UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 8-K

Current Report

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 11, 2009

CYTORI THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or Other Jurisdiction of Incorporation)

000-32501 (Commission File Number) 33-0827593
(I.R.S. Employer Identification Number)

3020 Callan Road, San Diego, California 92121

(Address of principal executive offices, with zip code)

(858) 458-0900

(Registrant's telephone number, including area code)

n/a

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- O Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- O Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- O Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02 Results of Operations and Financial Condition

On May 11, 2009, Cytori Therapeutics, Inc. issued a press release announcing its financial results for the first quarter ended March 31, 2009. A copy of the press release is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

The information disclosed under this Item 2.02 in this report, including Exhibit 99.1 hereto, is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, nor shall it be incorporated by reference into any registration statement or other document pursuant to the Securities Act of 1933, as amended, except as expressly set forth in such filing.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits

Exhibit No. Description

99.1

Cytori Therapeutics, Inc. Press Release, dated May 11, 2009*

* Exhibit 99.1 hereto is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, nor shall it be incorporated by reference into any registration statement or other document pursuant to the Securities Act of 1933, as amended, except as expressly set forth in such filing.

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 hereunto duly authorized.

Date: May 11, 2009

CYTORI THERAPEUTICS, INC.

By: /s/ Christopher J. Calhoun

Christopher J. Calhoun Chief Executive Officer

Cytori Reports First Quarter 2009 Financial Results

May 11, 2009, San Diego, CA -- Cytori Therapeutics (NASDAQ: CYTX) reports financial results for the first quarter ended March 31, 2009. These results highlight the Company's progress and demonstrate commercial, clinical and strategic achievements, which year-to-date include:

- · Continued growth in product revenues
- · EU partnership with GE Healthcare to commercialize Celution® and StemSource® products in the cosmetic and reconstructive surgery, research and stem cell banking markets in select European countries
- · North American partnership with GE Healthcare to commercialize StemSource® products
- · Installed first Japanese StemSource® Cell Bank at Kyoto Prefectural University of Medicine
- · Completed enrollment of the APOLLO heart attack trial
- · Expanded protection for Celution® and StemSource platforms through receipt of three patents and one allowance relating to cell banking, automated cell processing systems, and important methods for cell-enhanced reconstruction

Product revenues increased to \$1.9 million for the first quarter of 2009, compared to \$153,000 recognized in the first quarter of 2008, the first period for which Cytori's regenerative medicine products were commercially available. First quarter 2009 product revenues consisted of \$1.3 million in Celution® System sales in Europe and Asia and the recognition of \$0.6 million from the installation of a StemSource® Cell Bank in Japan. Gross profit for the first quarter was \$825,000, compared to \$93,000 in the first quarter of 2008.

"Cytori's first quarter sales reflect the progress the Company has made since it introduced its regenerative medicine product line early last year," said Christopher J. Calhoun, chief executive officer for Cytori. "We achieved a significant year over year increase in product revenues based on a diverse mix of orders between the Celution® System and StemSource® Cell Bank sales in Europe and Asia and we believe we are on track to meet our \$10 million revenue projection for 2009. During the remainder of the year, we anticipate revenues to be driven by increased interest in the Celution® system from cosmetic and reconstructive surgeons in Europe and Asia, the achievement of periodic international StemSource orders, and the introduction of the StemSource® research products in the United States through GE Healthcare."

During the first quarter of 2009, Cytori reduced total operating expenses to \$6.4 million, as compared to \$9.2 million for the same period in 2008. This decrease is due to a reduction in research and development and general and administrative expenses and recognition of a gain from the change in fair value of warrant liability, offset by a planned increase in sales and marketing expenses. This trend is expected to continue due, in part, to further cost containment measures enacted in March 2009 and which are expected to take full effect in the second quarter of 2009. These measures include continued reduction in research and development, as resources have been shifted to managing the sales and marketing activities of our distribution partners.

Net loss for the first quarter of 2009 decreased to \$6.1 million, as compared to \$8.3 million for the first quarter in 2008. Cytori ended the first quarter of 2009 with \$15.5 million in cash and cash equivalents compared to \$12.6 million in cash and cash equivalents at December 31, 2008. Subsequent to the end of the quarter, Cytori entered into agreements to raise \$4.2 million in proceeds from a private placement.

Conference Call

Cytori will host a conference call at 10:00 a.m. Eastern Time today to discuss these results. The audio webcast of the conference call may be accessed under "Events & Webcasts" in the Investor Relations section of the Cytori's website (www.cytoritx.com). The webcast will be available live and by replay two hours after the call and archived for 90 days. A telephone replay will be available for one week, accessible at +1 (303) 590-3030 (PIN: 4059504).

About Cytori

Cytori develops and globally commercializes regenerative medicine technologies, which provide real-time, point-of-care access to clinical grade regenerative cells. Our technology is incorporated into two product families. The Celution®-related products are sold throughout Europe and Asia primarily into the cosmetic and reconstructive surgery market and are under evaluation by the U.S. FDA. Our StemSource® products are sold globally for cell banking and research applications. We are also developing additional clinical uses of our technology for the treatment of multiple medical conditions, including cardiovascular disease, urinary tract disorders, and wound related conditions. To commercialize our technology, Cytori has partnered with global and regional leaders in healthcare such as Olympus Corp, GE Healthcare, and Green Hospital Supply. www.cytoritx.com

Cautionary Statement Regarding Forward-Looking Statements

This press release includes forward-looking statements regarding events, trends and business prospects, which may affect our future operating results and financial position. Such statements, including, but not limited to, those regarding our forecasts for 2009 product revenues, anticipated continued reduction in operating expenses for 2009 and the timing of that reduction, our sales expectations from our marketing and distribution partners, customer consumable reorder trends, anticipated StemSource® Cell Bank orders, our ability to introduce complementary cosmetic and reconstructive surgery products in 2009, are all subject to risks and uncertainties that could cause our actual results and financial position to differ materially. Some of these risks and uncertainties include, but are not limited to, risks related to our history of operating losses, the need for further financing and our ability to access the necessary additional capital for our business, inherent risk and uncertainty in the protection intellectual property rights, regulatory uncertainties regarding the collection and results of, clinical data, dependence on third party performance, as well as other risks and uncertainties described under the "Risk Factors" in Cytori's Securities and Exchange Commission Filings. We assume no responsibility to update or revise any forward-looking statements to reflect events, trends or circumstances after the date they are made.

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CONSOLIDATED CONDENSED BALANCE SHEETS (UNAUDITED)

	As of March 31, 2009		As of December 31, 2008	
Assets				
Current assets:				
Cash and cash equivalents	\$	15,472,000	\$	12,611,000
Accounts receivable, net of allowance for doubtful accounts of				
\$272,000 and \$122,000 in 2009 and 2008, respectively		1,219,000		1,308,000
Inventories, net		1,851,000		2,143,000
Other current assets		1,158,000		1,163,000
Total current assets		19,700,000		17,225,000
Property and equipment, net		2,278,000		2,552,000
Investment in joint venture		308,000		324,000
Other assets		649,000		729,000
Intangibles, net		801,000		857,000
Goodwill		3,922,000		3,922,000
Total assets	\$	27,658,000	\$	25,609,000
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Liabilities and Stockholders' Deficit				
Current liabilities:				
Accounts payable and accrued expenses	\$	4,395,000	\$	5,088,000
Current portion of long-term obligations		2,497,000		2,047,000
Total current liabilities		6,892,000		7,135,000
Deferred revenues, related party		16,474,000		16,474,000
Deferred revenues		2,464,000		2,445,000
Warrant liability		677,000		2,110,000
Option liability		2,270,000		2,060,000
Long-term deferred rent		84,000		168,000
Long-term obligations, less current portion		4,520,000		5,044,000
Long-term obligations, tess current portion		4,320,000	_	3,044,000
Total liabilities		33,381,000		33,326,000
Commitments and contingencies				
Stockholders' deficit:				
Preferred stock, \$0.001 par value; 5,000,000 shares authorized; -0-				
shares issued and outstanding in 2009 and 2008				_
Common stock, \$0.001 par value; 95,000,000 shares authorized;				
34,088,915 and 31,176,275 shares issued and 34,088,915 and				
29,303,441 shares outstanding in 2009 and 2008, respectively		34,000		31,000
Additional paid-in capital		159,629,000		161,214,000
Accumulated deficit		(165,386,000)		(162,168,000)
Treasury stock, at cost		(100,000,000)		(6,794,000)
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Total stockholders' deficit		(5,723,000)		(7,717,000)
		<u> </u>		
Total liabilities and stockholders' deficit	\$	27,658,000	\$	25,609,000

CONSOLIDATED CONDENSED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS (UNAUDITED)

For the Three Months Ended March 31,

	2009	2008
Product revenues:		
Related party	\$ 564,000	\$ —
Third party	1,348,000	153,000
1 ma punty	1,912,000	153,000
	1,312,000	155,000
Cost of product revenues	1,087,000	60,000
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Gross profit	825,000	93,000
Development revenues:		
Development, related party	<u> </u>	774,000
Research grants and other	8,000	37,000
	8,000	811,000
Operating expenses:		
Research and development	3,468,000	4,963,000
Sales and marketing	1,286,000	958,000
General and administrative	2,494,000	3,111,000
Change in fair value of warrants	(1,021,000)	
Change in fair value of option liability	210,000	200,000
Total operating expenses	6,437,000	9,232,000
Operating loss	(5,604,000)	(8,328,000)
Other income (expense):		
Interest income	14,000	76,000
Interest expense	(400,000)	
Other income (expense), net	(92,000)	
Equity loss from investment in joint venture	(16,000)	(9,000)
Total other income (expense), net	(494,000)	55,000
Net loss	\$ (6,098,000)	\$ (8,273,000)
Basic and diluted net loss per share	\$ (0.20)	\$ (0.34)
Basic and diluted weighted average common shares	30,266,169	24,442,655