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): **November 4, 2010**

CYTORI THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**001-34375**	**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):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

□ 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 November 4, 2010, Cytori Therapeutics, Inc. (Company) issued a press release announcing its financial results for the third quarter ended September 30, 2010. 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 blog on the Investor Relations section of its website. A copy 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 November 4, 2010*
99.2	Cytori Therapeutics, Inc. Shareholder Letter, dated November 4, 2010*

* 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: November 4, 2010

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

EXHIBIT 99.1

November 4, 2010

Cytori Reports Third Quarter & Nine Month 2010 Results

Cytori Therapeutics (NASDAQ:CYTX) reports third quarter and nine month 2010 financial results. Further details, including progress of the Company's commercial activities and product development pipeline, are provided in the 'November 2010 Shareholder Letter', which may be accessed at http://ir.cytoritx.com.

Recently, Cytori has executed the following milestones:

· Grew system installed-base in Europe, Asia and U.S., bringing cumulative revenue-generating units worldwide to 135;

· Shipped 221 consumables, including 162 consumable re-orders during the third quarter;

· Expanded European Celution® regulatory approval to include breast reconstruction and other medical indications such as treatment of Crohn's fistulas;

· Received approval for and launched PureGraft™ into the U.S. and European plastic and reconstructive surgery markets;

· Finalized protocol and identified initial sites for ADVANCE, the Company's pivotal European heart attack study, with enrollment anticipated to begin in the first quarter of 2011;

· Prepared Celution® pre-IDE applications, which will be submitted to FDA to initiate a U.S. soft tissue defect repair study; and

· Capitalized the Company through 2012 from a public offering, raising $19.3 million in net proceeds.

Financial Results

Product revenues were $1.5 million for the quarter and $5.9 million for the first nine months in 2010, compared to $1.4 million and $4.6 million for the same time periods, respectively, in 2009. Gross profit was $0.6 million for the third quarter and $3.1 million for the first nine months of 2010, compared to $0.6 million and $1.9 million for the same periods respectively in 2009.

Revenue growth for the first nine months of 2010 compared to the same period in 2009 is due in part to increased demand for the Celution® System for private pay cosmetic surgery procedures and the sale of a StemSource® Cell Bank in each of the first two quarters of 2010, compared to one StemSource® Bank sale in the period in 2009. There was no StemSource® Cell Bank sale in the third quarter of 2010. Decline in third quarter 2010 consumable orders reflects seasonality of cosmetic procedures in July and August.

Total operating expenses were $10.3 million and $22.1 million for the third quarter and first nine months of 2010, respectively, compared to $7.0 million and $21.7 million for the same periods in 2009. The increase in operating expenses in the third quarter of 2010 is due in part to a $1.8 million non-cash change in the fair value of the warrant liability. Total operating expenses reflect an increase in sales and marketing and general administration activities that was partially offset by a decrease in research and development costs.

Cash and cash equivalents as of September 30, 2010 were $30.7 million. An additional $19.3 million in net proceeds were raised subsequent to the end of the quarter through a public offering of common stock.

Outlook

Cytori continues to expand the number of Celution® and StemSource® products in the field while simultaneously investing in growing system adoption, consumable usage, and broadening the market. With the recent expanded CE Mark, European sales activities will be focused increasingly on hospitals, where the new medical indications that the Celution® System received will facilitate penetration. The claims expansion coupled with the upcoming release of complete results from RESTORE 2 are expected to support our breast reconstruction reimbursement efforts in Europe. The recently approved PureGraft™ product will be marketed as a broad based fat grafting product to the private pay plastic surgery market. Pur eGraft™ users then provide an enhanced base of potential customers of the premium Celution® System. The Asia Pacific sales activities will continue to focus on a mix of research and cosmetic surgery sales, while looking to grow into at least one new geographic region by early next year. The U.S. sales activities will continue to focus on penetrating the U.S. private pay autologous fat grafting market with PureGraft™ while continuing to generate StemSource® System sales for research and banking.

Conference Call & Shareholder Letter

Cytori will host a conference call and question and answer session at 5:00 PM 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 Cytori's website (www.cytori.com). The webcast will be available live and by replay two hours after the call and archived for 90 days.

Cautionary Statement Regarding Forward-Looking Statements

This press release and shareholder letter include 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, the expectation that expanded European regulatory approval for Celution® and release of complete results from RESTORE 2will facilitate reimbursement efforts, improve our ability to sell systems to hospitals and expand our market opportunity, our belief that we can fund operations through 2012, our expectation that the US and European launch of PureGraft™ may enhance our Celution® customer base are all subject to risks and uncertainties that could cause our actual re sults 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 of intellectual property rights, regulatory uncertainties regarding the collection and results of clinical data, uncertainties relating to the future success of our sales and marketing programs, 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 on Forms 10-K and Form 10-Q. 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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CYTORI THERAPEUTICS, INC.
CONSOLIDATED CONDENSED BALANCE SHEETS
(UNAUDITED)

	As of September 30, 2010	As of December 31, 2009
Assets		
Current assets:		
Cash and cash equivalents	$ 30,729,000	$ 12,854,000
Accounts receivable, net of allowance for doubtful accounts of $314,000 and $751,000 in 2010 and 2009, respectively	1,664,000	1,631,000
Inventories, net	3,065,000	2,589,000
Other current assets	974,000	1,024,000
Total current assets	36,432,000	18,098,000
Property and equipment, net	1,172,000	1,314,000
Restricted cash and cash equivalents	350,000	—
Investment in joint venture	512,000	280,000
Other assets	520,000	500,000
Intangibles, net	469,000	635,000
Goodwill	3,922,000	3,922,000
Total assets	$ 43,377,000	$ 24,749,000
Liabilities and Stockholders' Equity (Deficit)		
Current liabilities:		
Accounts payable and accrued expenses	$ 5,406,000	$ 5,478,000
Current portion of long-term debt	4,211,000	2,705,000
Total current liabilities	9,617,000	8,183,000
Deferred revenues, related party	5,512,000	7,634,000
Deferred revenues	2,417,000	2,388,000
Warrant liability	4,448,000	6,272,000
Option liability	1,320,000	1,140,000
Long-term deferred rent	302,000	—
Long-term debt, less current portion	15,243,000	2,790,000
Total liabilities	38,859,000	28,407,000
Commitments and contingencies		
Stockholders' equity (deficit):		
Preferred stock, $0.001 par value; 5,000,000 shares authorized; -0- shares issued and outstanding in 2010 and 2009	—	—
Common stock, $0.001 par value; 95,000,000 shares authorized; 45,909,194 and 40,039,259 shares issued and 45,909,194 and 40,039,259 shares outstanding in 2010 and 2009, respectively	46,000	40,000
Additional paid-in capital	205,219,000	178,806,000
Accumulated deficit	(200,747,000)	(182,504,000)
Total stockholders' equity (deficit)	4,518,000	(3,658,000)
Total liabilities and stockholders' equity (deficit)	$ 43,377,000	$ 24,749,000

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

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2010	**2009**	**2010**	**2009**
Product revenues:				
Related party	$ 581,000	$ 9,000	$ 590,000	$ 582,000
Third party	938,000	1,377,000	5,286,000	3,994,000
	1,519,000	1,386,000	5,876,000	4,576,000
Cost of product revenues	920,000	782,000	2,733,000	2,645,000
Gross profit	599,000	604,000	3,143,000	1,931,000
Development revenues:				
Development, related party	—	—	2,122,000	7,250,000
Research grant and other	65,000	5,000	93,000	27,000
	65,000	5,000	2,215,000	7,277,000
Operating expenses:				
Research and development	2,480,000	2,618,000	7,026,000	9,006,000
Sales and marketing	2,932,000	1,621,000	7,356,000	4,369,000
General and administrative	3,060,000	2,483,000	9,331,000	7,287,000
Change in fair value of warrants	1,803,000	446,000	(1,824,000)	1,558,000
Change in fair value of option liability	(20,000)	(140,000)	180,000	(560,000)
Total operating expenses	10,255,000	7,028,000	22,069,000	21,660,000
Operating loss	(9,591,000)	(6,419,000)	(16,711,000)	(12,452,000)
Other income (expense):				
Interest income	3,000	2,000	6,000	19,000
Interest expense	(759,000)	(346,000)	(1,288,000)	(1,120,000)
Other expense, net	(27,000)	(31,000)	(152,000)	(139,000)
Equity loss from investment in joint venture	(43,000)	(8,000)	(98,000)	(35,000)
Total other expense	(826,000)	(383,000)	(1,532,000)	(1,275,000)
Net loss	$ (10,417,000)	$ (6,802,000)	$ (18,243,000)	$ (13,727,000)
Basic and diluted net loss per common share	$ (0.23)	$ (0.18)	$ (0.40)	$ (0.39)
Basic and diluted weighted average common shares	45,905,580	37,176,165	45,185,774	34,893,303

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

	For the Nine Months Ended September 30,	
	2010	**2009**
Cash flows from operating activities:		
Net loss	$ (18,243,000)	$ (13,727,000)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	772,000	1,279,000
Amortization of deferred financing costs and debt discount	449,000	559,000
Warranty provision	—	(23,000)
Provision for doubtful accounts	428,000	450,000
Change in fair value of warrants	(1,824,000)	1,558,000
Change in fair value of option liability	180,000	(560,000)
Share-based compensation expense	2,294,000	1,991,000
Equity loss from investment in joint venture	98,000	35,000
Increases (decreases) in cash caused by changes in operating assets and liabilities:		
Accounts receivable	(452,000)	(997,000)
Inventories	(476,000)	249,000
Other current assets	(104,000)	(26,000)
Other assets	(64,000)	49,000
Accounts payable and accrued expenses	(72,000)	(1,066,000)
Deferred revenues, related party	(2,122,000)	(7,250,000)
Deferred revenues	29,000	(33,000)
Long-term deferred rent	302,000	(168,000)
Net cash used in operating activities	(18,805,000)	(17,680,000)
Cash flows from investing activities:		
Purchases of property and equipment	(473,000)	(100,000)
Cash invested in restricted cash	(350,000)	—
Investment in joint venture	(330,000)	—
Net cash used in investing activities	(1,153,000)	(100,000)
Cash flows from financing activities:		
Principal payments on long-term debt	(5,454,000)	(1,419,000)
Proceeds from long-term debt	20,000,000	—
Debt issuance costs and loan fees	(559,000)	—
Proceeds from exercise of employee stock options and warrants	7,050,000	71,000
Proceeds from sale of common stock and warrants	17,314,000	16,865,000
Costs from sale of common stock and warrants	(518,000)	(1,141,000)
Proceeds from sale of treasury stock	—	3,933,000
Net cash provided by financing activities	37,833,000	18,309,000
Net increase in cash and cash equivalents	17,875,000	529,000
Cash and cash equivalents at beginning of period	12,854,000	12,611,000
Cash and cash equivalents at end of period	$ 30,729,000	$ 13,140,000

EXHIBIT 99.2

Shareholder Letter: Third Quarter 2010 Results

Dear Investors,

Cytori's recent progress has been defined by the following accomplishments:

- Grew system installed-base in Europe, Asia and U.S., bringing cumulative revenue-generating units worldwide to 135;
- Shipped 221 consumables, including 162 consumable re-orders during the third quarter;
- Expanded European Celution® regulatory approval, which includes breast reconstruction and other medical indications such as the treatment of Crohn's fistulas;
- Received approval for and launched PureGraft™ into the U.S. and European plastic and reconstructive surgery markets;
- Filed the protocol and identified initial sites for ADVANCE, the Company's pivotal European heart attack trial, with enrollment anticipated to begin in the first quarter of 2011;
- Prepared Celution® pre-IDE applications, which will be submitted to FDA to initiate a U.S. soft tissue defect repair trial; and
- Capitalized the Company through 2012 from a public offering, raising $19.3 million in net proceeds.

Outlook

Cytori continues to expand the number of Celution® and StemSource® products in the field while simultaneously investing in growing system sales, consumable usage, and broadening the market.

With the recently expanded CE Mark approval, European sales activities will be increasingly focused on hospitals, where the new medical indications that the Celution® System received will facilitate market penetration. To illustrate this point, we recently received a written notice that the Tuscan regional government will fund the Celution® System and consumables on a limited basis to Careggi University Hospital, its lead cancer hospital in Florence, Italy. The grant will be limited to breast cancer reconstruction. Furthermore, sales growth should be helped by the release of complete results from RESTORE 2. This data will also facilitate the expansion of breast reconstruction reimbursement efforts in Europe. In addition, the recently CE-Mark approved PureGraft™ will be marketed as a broad based fat grafting product to t he private pay plastic surgery market, sold both through direct channels and distributors. PureGraft™ users then provide an enhanced base of potential customers for the premium Celution® System.

The Asia Pacific commercial activities will continue to focus on a mix of research and cosmetic surgery sales, while looking to grow into at least one new region early next year. The U.S. sales activities will focus on penetrating the U.S. private pay autologous fat grafting market with PureGraft™, continuing StemSource® System sales for research and banking.

To extend our platform into additional medical markets and regions, we are preparing to initiate our European heart attack pivotal trial and we will submit IDE applications for repair of soft tissue defects in the U.S. We intend to begin enrolling patients in one of the proposed U.S. studies in 2011.

Product Sales

For the first nine months, we had shipments of 955 consumables compared to 868 in the first nine months of 2009. The cumulative number of revenue generating units has increased 59% over this time period from 85 to 135. This contributed to $5.9 million in product sales year to date, already surpassing our $5.8 million full year 2009 product revenue. In the third quarter, we had orders for 221 consumables, of which 162 were re-orders and eleven system sales worldwide, which contributed to $1.5 million in product sales.

	9-Mo 2010	9-Mo 2009	Q3 2010	Q3 2009
Revenue Generating Systems (cumulative)	135	85	135	85
Consumables Shipped	955	868	221	314
Consumable Re-Orders	727	521	162	185
% Reorders of Total Shipped	76%	60%	73%	59%

Revenue growth for the first nine months of 2010 compared to the same period in 2009 is due in part to increased demand for the Celution® System for private pay cosmetic surgery procedures and the sale of a StemSource® Cell bank in each of the first two quarters of 2010, compared with one similar sale in this time period in 2009. The decrease in third quarter revenue, compared to the second quarter of 2010, was related primarily to the absence of a StemSource® Cell Bank sale and a seasonal decline in consumable orders for elective cosmetic surgery procedures. Consumable shipments were also impacted by the completion of the initial enrollment phase of several investigator sponsored clinical studies. Our nine month results and our full year 2010 trends demonstrate a growing demand for our products.

The PureGraft™ System, which we launched in Europe and the U.S. is beginning to contribute to our revenues. PureGraft™ is a superior product which we believe to be setting the standard for autologous fat graft preparation. In Europe, this is an ideal complement to Celution® for cell-enriched fat grafting but is also attractive as a standalone product for non-cell-enriched procedures or those physicians not ready to purchase a Celution® System.

Cardiovascular Disease

Our most advanced Celution® System pipeline application is in cardiovascular disease. During the second quarter, we reported positive outcomes from two European clinical trials, one in acute heart attacks and another in chronic ischemic heart disease. PRECISE 18-month data is planned to be reported no later than the first quarter of 2011, with 18-month APOLLO data to follow.

Based on the outcome from the APOLLO heart attack trial, we are initiating a randomized, double-blind, placebo-controlled European heart attack approval trial, which will be named ADVANCE. This pivotal trial will incorporate the next-generation device, the Celution® One, which will be manufactured by the Olympus-Cytori Joint Venture and used under an investigational license. The process of site selection is underway. We expect to begin enrollment in the first quarter of 2011.

Celution® U.S.

In the U.S., we have made progress toward initiating a U.S. clinical trial with the Celution® System. Our strategy remains to simultaneously seek near term regulatory approval for the system as well as longer term clinical trials for specific indications. During the third quarter, we conducted multiple Celution® System application discussions with the FDA and have already submitted our first filing. Filings for additional applications, including IDE, will also be submitted this quarter. Based on subsequent feedback from the FDA, we will select which indication to move forward with first. We expect to initiate at least one U.S. trial in 2011.

12-Month Milestones

Key forthcoming milestones are as follows:

- Broaden our installed base and consumable sales growth, expansion into the hospital market;
- Report of 12-month RESTORE 2 results in the first quarter of 2011;
- Initiate European heart attack approval trial using the Celution® One system;
- Initiate U.S. soft tissue clinical trial;
- Report 18-month results from the APOLLO trial;
- Report 18-month results from the PRECISE trial; and
- Formation of strategic partnership.

Finally, we would like to welcome Lloyd H. Dean to our Board of Directors. His depth of experience, ranging from executive and hospital management to commercialization and growth, will be instrumental as we continue to expand the reach of our products and grow our brand.

Regards,

Christopher J. Calhoun
Chief Executive Officer

Cautionary Statement Regarding Forward-Looking Statements

This shareholder letter 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 operating expenses and cash utilization rate through 2012, the expected increase of sales opportunities due to our expansion of Celution® System indications in Europe, our ability to successfully commercialize the PureGraft™ product, the competitive capabilities of our PureGraft™ product versus other related products, our ability to leverage PureGraft™ products to increase the number of aesthetic or reconstructive procedures performed and for developing new Celution® accounts, system and consumable order trends, as well as our ability to obt ain third party and governmental approvals for our clinical trials and reimbursement for our consumable sales and therefore increase adoption in the reconstructive surgery market, 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, uncertainties relating to the success of our sales and marketing programs, 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 on Forms 10-K and 10-Q. We assume no responsibility to update or revise any forward-looking statements to reflect events, trends or circumstances after the date they are made.