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 13, 2017

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))

Dere-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company \Box

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box

Item 8.01. Other Events.

On November 13, 2017, Cytori Therapeutics, Inc. (the "Company" or "Cytori") announced that the U.S. Food and Drug Administration approved an investigator-initiated trial of Cytori Cell Therapy[™] in up to 25 patients with bilateral osteonecrosis of the hip. This U.S. trial is designed to assess the ability of Cytori Cell Therapy to provide benefit in patients with osteonecrosis of the hip. The hope is that improved formation of new bone and blood vessels within the diseased hip will lead to more robust bone regeneration and thereby delay or even eliminate the need for later hip replacement surgery. The Company is supporting the trial by providing clinical materials and technical support, and believes that the first patient may be enrolled by the end of 2017.

Cautionary Statement Regarding Forward-Looking Statements

This Current Report on Form 8-K includes forward-looking statements regarding events, trends and business prospects, which may affect Cytori's future operating results and financial position. Such statements, including, but not limited to, statements regarding the potential that improved formation of new bone and blood vessels will lead to more robust bone regeneration in patients with osteonecrosis and the anticipated timing of enrollment of the osteonecrosis trial, are subject to risks and uncertainties that could cause Cytori's actual results and financial position to differ materially. These risks and uncertainties, which include inherent uncertainties in conduct of clinical studies and trials and the results of such trials (including risks that further studies may not support efficacy or safety of Cytori Cell Therapy), risks associated with clinical use of Cytori Cell Therapy in studies and trials not controlled by Cytori, risks to Cytori's intellectual property portfolio (including the risk that independent investigators using Cytori's technology or their employers may file for patent or other intellectual property that would not be owned by Cytori and may be competitive with or conflict with Cytori's technology and pipeline) are described under the heading "Risk Factors" 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 to reflect events, trends or circumstances after the date they are made.

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 13, 2017

By: /s/ Tiago Girao Tiago Girao VP Finance and Chief Financial Officer