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 5, 2014**

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 No.)

3020 Callan Road, San Diego, California 92121
(Address of principal executive offices) (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 8.01 Other Events.

On August 5, 2014, Cytori Therapeutics, Inc. ("Cytori") issued the attached press release providing an update on the status of the ATHENA trial.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	Cytori Therapeutics, Inc. Press Release, dated August 5, 2014

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 5, 2014

By: /s/ Marc H. Hedrick
Marc H. Hedrick
President, Chief Executive Officer

EXHIBIT INDEX

Exhibit No.	Description
99.1	Cytori Therapeutics, Inc. Press Release, dated August 5, 2014

CYTORI THERAPEUTICS CONTACT
Megan McCormick
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mmccormick@cytori.com

Cytori Provides Update on ATHENA Trial Status

SAN DIEGO, August 5, 2014 – Cytori Therapeutics (NASDAQ: CYTX) has placed enrollment in the ATHENA and ATHENA II trials on clinical hold and therefore anticipates that it will not be possible to complete enrollment of the ATHENA I trial prior to the end of 2014 as previously anticipated. The decision to place the trials on hold was based on a safety review of reported cerebrovascular events. Symptoms occurred in three patients, of which two patients' symptoms fully resolved within a short period of time and the third patient has had substantial resolution of symptoms. Such events had not been previously reported in Cytori's other cardiovascular trials and appear to be related in part to the medical co-morbidities in the treated population and the complex nature of the procedures involved in the trial.

The U.S. ATHENA and ATHENA II clinical trials are randomized, double-blind, placebo controlled studies designed to evaluate the safety and feasibility of adipose-derived regenerative cells (ADRCs™) in heart failure patients with ischemic heart disease who are already receiving maximal therapy with no options for revascularization. The procedure involves a fat harvest through small volume liposuction, cardiac catheterization, electromechanical mapping of the heart to determine where to inject ADRCs (or placebo), the actual ADRC (or placebo) injection and related data collection and monitoring activities.

Cytori has been working with the FDA, an independent Data Monitoring Committee (DMC), trial investigators and external expert consultants to fully understand any adverse events and to carefully define adjustments to the protocol intended to minimize risks to patients and to improve the benefit to risk profile of the study.

Adverse events are expected in trials in which participants suffer from advanced cardiac disease and protocol revisions during phase II safety and feasibility studies in compromised populations are common. Cytori is committed to refining the trial protocol as needed, to mitigate risks as much as possible. Updated information regarding enrollment projections will be communicated upon final protocol revisions and agreement amongst the investigators, the DMC and FDA as to the safety and feasibility of continuing the trial as amended.

About Cytori

Cytori Therapeutics is developing cell therapies based on autologous adipose-derived regenerative cells (ADRCs) to treat cardiovascular disease and other medical conditions. Our scientific data suggest ADRCs improve blood flow, moderate the inflammatory response and rescue tissue at risk of dying. As a result, we believe these cells can be applied across multiple "ischemic" conditions. These therapies are made available to the physician and patient at the point-of-care by Cytori's proprietary technologies and products, including the Celution® System product family. www.cytori.com

Cautionary Statement Regarding Forward-Looking Statements
This communication 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 ability to make the necessary and appropriate amendments to the Athena I & II treatment protocols are subject to risks and uncertainties that could cause our actual results and financial position to differ materially. Some of these risks and uncertainties include the challenges inherent in mitigating procedural risks in compromised patient populations, our ability to satisfy the Data Monitoring Committee and the FDA as to the reasonable safety of continuing the trial, as well as other risks and uncertainties described under the "Risk Factors" section in Cytori's Securities and Exchange Commission Filings on Form 10-K and Form 10-Q. Cytori assumes no responsibility to update or revise any forward-looking statements contained in this press release to reflect events, trends or circumstances after the date of this communication.

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