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): **July 17, 2006**

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 8.01 Other Events

A press release was issued by Cytori Therapeutics, Inc. on July 17, 2006, reporting the safety and efficacy of its Celution System™ in a preclinical study of coronary artery disease. A copy of the press release is attached hereto as Exhibit 99.1.

Item 9.01 Financial Statements and Exhibits

(c) Exhibits

Exhibit 99.1	Press release issued by Cytori Therapeutics, Inc. on July 17, 2006, reporting the safety and efficacy of its Celution System™ in a preclinical study of coronary artery disease.

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: July 17, 2006 By: /s/ CHRISTOPHER J. CALHOUN

Christopher J. Calhoun
Chief Executive Officer

EXHIBIT INDEX

Exhibit Number	Description of Document
99.1	Press release issued by Cytori Therapeutics, Inc. on July 17, 2006, reporting the safety and efficacy of its Celution System™ in a preclinical study of coronary artery disease.

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Cytori Therapeutics Reports Safety and Efficacy of its Celution System™ in a Preclinical Study of Coronary Artery Disease

- Outlines Design of Planned Chronic Ischemia Clinical Study in Europe -

San Diego, CA, July 17, 2006 - Cytori Therapeutics, Inc. (NASDAQ: CYTX; Frankfurt: XMP), today reported top-line preliminary results demonstrating that adipose-derived stem and regenerative cells from its proprietary Celution™ System was safe and improved heart function in a chronic ischemia model, representing a severe form of coronary artery disease. The study was conducted by Emerson Perin, M.D., Ph.D., at The Texas Heart Institute in collaboration with Cytori. The full data and analysis of this study will be presented later this year.

In this blinded, randomized study, seven pigs received their own adipose stem and regenerative cells (treated) or a saline injection (control, six animals). Autologous adipose stem and regenerative cells were extracted and concentrated using the Celution™ System, Cytori's automated cell processing system. The cells were then delivered via the NOGA® Mapping and delivery system directly into the ischemic sites.

Thirty days following treatment, the cell treated group exhibited a 13% ($p \leq 0.03$) absolute improvement in ejection fraction over the control group. Ejection fraction is a common measure of the heart's pumping efficiency. Consistent with this functional improvement, heart structure was preserved as evidenced by a 37% ($p \leq 0.0001$) thicker ventricular wall in the cell treated groups, versus the control. Improved wall thickness leads to improved mechanical properties of the heart, which may slow deterioration of its pumping ability.

"This is the first report of adipose stem and regenerative cells as a treatment for ischemic-related coronary artery disease in a randomized large animal preclinical study," said Dr. Perin. "It was carefully designed to approximate as closely as possible a true clinical setting. The results showed that within the treated group there was significant improvement of key measurements of heart performance including ejection fraction and wall thickness as well as a corresponding decrease in the amount of scar tissue."

"This outcome is consistent with our prior preclinical cardiac data and demonstrates the exciting potential of this therapy to significantly improve the function of damaged hearts," said Marc H. Hedrick, M.D., President of Cytori Therapeutics. "These results also reveal to us valuable information related to the design of our planned chronic ischemia clinical study in Europe."

Cytori's PRECISE clinical study in Europe, which is one of two studies currently in the planning stages, will investigate the safety and feasibility of adipose stem and regenerative cells for chronic ischemia. In the study, cells will be processed using the Celution™ System and delivered using a NOGA® Mapping and delivery system in the same approach used for the preclinical study. The randomized, placebo-controlled dose-escalation study will enroll up to 36 patients with chronic ischemia who are not eligible for coronary artery bypass surgery or percutaneous coronary intervention.

An ejection fraction that continues to decline in patients with ischemic coronary artery disease can ultimately lead to disability and death. Currently available therapies can only delay the progression of the disease and slow the rate of decline in pumping function but are unable to improve or restore heart function.

About Cytori Therapeutics

Cytori Therapeutics, Inc., (NASDAQ: CYTX; Frankfurt: XMPA) is discovering and developing proprietary cell-

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based therapeutics utilizing adult stem and regenerative cells derived from adipose tissue, also known as fat. The Company's investigational therapies target cardiovascular disease, spine and orthopedic conditions, gastrointestinal disorders and new approaches for aesthetic and reconstructive surgery. To facilitate processing and delivery of adipose stem and regenerative cells, Cytori has developed its proprietary Celution™ System to isolate and concentrate a patient's own stem and regenerative cells in about an hour. This system will dramatically improve the speed in which personalized cell-based therapies can be delivered to patients.

Cautionary Statement Regarding Forward-Looking Statements

This press release includes forward-looking statements regarding events, trends and prospects of our business which may affect our future operating results and financial position. Such statements 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 our history of operating losses and expected continuing losses, the need for further financing, our ability to develop and commercialize regenerative cell-based therapies, our dependence on third parties, our ability to obtain, defend and enforce our intellectual property, and other risks and uncertainties described (under the heading "Risk Factors") in Cytori Therapeutics' Form 10-K annual report for the year ended December 31, 2005 and subsequent SEC filings, which will be available through our web site. 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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