds of $6,000,000 from the common stock private placement to Green Hospital Supply, Inc., in April 2007.

We don’t expect significant capital expenditures during the remainder of 2007; however, if necessary, we may borrow under our Amended Master Security Agreement.

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

Our cash requirements for 2007 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. Further, we are actively pursuing a buyer (or buyers) for our MacroPore Biosurgery spine and orthopedics assets. This decision is based on the change in our strategic focus as well as the continuing negative profit margins being realized from the MacroPore Biosurgery segment.

The following summarizes our contractual obligations and other commitments at March 31, 2007, and the effect such obligations could have on our liquidity and cash flow in future periods:

	Payments due by period				
Contractual Obligations	**Total**	**Less than 1 year**	**1 - 3 years**	**3 - 5 years**	**More than 5 years**
Long-term obligations	$ 1,905,000	$ 949,000	$ 956,000	$ —	$ —
Interest commitment on long-term obligations	228,000	153,000	75,000	—	—
Operating lease obligations	4,647,000	1,549,000	3,098,000	—	—
Pre-clinical research study obligations	382,000	382,000	—	—	—
Clinical research study obligations	6,411,000	5,220,000	1,191,000	—	—
Total	$ 13,573,000	$ 8,253,000	$ 5,320,000	$ —	$ —

Cash (used in) provided by operating, investing, and financing activities for the three months ended March 31, 2007 and 2006 is summarized as follows:

	For the three months ended March 31,	
	2007	**2006**
Net cash (used in) provided by operating activities	$ (8,160,000)	$ 3,160,000
Net cash provided by (used in) investing activities	1,084,000	(4,474,000)
Net cash provided by financing activities	19,875,000	293,000

Operating activities

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

Research and development efforts, other operational activities, and a comparatively small amount of product sales generated a $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.

Research and development efforts, other operational activities, and a comparatively small amount of product sales generated a $7,456,000 net loss for the three months ended March 31, 2006. The cash impact of this loss was cash provided of $3,160,000, after adjusting for the $10,317,000 we received from Olympus in that quarter, as discussed previously. Other adjustments include material non-cash activities, such as depreciation and amortization, changes in the fair value of the Olympus option liabilities, share-based compensation expense, and equity loss from investment in Joint Venture, as well as changes in working capital due to the timing of product shipments (accounts receivable) and payment of liabilities.

Investing activities

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.

Net cash used in investing activities for the three months ended March 31, 2006 resulted primarily from the purchases of short-term investments, as well as expenditures for leasehold improvements.

Capital spending is essential to our product innovation initiatives and to maintain our operational capabilities. For the three months ended March 31, 2007 and 2006, we used cash to purchase $130,000 and $1,895,000, respectively, of property and equipment, primarily, to support the research and development of the regenerative cell technology platform. The high level of 2006 capital spending was caused primarily by expenditures for leasehold improvements made to our new Callan Road facilities.

Financing Activities

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).

The net cash provided by financing activities for the year ended March 31, 2006 related mainly to the exercise of employee stock options offset by the principal payments on long-term obligations.

Critical Accounting Policies and Significant Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States 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.

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 and Senko. 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 product 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 discussed further in the paragraphs that follow.

Multiple -elements

Some of our revenue-generating arrangements contain 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.

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, and 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 milestone 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 - notably, training - since we as a company do not routinely deliver this service on a stand-alone basis. Finally, we had to make assumptions about how the non-separable elements of the arrangement are earned, particularly the estimated period over which Senko will benefit from the arrangement (refer to the “Recognition” discussion below for further background).

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

- Granting the Joint Venture (which Olympus is considered to control) an exclusive and perpetual manufacturing license to our device technology, including the Celution™ System and certain related intellectual property; and

- Performing development activities in relation to certain therapeutic applications associated with our Celution™ System, including completing pre-clinical and clinical trials, seeking regulatory approval as appropriate, and assisting with product development.

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 the development services, including pre-clinical and clinical studies, regulatory filings, and product development, necessary for the Joint Venture to derive any 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:

- Upfront License Fees/Milestones

  - As part of the Senko Distribution Agreement, we received an upfront license fee upon execution of the arrangement, which, as noted previously, was not separable under EITF 00-21. Accordingly, the license has been combined with the development (milestones) element, which was separable, 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 $361,000 of this amount is classified as deferred revenues. Approximately $361,000 ($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 in estimates regarding the total level of effort as we continue to seek regulatory approval. In fact, there can be no assurance that commercialization in Japan will ever be achieved, although our latest understanding is that regulatory approval will be received in 2007.

  - 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 have elected an accounting policy to recognize revenues from the combined license/development accounting unit as we perform the development services, as this represents our final obligation underlying the combined accounting unit. Specifically, we plan to recognize revenues from the license/development accounting unit using a “proportional performance” methodology, resulting in the derecognition of amounts recorded in the deferred revenues, related party account as we complete various milestones underlying the development services. For instance, we have recognized and will continue to recognize some of the deferred revenues, related party, as revenues, related party, when we complete a pre-clinical trial or obtain regulatory approval in a specific jurisdiction. Determining what portion of the deferred revenues, related party balance to recognize as each milestone is completed involves substantial judgment. In allocating the balance of the deferred revenues, related party, to various milestones, we had in-depth discussions with our operations personnel regarding the relative value of each milestone to the Joint Venture and Olympus. We also considered the cost of completing each milestone relative to the total costs we plan to incur in completing all of the development activities, since we believe that the relative cost of completing a milestone is a reasonable proxy for its fair value. The accounting policy described above could result in revenues being recorded in an earlier accounting period than had other judgments or assumptions been made by us.

- Government Grants

  - We are eligible to receive grants from the NIH related to our research on adipose-derived cell therapy to treat myocardial infarctions. There are no specific standards under U.S. Generally Accepted Accounting Principles (“GAAP”) that prescribe the recognition or classification of these grants in the statement of operations. Absent such guidance, we have established an accounting policy to recognize NIH grant revenues at the lesser of:

    - § Qualifying costs incurred (and not previously recognized), plus any allowable grant fees, for which Cytori is entitled to grant funding; or,
    - § The amount determined by comparing the research outputs generated to date versus the total outputs that are expected to be achieved under the entire arrangement.

  - Our accounting policy could theoretically defer revenue recognition beyond the period in which we have earned the rights to such fees. However, we selected this accounting policy to counteract the possibility of recognizing revenues from the NIH arrangement too early. For instance, if our policy permitted revenues to be recognized solely as qualifying costs were incurred, we could alter the amount of revenue recognized by incurring more or less cost in a given period, irrespective of whether these costs correlate to the research outputs generated. On the other hand, if revenue recognition were based on output measures alone, it would be possible to recognize revenue in excess of costs actually incurred; this is not appropriate since qualifying costs remain the basis of our funding under the NIH grant. The application of our

accounting policy, nonetheless, involves significant judgment, particularly in estimating the percentage of outputs realized to date versus the total outputs expected to be achieved under the grant arrangement.

Presentation

We have presented amounts earned under our NIH research arrangement as research grant revenue. We believe that the activities underlying the NIH agreement constituted a portion of our ongoing major or central 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.

Goodwill Impairment Testing

In late 2002, we purchased StemSource, Inc. and recognized over $4,600,000 in goodwill associated with the acquisition, of which $4,387,000 remains on our balance sheet as of March 31, 2007. As required by Statement of Financial Accounting Standard No. 142, “Goodwill and Other Intangible Assets” (“SFAS 142”), we must test this goodwill at least annually for impairment as well as when an event occurs or circumstances change such that it is reasonably possible that impairment may exist. Moreover, this testing must be performed at a level of the organization known as the reporting unit. A reporting unit is at least the same level as a company’s operating segments, and sometimes even one level lower. Our two reporting units are, in fact, 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.

When we last completed our goodwill impairment testing in 2006, the fair values of our two reporting units each exceeded their respective carrying values. Accordingly, we determined that none of our reported goodwill was impaired.

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.

The most complex and challenging asset to assign to each reporting unit was our acquired goodwill. As noted previously, all of our recorded goodwill was generated in connection with our acquisition of StemSource in 2002. However, when we first acquired StemSource, we determined that a portion of the goodwill related to the MacroPore Biosurgery reporting unit. The amount of goodwill allocated represented our best estimate of the synergies (notably future cost savings from shared research and development activities) that the MacroPore Biosurgery reporting unit would obtain by virtue of the acquisition.

Finally, with the consultation and assistance of a third party, we estimated the fair value of our reporting units by using various estimation techniques. In particular, 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 we believe there are 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.

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.

Dispositions

In 2004, we sold most of the assets and intellectual property rights in our (non-Japan) Thin Film product line to MAST.

As is common in the life sciences industry, the sale agreements contained provisions beyond the simple transfer of net assets to the acquiring enterprises for a fixed price. Specifically, as part of the arrangement, we also agreed to perform the following services:

- Provide training to MAST personnel on production and other aspects of the Thin Film product lines, and
- Provide a back-up supply of Thin Film products to MAST, at cost, for a specified period of time.

Disposing of assets and product lines is not one of our core ongoing or central activities. Accordingly, determining the appropriate accounting for these transactions involved some of our most difficult, subjective, and complex judgments. In particular, we made assumptions around the appropriate manner and timing in which to recognize the gain on disposal for each transaction in the statement of operations.

We initially deferred recognition of the gain related to our disposition of certain Thin Film assets, which occurred in May 2004. Again, the Asset Purchase Agreement governing the Thin Film sale obligated us to perform certain actions for the benefit of the buyer - MAST - for a defined period of time, such as serving as a back-up supplier. We concluded, due to the arbitration proceedings settled in August 2005 that we completed our remaining performance obligations during the third quarter of 2005. Accordingly, we recognized the remaining deferred gain on sale of assets as gain on sale of assets.

We also recognized a portion of the deferred gain when we sold products to MAST under the back-up supply agreement in 2004. Refer to the “Revenue Recognition” section of this Critical Accounting Policies and Significant Estimates discussion for further details.

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.

In concluding that the Olympus-Cytori Joint Venture was a VIE, we considered the following factors:

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

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), and

- 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, and others may arrive at the conclusion that Cytori should consolidate the Joint Venture. Had we consolidated the Joint Venture, though, there would be no effect on our net loss or shareholders’ equity at December 31, 2006 or for the year then ended. However, certain balance sheet and income statement captions would have been presented in a different manner. For instance, we would not have presented a single line item entitled investment in joint venture in our balance sheet, but instead would have performed a line by line consolidation of each of the Joint Venture’s accounts into our financial statements.

Recent Accounting Pronouncements

In September 2006, the SEC issued Staff Accounting Bulletin No. 108, “Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements” (“SAB 108”). SAB 108 provides interpretive guidance on how the effects of prior -year uncorrected misstatements should be considered when quantifying misstatements in the current year financial statements. SAB 108 requires registrants to quantify misstatements using both an income statement (“rollover”) and balance sheet (“iron curtain”) approach and evaluate whether either approach results in a misstatement that, when all relevant quantitative and qualitative factors are considered, is material. If prior year errors that had been previously considered immaterial now are considered material based on either approach, no restatement is required so long as management properly applied its previous approach and all relevant facts and circumstances were considered. If prior years are not restated, the cumulative effect adjustment is recorded in opening accumulated earnings (deficit) as of the beginning of the fiscal year of adoption. SAB 108 is effective for fiscal years ending on or after November 15, 2006, with earlier adoption encouraged. The adoption of SAB 108 has not had a significant effect on our financial statements.

In September 2006, the FASB issued SFAS No. 157, “Fair Value Measurements” (“SFAS 157”). SFAS 157 defines fair value, establishes a framework for measuring fair value, and expands disclosure of fair value measurements. SFAS 157 applies under other accounting pronouncements that require or permit fair value measurements and, accordingly, does not require any new fair value measurements. SFAS 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007. We do not believe that the adoption of SFAS 157 will have a significant effect on our financial statements.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

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

Interest Rate Exposure

We are not subject to market risk due to fluctuations in interest rates on our long-term obligations as they bear a fixed rate of interest. Our exposure relates primarily to short-term investments. These short-term investments, reported at an aggregate fair market value of $2,761,000 as of March 31, 2007, consist primarily of investments in debt instruments of financial institutions and corporations with strong credit ratings and United States of America government obligations. These securities are subject to market rate risk as their fair value will fall if market interest rates increase. If market interest rates were to increase immediately and uniformly by 100 basis points from the levels prevailing at March 31, 2007, for example, and assuming average investment duration of seven months, the fair value of the portfolio would not decline by a material amount. We do not use derivative financial instruments to mitigate the risk inherent in these securities. However, we do attempt to reduce such risks by generally limiting the maturity date of such securities, diversifying our investments, and limiting the amount of credit exposure with any one issuer. While we do not always have the intent, we do currently have the ability to hold these investments until maturity and, therefore, believe that reductions in the value of such securities attributable to short-term fluctuations in interest rates would not materially affect our financial position, results of operations, or cash flows. Changes in interest rates would, of course, affect the interest income we earn on our cash balances after re-investment.

Foreign Currency Exchange Rate Exposure

Our exposure to market risk due to fluctuations in foreign currency exchange rates relates primarily to our cash balances 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 of America for the quarter ended March 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 of America and foreign economies, resulting in a material adverse effect on our business, financial condition, and results of operations.

Under our Japanese Thin Film agreement with Senko, we would receive payments in the nature of royalties based on Senko's net sales, which would be Yen denominated. We expect such sales or royalties to begin in 2007.

Item 4. Controls and Procedures

Christopher J. Calhoun, our Chief Executive Officer, and Mark E. Saad, our Chief Financial Officer, after evaluating the effectiveness of our "disclosure controls and procedures" (as defined in Securities Exchange Act Rule 13a-15(e)), have concluded that as of March 31, 2007, our disclosure controls and procedures are effective.

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, 2007, 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.

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/A. 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/A.

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 regenerative cell business will continue to result in a substantial requirement for research and development expenses for several years, during which it could bring in no significant cash and/or revenues. Our spine and orthopedics products business has performed poorly and we are actively seeking to divest these assets. There can be no guarantee that adequate funds for our operations from any additional debt or equity financing, our operating revenues, arrangements with distribution partners, or from other sources will be available when needed 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 programs, manufacturing operations, clinical studies or regulatory activities, or to license third parties to commercialize products or technologies that we would otherwise seek to develop ourselves, thus having a substantial negative effect on our results of operations and financial condition.

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

We have incurred net operating losses in each year since we started doing business. These losses have resulted primarily from expenses associated with our research and development activities and general and administrative expenses. Losses related to our development of regenerative cell technology are expected to keep us in a loss position on a consolidated basis for several years. We anticipate that our recurring operating expenses will be at high levels for the next few years, due to the continued need to fund our clinical research program as well as additional pre-clinical research.

Our business strategy is high-risk

We are focusing our resources and efforts primarily on our regenerative cell technology and its cash needs for research and development activities. This is a high-risk strategy because there can be no assurance that our regenerative cell technology will ever be developed into commercially viable products (commercial risk), that we will be able to preclude 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 be able to successfully manage a company in a different business 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 regenerative cells (scientific risk), or that our cash resources will be adequate to develop the regenerative cell technology until it becomes 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 some investors.

The financial risk in this strategy is significant, particularly since our bioresorbable products are not currently independently cash-flow-positive. Our spine and orthopedics implants business has declined significantly nd we are actively pursuing a buyer (or buyers) for this line of business.

We must keep our joint venture with Olympus operating smoothly

Our regenerative cell business cannot succeed on the current timelines unless our joint venture collaboration with Olympus goes well. We have given Olympus-Cytori, Inc. an exclusive license to our regenerative cell therapeutic device technology for use in future generation devices. If Olympus-Cytori, Inc. does not successfully develop and manufacture future generation devices for sale to us, we may not be able to commercialize any device or any therapeutic products successfully into the market. In addition, any future disruption in or breakup of our relationship with Olympus would be extremely costly to our reputation, in addition to causing many serious practical problems.

We and Olympus must overcome contractual and cultural barriers as we work together. 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 essentially non-contractual and must be worked out between the parties and the responsible individuals over time. The Joint Venture is intended to have a long life, and it is difficult to maintain cooperative relationships over a long period of time from a far distance in the face of various kinds of change. Cultural differences, including a language barrier to some degree, may affect the efficiency of the relationship as well.

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

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

Furthermore, under a License/Joint Development Agreement among Olympus-Cytori, Inc., Olympus, and us, Olympus will have a primary role in the development of Olympus-Cytori, Inc.'s future 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 future generation devices.

We rely on Medtronic to distribute our spine and orthopedics biomaterials products, but Medtronic's level of commitment to our products historically has been poor and we are not succeeding in this line of business

We have limited control over sales, marketing, and distribution of our biomaterials products. Our strategy for sales and marketing of our bioresorbable products included entering into an agreement with Medtronic, a company with a large distribution network, to market many of our current and certain future products incorporating our technology. The sale of hard-tissue-fixation bioresorbable implant products to our distribution partner, Medtronic, has constituted the majority of our revenues.

We remain significantly dependent on Medtronic to generate sales revenues for all of our spine and orthopedics bioresorbable products. The amount and timing of resources which may be devoted to the performance of Medtronic's contractual responsibilities are not within our control. There can be no guarantee that Medtronic will perform its obligations as expected or pay us any additional option or license fees. There is also no guarantee that it will market any new products under the distribution agreements or that we will derive any significant revenue from such arrangements. Medtronic's sale of our products to end customers in 2004 through 2007, and its rate of product orders placed with us in the same periods, disappointed our expectations.

We remain significantly disappointed with the marketing efforts of Medtronic for our non-MYSTIQUE™ products at this time. We recorded an inventory provision for slow-moving non-MYSTIQUE™ inventory in the second, third, and fourth quarters of 2005 as well as in the second and third quarters of 2006. We are also becoming concerned about Medtronic's commitment to MYSTIQUE™.

Our dependence upon Medtronic to market and sell our bioresorbable products places us in a position where we cannot accurately predict the extent to which our products will be actively and effectively marketed, depriving us of some of the reliable data we need to make optimal operational and strategic decisions. The results of this business line in each year from 2004 through 2007 have been below our internal expectations.

Although Medtronic has exclusive distribution rights to our co-developed spinal implants, it also distributes other products that are competitive to ours. Medtronic might choose to develop and distribute existing or alternative technologies in preference to our technology in the spine, or preferentially market competitive products that can achieve higher profit margins. We suspect that this has in fact been happening.

There can be no assurance that our interests will coincide with those of Medtronic or that disagreement over rights or technology or other proprietary interests will not occur. The loss of the marketing services provided by Medtronic (or the failure of Medtronic to satisfactorily perform these marketing services), or the loss of revenues generated by Medtronic, could have a substantial negative effect on our ability or willingness to continue our spine and orthopedics biomaterials business. Indeed, it seems the problems we have already experienced with Medtronic may be intractable. Accordingly, we are actively seeking divestiture or other strategic alternatives for the business.

Senko has not yet begun to distribute our Thin Film products in Japan; and if and when they do, we cannot be assured that they will be successful.

We have a limited operating history; our operating results can be volatile

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 fields such as the biotechnology and medical device fields. Due to our limited operating history, and the development stage status of our regenerative cell 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. Since our limited operating history makes the prediction of future results difficult or impossible, our recent revenue results should not be taken as an indication of any future growth or of a sustainable level of revenue. Operating results will also be affected by our transition away from our revenue-generating medical device business and the focus of the vast majority of our resources into the development of the regenerative cell business.

Moreover, our operating results can vary substantially from our previously published financial guidance (such as occurred in the second quarter of 2004), from analyst expectations, and from previous periodic results for many reasons, including the timing of product introductions and distributor purchase orders. Also, our stock price is likely to be disproportionately affected by changes which generally affect the economy, the stock market, or the medical device and biotechnology industries.

From time to time, we have tried to influence 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. This lack of visibility and predictability of product demand for our bioresorbable implant products is likely to occur in the future as well.

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 biotechnical, medical device, pharmaceutical, and biopharmaceutical companies. Many of our competitors and potential competitors have substantially greater financial, technological, research and development, marketing, and personnel resources than we do. There can be no assurance that our competitors will not succeed in developing alternative technologies and 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 technology and products obsolete and non-competitive in these fields. In general, we may not be able to preclude other companies from developing and marketing competitive regenerative cell therapies or bioresorbable products that are similar to ours or perform similar functions.

These competitors may also have greater experience in developing therapeutic treatments, conducting clinical trials, obtaining regulatory clearances or approvals, manufacturing and commercializing therapeutic or biomaterials products. It is possible that certain of these competitors may obtain patent protection, approval, or clearance from the FDA or achieve commercialization earlier than we, any of which could have a substantial negative effect on our business. Finally, Olympus, Medtronic and our other partners might pursue parallel development of other technologies or products, which may result in a partner developing additional products that will compete with our products.

We also compete with other types of regenerative cell therapies, such as bone marrow-derived cell therapies and potentially embryonic-derived therapies. Our biomaterials business competes with manufacturers of traditional non-bioresorbable implants, such as titanium implants. Doctors have historically been slow to adopt new technologies such as 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 superiority.

We expect physicians' inertia and skepticism to also be a significant barrier as we attempt to gain market penetration with our future regenerative cell 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.

Our regenerative cell technology 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. We are presently pursuing therapies for cardiovascular disease as well as new approaches for aesthetic and reconstructive surgery, gastrointestinal disorders and spine and orthopedic conditions. There can be 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 our regenerative cell technology in a way to earn a durable profit commensurate with the medical benefit. Although we are working to develop proprietary therapeutic products which optimize or enhance the benefit of autologous stem and regenerative cells for a variety of particular indications, most of our cell-related products and/or services are at least two to five years away.

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

We have limited manufacturing experience

We have no experience in manufacturing the Celution™ System at a commercial level, and 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 Celution™ System in a manner that is cost-effective or commercially viable, or that development and manufacturing capabilities might not take much longer than currently anticipated to be ready for the market.

In the event that the Olympus-Cytori joint venture is not successful, Cytori may not have the resources or ability to self-manufacture commercially viable devices, and in any event this failure may substantially extend the time it would take for us to bring a commercial device to market. This makes us significantly dependant on the continued dedication and skill of Olympus for the successful development of the Celution™ System.

In addition, as a company we have limited experience in manufacturing the type of cell-related therapeutic products which we intend to introduce in 2008.

In addition, the future of our biomaterials business success is significantly dependent on our ability to manufacture our bioresorbable implants in commercial quantities, in compliance with regulatory requirements, and in a cost-effective manner. Production of some of our products in commercial-scale quantities may involve unforeseen technical challenges and may require significant scale-up expenses for additions to facilities and personnel. There can be no guarantee that we will be able to achieve large-scale manufacturing capabilities for some of our biomaterials products or that we will be able to manufacture these products in a cost-effective manner or in quantities necessary to allow us to achieve profitability. Our 2002 sale of CMF production assets to Medtronic and our 2004 sale of the (non-Japan) Thin Film product line deprived us of some economies of scale in manufacturing. Current demand for spine and orthopedics products from Medtronic is so low that economies of scale are lacking in regard to that product line as well.

We have to maintain quality assurance certification and manufacturing approvals

The manufacture of our bioresorbable products is, and the manufacture of the Celution™ System for regenerative cells 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 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 sole source supplier for our crucial raw material for our bioresorbable products

We currently purchase the high molecular weight, medical grade, lactic acid copolymer used in manufacturing most of our bioresorbable products from a single qualified source. Although we have a contract with B.I. Chemicals, Inc., which guarantees continuation of supply through August 15, 2008, we cannot guarantee that they will elect to continue the contract beyond that date, or that they will not elect to discontinue the manufacture of the material. They have agreed that if they discontinue manufacturing, they will either find a replacement supplier, or provide us with the necessary technology to self-manufacture the material, either of which could mean a substantial increase in material costs. Also, despite this agreement, they might fail to do these things for us. Under the terms of the contract, B.I. Chemicals, Inc. may choose to raise their prices upon six months' prior notice, which may also result in a substantially increased material cost. Although we believe that we would be able to obtain the material from at least one other source in the event of a failure of supply, there can be no assurance that we will be able to obtain adequate increased commercial quantities of the necessary high quality within a reasonable period of time or at commercially reasonable rates. Lack of adequate commercial quantities or the inability to develop alternative sources meeting regulatory requirements at similar prices and terms within a reasonable time, or any interruptions in supply in the future could have a significant negative effect on our ability to manufacture products and, consequently, could have a material adverse effect on our results of operations and financial condition.

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 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 the University of California's assignors, are the true inventors of Patent 6,777,231. We are the exclusive, worldwide licensee of the University of California's rights under this patent, 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, and our regenerative cell strategy could be impacted.

We have various U.S. patents for the design of our bioresorbable plates and high torque screws and devices and we have filed applications for numerous additional U.S. patents, as well as certain corresponding patent applications outside the United States of America, relating to our technology. However, we believe we cannot patent our use of the lactic acid copolymer for surgical implants, nor are many of our particular implants generally patentable.

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 Regents of the University of California up to 7% of royalty payments made by a licensee (us) to the Regents of the University of California. 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 and bioresorbable businesses, we also rely on unpatented trade secrets and proprietary technological expertise. Our intended future cell-related therapeutic products, such as a 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 of America

Intellectual property law outside the United States of America 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 of America laws. We currently have pending patent applications in Europe, Australia, Japan, Canada, China, Korea, and Singapore, among others.

We are, and Olympus-Cytori, Inc. will be, subject to intensive FDA regulation

As newly developed medical devices, our and Olympus-Cytori's regenerative cell harvesting, isolation and delivery devices, and our bioresorbable implants must receive regulatory clearances or approvals from the FDA and, in many instances, from non-U.S. and state governments prior to their sale. Our and Olympus-Cytori's current and future regenerative cell harvesting, isolation and delivery devices and bioresorbable implants are subject to stringent government regulation in the United States of America 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.

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. Two executive officers left us in 2006, one in connection with a summer 2006 reduction of our headcount by 18%.

Companies which make personnel cuts sometimes find the resulting loss of experience and lack of coverage can cause important business problems.

We may not have enough product liability insurance

The testing, manufacturing, marketing, and sale of our regenerative cell and bioresorbable implant 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 the Company, 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 the Company 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 the Company, and this prevention or delay adversely affect the market price of our shares.

We pay no dividends

We currently do not intend to pay any cash dividends for the foreseeable future.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None

Item 3. Defaults Upon Senior Securities

None

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

None

Item 5. Other Information

Material Agreements

None

Properties

On May 24, 2005, we entered into a lease for 91,000 square feet located at 3020 and 3030 Callan Road, San Diego, California. We moved the majority of our operations to this new facility during the second half of 2005 and the first quarter of 2006. The 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.

Our lease on the facility located at 6740 Top Gun Street, San Diego, California was amended and terminated on December 31, 2006. We will continue to occupy a portion of the building and pay rent to the new lessee until June 30, 2007. We also lease 4,027 square feet of office space located at 9-3 Otsuka 2-chome, Bunkyo-ku, Tokyo, Japan. The agreement bears rent at a rate of $3.66 per square foot, expiring on November 30, 2007.

On the properties stated above, we pay an aggregate of approximately $193,000 in rent per month.

Staff

As of March 31, 2007, we had 130 full-time equivalent employees, comprised of 4 employees in manufacturing, 83 employees in research and development, 6 employees in sales and marketing, and 37 employees in management and finance and administration. From time to time, we also employ independent contractors to support our administrative organizations. Our employees are not represented by any collective bargaining unit and we have never experienced a work stoppage. A breakout by segment is as follows:

	Regenerative Cell Technology	MacroPore Biosurgery	Corporate	Total
Manufacturing	—	4	—	4
Research & Development	82	1	—	83
Sales and Marketing	6	—	—	6
General & Administrative	—	—	37	37
Total	88	5	37	130

Item 6. Exhibits

10.42	Placement Agency Agreement, dated August 9, 2006, between Cytori Therapeutics, Inc. and Piper Jaffray & Co. (filed as Exhibit 10.34 to our Form 8-K Current Report as filed on August 15, 2006 and incorporated by reference herein)
10.43	Financial Services Advisory Engagement Letter, between Cytori Therapeutics, Inc. and WBB Securities, LLC.(filed as Exhibit 10.2 to our Form 8-K Current Report as filed on February 26, 2007 and incorporated by reference herein)
10.44	Form of Subscription Agreement, between Cytori Therapeutics, Inc. and Investor (filed as part of the Free Writing Prospectus as filed on February 26, 2007 and incorporated by reference herein)
10.45	Form of Warrant (filed as part of the Free Writing Prospectus as filed on February 26, 2007 and incorporated by reference herein)
10.46	Common Stock Purchase Agreement, dated March 28, 2007, between Cytori Therapeutics, Inc. and Green Hospital Supply, Inc. (Filed as Exhibit 10.46 to our Quarterly Report on Form 10-Q as filed on May 11, 2007 and incorporated by reference herein.)
15.1	Letter re unaudited interim financial information. (Filed as Exhibit 15.1 to our Quarterly Report on Form 10-Q as filed on May 11, 2007 and incorporated by reference herein.)
31.1	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. (Filed herewith.)
31.2	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. (Filed herewith.)
32.1	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. (Filed herewith.)

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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 25, 2007.

CYTORI THERAPEUTICS, INC.

Dated: May 25, 2007

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

Dated: May 25, 2007

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

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EXHIBIT 31.1

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/A 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 25, 2007
/s/ Christopher J. Calhoun
Christopher J. Calhoun,
Chief Executive Officer

EXHIBIT 31.2

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/A 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 25, 2007
/s/ Mark E. Saad
Mark E. Saad
Chief Financial Officer

EXHIBIT 32.1

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/A of Cytori Therapeutics, Inc. for the quarterly period ended March 31, 2007 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/A 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/A report of Cytori Therapeutics, Inc. that this certification accompanies fairly presents, in all material respects, the financial condition and results of operations of Cytori Therapeutics, Inc.

By: /s/ Christopher J. Calhoun

Dated: May 25, 2007

Christopher J. Calhoun
Chief Executive Officer

By: /s/ Mark E. Saad

Dated: May 25, 2007

Mark E. Saad
Chief Financial Officer