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): February 23, 2016

CYTORI THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation)

> 3020 Callan Road San Diego, California (Address of principal executive offices)

001-34375 (Commission File Number) 33-0827593 (IRS Employer Identification No.)

92121 (Zip Code)

Registrant's telephone number, including area code: (858) 458-0900

Not Applicable 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:

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 February 23, 2016, Cytori Therapeutics, Inc. (the "Company") received an acknowledgement and agreement from Oxford Finance LLC, as collateral agent and lender ("Oxford") that Oxford had received evidence, in form and substance reasonably satisfactory to Oxford, that the Company had received positive data on its US ACT-OA clinical trial. As a result, pursuant to the Loan and Security Agreement (the "Loan Agreement"), dated May 29, 2015, with Oxford and the other lenders party thereto from time to time, the period for which the Company is only required to make interest-only payment was extended from June 1, 2016 to January 1, 2017 (the "Amortization Commencement Date"). Following the Amortization Commencement Date, the Company is required to make payments of principal and accrued interest in equal monthly installments sufficient to amortize the Term Loan through June 1, 2019, the maturity date.

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.

February 23, 2016

CYTORI THERAPEUTICS, INC.

By: /s/ Jeremy Hayden

Name: Jeremy Hayden Title: General Counsel and VP of Business Development