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): **August 10, 2009**

CYTORI THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**000-32501**	**33-0827593**
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(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 August 10, 2009, Cytori Therapeutics, Inc. (Company) issued a press release announcing its financial results for the second quarter ended June 30, 2009. A copy of the press release is attached hereto as Exhibit 99.1 and is incorporated herein by reference. In addition, on the same date, the Company has posted further insight into those results of operations in an open letter to its stockholders and other interested parties in the Investor Relations section of its website. Acopy of the letter is attached hereto as exhibit 99.2.

The information disclosed under this Item 2.02 in this report, including Exhibits 99.1 and 99.2 hereto, are 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 August 10, 2009*
99.2	Cytori Therapeutics, Inc. Shareholder Letter, dated August 10, 2009*

* Exhibits 99.1 and 99.2 hereto are 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.

CYTORI THERAPEUTICS, INC.

Date: August 10, 2009

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

EXHIBIT 99.1

Cytori Reports 2nd Quarter 2009 Financial Results

Cytori Therapeutics (NASDAQ:CYTX) reports financial results for the quarter ended June 30, 2009.

Total revenues were $8.5 million and $10.5 million for the three and six months ended June 30, 2009, respectively, compared to $1.4 million and $2.4 million for the same periods in 2008. As part of Cytori's Olympus partnership, the Company recognized $7.3 million in development revenue in the second quarter of 2009, due mostly to the completion of enrollment in the cardiovascular disease clinical safety and feasibility studies. Product revenues were $1.3 million and $3.2 million for the three and six months ended June 30, 2009, respectively, compared to $1.4 million and $1.6 million for the same periods in 2008. Gross profit was $0.5 million and $1.3 million for the three and six months ended June 30, 2009, respectively, compared to $0.7 million and $0.8 million for the same periods in 2008.

Cytori continued to lower operating expenses in the second quarter of 2009, due to a significant reduction in research and development and general and administrative expenses, offset in part by a planned increase in sales and marketing expenses, as the company shifts its focus toward commercialization. Total operating expenses, less the change in fair value of warrants and option liabilities, were $6.7 million and $13.9 million for the three and six months ended June 30, 2009, respectively, compared to $9.3 million and $18.3 million, for the same respective periods in 2008.

Net loss decreased to $0.8 million and $6.9 million for the three and six months ended June 30, 2009 compared to $8.4 million and $16.7 million for the respective periods in 2008, respectively. The improvement in net loss is attributable mostly to increased development revenues and the significant reduction in research and development and general and administrative expenses during the second quarter of 2009. Cytori ended the second quarter of 2009 with $13.9 million in cash and cash equivalents plus $1.5 million in accounts receivable, compared to $12.6 million in cash and cash equivalents and $1.3 million in accounts receivable as of December 31, 2008. Subsequent to the end of the quarter, Cytori raised $2.5 million in connection with the Seaside 88 equity agreement. Combined with the $0.8 million raised in June, a total of $3.3 million has been raised from Seaside 88 to date.

"During the second quarter, we continued to establish a foundation of Celution® customers in Europe and Asia through system sales and experienced an increase in re-orders of consumables," said Christopher J. Calhoun, chief executive officer of Cytori. "Additionally, we have completed enrollment in our cardiovascular disease clinical trials, surpassed 70% enrollment for our post-marketing breast reconstruction study, strengthened our balance sheet, and gained important clarity on our U.S. regulatory pathway. Due to the nature of the sales cycle for our Celution® and Stem Source® products, we expect to experience annual revenue growth interspersed with fluctuations in quarterly growth. Based on our current sales pipeline, we maintain our goal for $10 million in product revenue for 2009."

Conference Call & Shareholder Letter
Cytori's Second Quarter Update and Financial Results Shareholder letter is now available on the Company's Investor Relations homepage at http://ir.cytoritx.com. Cytori will host a conference call and question and answer session at 10:30 a.m. Eastern Time today to further discuss these results. The audio webcast of the conference call may be accessed under "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: 4126637).

About Cytori
Cytori is committed to providing patients and physicians around the world with medical technologies, which harness the potential of adult stem and regenerative cells from adipose tissue. With the introduction of a family of medical devices, we have made a patient's own clinical grade stem and regenerative cells available to them at the point-of-care. The Celution® System family of medical devices and instruments is being sold into the European and Asian cosmetic and reconstructive surgery markets, while we seek regulatory clearance for it in the United States. Our StemSource® product line is sold globally for cell banking and research applications. 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(R) 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.

CONSOLIDATED CONDENSED BALANCE SHEETS
(UNAUDITED)

	As of June 30, 2009	As of December 31, 2008
Assets		
Current assets:		
Cash and cash equivalents	$ 13,920,000	$ 12,611,000
Accounts receivable, net of allowance for doubtful accounts of $422,000 and $122,000 in 2009 and 2008, respectively	1,504,000	1,308,000
Inventories, net	1,861,000	2,143,000
Other current assets	1,038,000	1,163,000
Total current assets	18,323,000	17,225,000
Property and equipment, net	1,812,000	2,552,000
Investment in joint venture	297,000	324,000
Other assets	582,000	729,000
Intangibles, net	746,000	857,000
Goodwill	3,922,000	3,922,000
Total assets	$ 25,682,000	$ 25,609,000
Liabilities and Stockholders' Deficit		
Current liabilities:		
Accounts payable and accrued expenses	$ 3,912,000	$ 5,088,000
Current portion of long-term obligations	2,564,000	2,047,000
Total current liabilities	6,476,000	7,135,000
Deferred revenues, related party	9,224,000	16,474,000
Deferred revenues	2,438,000	2,445,000
Warrant liability	2,810,000	—
Option liability	1,640,000	2,060,000
Long-term deferred rent	—	168,000
Long-term obligations, less current portion	3,974,000	5,044,000
Total liabilities	26,562,000	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; 36,234,380 and 31,176,275 shares issued and 36,234,380 and 29,303,441 shares outstanding in 2009 and 2008, respectively	36,000	31,000
Additional paid-in capital	165,296,000	161,214,000
Accumulated deficit	(166,212,000)	(162,168,000)
Treasury stock, at cost	—	(6,794,000)
Total stockholders' deficit	(880,000)	(7,717,000)
Total liabilities and stockholders' deficit	$ 25,682,000	$ 25,609,000

CONSOLIDATED CONDENSED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(UNAUDITED)

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2009	**2008**	**2009**	**2008**
Product revenues:				
Related party	$ 9,000	$ 28,000	$ 573,000	$ 28,000
Third party	1,268,000	1,376,000	2,616,000	1,529,000
	1,277,000	1,404,000	3,189,000	1,557,000
Cost of product revenues	776,000	675,000	1,863,000	735,000
Gross profit	501,000	729,000	1,326,000	822,000
Development revenues:				
Development, related party	7,250,000	—	7,250,000	774,000
Research grant and other	14,000	12,000	22,000	49,000
	7,264,000	12,000	7,272,000	823,000
Operating expenses:				
Research and development	2,919,000	5,034,000	6,388,000	9,998,000
Sales and marketing	1,463,000	1,117,000	2,748,000	2,074,000
General and administrative	2,309,000	3,162,000	4,803,000	6,272,000
Change in fair value of warrants	2,133,000	—	1,112,000	—
Change in fair value of option liabilities	(630,000)	(200,000)	(420,000)	—
Total operating expenses	8,194,000	9,113,000	14,631,000	18,344,000
Operating loss	(429,000)	(8,372,000)	(6,033,000)	(16,699,000)
Other income (expense):				
Interest income	4,000	38,000	18,000	114,000
Interest expense	(374,000)	(18,000)	(774,000)	(41,000)
Other expense, net	(16,000)	(53,000)	(108,000)	(43,000)
Equity loss from investment in joint venture	(11,000)	(8,000)	(27,000)	(17,000)
Total other income (expense)	(397,000)	(41,000)	(891,000)	13,000
Net loss	$ (826,000)	$ (8,413,000)	$ (6,924,000)	$ (16,686,000)
Basic and diluted net loss per common share	$ (0.02)	$ (0.33)	$ (0.21)	$ (0.66)
Basic and diluted weighted average common shares	35,077,783	25,819,980	33,732,954	25,131,317

EXHIBIT 99.2

Second Quarter Update and Financial Results

Dear Shareholders,

The second quarter of 2009 was, across the board, a very important quarter for us and I would like to begin by highlighting our four most important achievements:

- We clarified our regulatory path in the United States for the Celution® System and are pleased to learn that it will be regulated as a medical device, not as a drug or a biologic product.

- We have had the largest number of consumable shipments per quarter since the beginning of commercialization, while we have continued to increase our installed base of Celution and StemSource® units in the field.

- We have demonstrated the feasibility and versatility of the platform by successfully completing enrollment in two cardiac clinical studies and expanding the number of trial centers and the enrollment in the RESTORE II breast reconstruction study. Furthermore, the number of investigator-initiated studies continues to expand throughout the world for a broad number of applications.

- We strengthened our balance sheet through two equity transactions that permit us to better execute our business strategy.

Regulatory Update

Our regulatory path in the European Union has been clearly defined as a medical device since we first sought marketing approval for the Celution System in Europe. The path in the United States had previously been less defined. Recently however, the FDA has determined that our Celution® 700 System will be regulated in the U.S. as a medical device. As a result, we anticipate ultimate clearance as either a Class II or Class III device and the next step with the FDA is to determine whether approval will require a clinical study or whether current data is sufficient for device clearance. A forthcoming filing to the FDA and subsequent communications are the next steps to define our timeline in the U.S. Our current estimate is that U.S. approval could come as early as 2010, depending largely on whether U.S. clinical studies are required and if so, the scope of the study design and follow up period.

Consistent with our experience in the EU and the U.S., in Japan, we are preparing a medical device application to file with the Ministry of Health (MHLW). The time to approval will depend in part on the determination of any clinical requirements.

Penetration of Cytori Technology

The number of Celution and StemSource systems in the field continues to grow as does the rate of consumables sold. Both systems are primarily sold through a combination of distribution partners and our direct sales force. During Q2 of this year, we sold 12 systems. By the end of June 2009, a cumulative total of 70 systems have been sold to end users, distributors or are generating revenue through consumable usage. The remaining units in the field are at clinical trial centers. We realized another quarter to quarter increase in consumables shipped. In the second quarter, 313 total units were shipped compared with 241 units in Q1 2009. Notably, the consumables shipped in Q2 represented the highest quarterly number since our product introduction. For this quarter, as in previous quarters, the consumables shipped represented a mix of opening or stocking orders, clinical trial units, and reorders. In the second quarter, 146 of 313 consumables sold were reorders. We believe this is a strong indicator of physician and patient satisfaction and demand for the technology.

Clinical Trial Progress

Enrollment has been completed in both of our cardiovascular disease studies in Europe this year and both were declared to have met their primary safety and feasibility objectives by an independent steering committee. Clinical data from both trials are being accumulated with results expected in the first half of 2010.

The 70 patient RESTORE-2 breast reconstruction study has enrolled more than 50 patients and we expect interim data to be reported later this year. The goals of this study are as follows:

- Show objectively that the Celution System can be used effectively by doctors to reconstruct soft tissue defects in patients following partial mastectomy;
- Expand the regulatory claims for the technology; and
- To enable pan-European reimbursement for this indication.

In addition to our three sponsored clinical trials, our strategy is to monitor the efforts of leading physicians around the globe in their efforts to adapt and apply Cytori's Celution System for an even broader number of medical conditions. More than ten such studies are enrolling patients or are in the planning stages. These studies include but are not limited to liver insufficiency, chronic wounds, post operative renal insufficiency, which enrolled its first patient last week, and urinary incontinence, which we have been informed by the Principal Investigator that the initial five patient feasibility study has been completed and is now proceeding to a larger efficacy study.

Financial Results

Total revenues were $8.5 million and $10.5 million for the three and six months ended June 30, 2009, respectively, compared to $1.4 million and $2.4 million for the same periods in 2008. As part of our Olympus partnership, we recognized $7.3 million in development revenue in the second quarter of 2009, due to the completion of enrollment in cardiovascular disease clinical safety and feasibility studies. Product revenues were $1.3 million and $3.2 million for the three and six months ended June 30, 2009, respectively, compared to $1.4 million and $1.6 million for the same periods in 2008. Gross profit was $0.5 million and $1.3 million for the three and six months ended June 30, 2009, respectively, compared to $0.7 million and $0.8 million for the same periods in 2008.

Cytori continued to lower operating expenses in the second quarter of 2009, due mostly to the significant reduction in research and development and general and administrative expenses, offset in part by a planned increase in sales and marketing expenses, as the company shifts its focus toward commercialization. Total operating expenses, less the change in fair value of warrants and option liabilities, were $6.7 million and $13.9 million for the three and six months ended June 30, 2009, respectively, compared to $9.3 million and $18.3 million, for the same respective periods in 2008.

Net loss decreased to $0.8 million and $6.9 million for the three and six months ended June 30, 2009 compared to $8.4 million and $16.7 million for the respective periods in 2008, respectively. The improvement in net loss is attributable mostly to increased development revenue and the significant reduction in research and development and general and administrative expenses during the second quarter of 2009.

We ended the second quarter of 2009 with $13.9 million in cash and cash equivalents plus $1.5 million in accounts receivable, compared to $12.6 million in cash and cash equivalents and $1.3 million in accounts receivable as of December 31, 2008. The balance sheet was strengthened from a private placement that raised $4.2 million during the second quarter and from a 12 month equity agreement with Seaside 88, which generated approximately $0.8 million in proceeds in the second quarter and $2.5 million in additional proceeds subsequent to the end of the quarter.

Establishing the Market in Regenerative Medicine

Cytori is leading the formation of the emerging market of regenerative medicine by delivering its therapeutic technology to patients around the world. The foundation for leadership has occurred as a result of specific achievements over the past few years, for example:

- Six years of significant investment into science and engineering have yielded a marketable and reliable device that has been used safely and successfully in many diverse clinical situations.

- We estimate that approximately 500 patients have been treated so far with the Celution System. This illustrates the utility and versatility of the technology and helps support local and regional reimbursement efforts in countries such as the U.K., Germany, Italy, Greece, and Japan. This also provides increasing visibility to new patients and physicians to further drive adoption of the technology.

- Continually evolving customer support efforts are targeted first to physicians desiring better patient outcomes, but also better practice economics. In addition, increased focused is being directed towards educating patients on these improved outcomes and ensuring they can easily connect with physician providers of Cytori technology.

- To optimally position the company for scaled growth, we have established key partnerships with leading global companies. This includes consideration of not only global product distribution with market leaders such as GE, Green Hospital Supply and select local distributors but also production and servicing of the next generation products through our joint venture with Olympus Corporation.

- Our global device-based regulatory strategy is now more fully validated allowing us to accelerate achievement of both general and more specific market approvals for important clinical indications.

Cytori is dedicated to achieving critical mass in the emerging opportunity represented by regenerative medicine. By developing the commercial standard for point-of-care regenerative medicine, market leadership is possible. Many key elements are already in place. Others are forthcoming soon. Measures such as an expanding installed base of our technology as well as increasing rates of system utilization will help tangibly communicate our progress to this goal.

Thank you for your interest in Cytori and we look forward to updating you again in three months on our growth and progress.

Warm Regards,

Christopher J. Calhoun
Chief Executive Officer

Cautionary Statement Regarding Forward-Looking Statements

This shareholder letter includes forward-looking statements regarding a variety of 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 sales and revenues, our anticipated regulatory clearances and approvals, the growth of potential clinical applications for our products, market acceptance of our products, and our ability to continue enrollment of patients in clinical trials 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.