
**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): September 29, 2014

CYTORI THERAPEUTICS, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-34375
(Commission File
Number)

33-0827593
(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 1.01 Entry Into a Material Definitive Agreement.

On September 29, 2014, Cytori Therapeutics, Inc. (the “Company”) entered into a second amendment of the Loan and Security Agreement with Oxford Finance LLC and Silicon Valley Bank (the “Lenders”) dated June 28, 2013 (the “Loan Agreement”). Pursuant to the amendment, if the Company raises at least \$13.0 million (the “Transactional Proceeds”) on or before October 31, 2014 through any one or a combination of subordinated debt, sales of equity securities, or entering into partnership agreements, then principal payments due under the Loan Agreement would be deferred by five (5) or six (6) months depending upon the timing of the Transactional Proceeds. The outstanding balance of the Loan Agreement, including the deferred principal payments, shall re-amortize over the remaining twenty-eight (28) months of the loan term commencing on April 1, 2015. If the Transactional Proceeds are not achieved by October 31, 2014, the amendment is null and void.

If the Transaction Proceeds are raised by October 31, 2014, the amendment provides that the Company will pay the Lenders an accommodation fee of \$25,000 payable upfront and a restructuring fee of \$175,000 on the earliest to occur of (a) the maturity date, (b) the acceleration of the term loan, or (c) the prepayment of the term loan.

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.

Date: September 29, 2014

CYTORI THERAPEUTICS, INC.

By: /s/ Tiago M. Girao
Tiago M. Girao
Chief Financial Officer