

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K/A
(Amendment No. 1)

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2015

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number 001-34375

CYTORI THERAPEUTICS, INC.

(Exact name of Registrant as Specified in Its Charter)

DELAWARE

(State or Other Jurisdiction
of Incorporation or Organization)

33-0827593

(I.R.S. Employer
Identification No.)

3020 CALLAN ROAD, SAN DIEGO, CALIFORNIA

(Address of principal executive offices)

92121

(Zip Code)

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

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common stock, par value \$0.001	NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act:

Preferred Stock Purchase Rights

Indicate by check mark if the registrant is a well-known seasoned issuer as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act.

Yes No

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act (Check one).

Large Accelerated Filer Accelerated Filer Non-Accelerated Filer Smaller reporting company

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the common stock of the registrant held by non-affiliates of the registrant on June 30, 2015, the last business day of the registrant's most recently completed second fiscal quarter, was \$83,722,318 based on the closing sales price of the registrant's common stock on June 30, 2015 as reported on the Nasdaq Global Market, of \$0.56 per share.

As of January 31, 2016, there were 195,186,460 shares of the registrant's common stock outstanding.

Explanatory Note

This Amendment No.1 on Form 10-K/A (the "Amendment") amends the Annual Report on Form 10-K of Cytori Therapeutics, Inc. (the "Company") for the fiscal year ended December 31, 2015 (the "2015 Form 10-K)", that was filed with the Securities and Exchange Commission on March 11, 2016. The purpose of the Amendment is solely to correct a typographical error in the fiscal year-end date in Exhibit 32 of the 2015 Form 10-K.

The Company hereby amends and replaces Exhibit 32 of the 2015 Form 10-K in its entirety. In addition, pursuant to Rule 12b-15 under the Securities Exchange Act of 1934, the Amendment includes new certifications of our principal executive officer and principal financial officer on Exhibits 31.1 and 31.2, each as of the filing date of the Amendment.

Except as described above, no other amendments are being made to the 2015 Form 10-K. This Amendment does not reflect events occurring after the filing of our 2015 Form 10-K or modify or update the disclosure contained in the 2015 Form 10-K in any way, except as discussed above.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a)(3) Exhibits

List of Exhibits required by Item 601 of Regulation S-K. See Item 15(b) below.

(b) Exhibits

The exhibits listed in the accompanying "Exhibit Index" are filed, furnished or incorporated by reference as part of this Annual Report, as indicated.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CYTORI THERAPEUTICS, INC.

By: /s/ Marc H. Hedrick, MD
Marc H. Hedrick, MD
President & Chief Executive Officer
March 24, 2016

EXHIBIT INDEX
CYTORI THERAPEUTICS, INC.
EXHIBIT INDEX

Exhibit Number	Exhibit Title	Filed with this Form 10-K	Incorporated by Reference		
			Form	File No.	Date Filed
3.1**	Composite Certificate of Incorporation.	X			
3.2	Amended and Restated Bylaws of Cytori Therapeutics, Inc.		10-Q	000-32501 Exhibit 3.2	08/14/2003
3.3	Amendment to Amended and Restated Bylaws of Cytori Therapeutics, Inc.		8-K	001-34375	05/06/2014
3.4	Certificate of Designation of Preferences, Rights and Limitations of Series A 3.6% Convertible Preferred Stock		8-K	001-034375	10/08/2014
4.1	Warrant to Purchase Common Stock issued by the Company on October 14, 2008 in favor of Silicon Valley Bank, pursuant to the Loan and Security Agreement dated October 14, 2008.		10-K	000-32501 Exhibit 10.62	03/06/2009
4.2	Warrant to Purchase Common Stock issued by the Company on June 11, 2010 in favor of GE Capital Equity Investments, Inc., pursuant to the Amended and Restated Loan and Security Agreement dated June 11, 2010.		8-K	001-34375 Exhibit 10.73	06/17/2010
4.3	Warrant to Purchase Common Stock issued by the Company on June 11, 2010 in favor of Silicon Valley Bank, pursuant to the Amended and Restated Loan and Security Agreement dated June 11, 2010.		8-K	001-34375 Exhibit 10.74	06/17/2010
4.4	Warrant to Purchase Common Stock issued by the Company on June 11, 2010 in favor of Oxford Financial Corporation, pursuant to the Amended and Restated Loan and Security Agreement dated June 11, 2010.		8-K	001-34375 Exhibit 10.75	06/17/2010
4.5	Warrant to Purchase Common Stock issued by the Company on September 9, 2011 in favor of GE Capital Equity Investments, Inc., pursuant to the Amended and Restated Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.84	09/15/2011
4.6	Warrant to Purchase Common Stock issued by the Company on September 9, 2011 in favor of Silicon Valley Bank, pursuant to the Amended and Restated Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.85	09/15/2011
4.7	Warrant to Purchase Common Stock issued by the Company on September 9, 2011 in favor of Oxford Financial Corporation, pursuant to the Amended and Restated Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.86	09/15/2011
4.8	Warrant to Purchase Common Stock issued by the Company on September 9, 2011 in favor of Oxford Financial Corporation, pursuant to the Amended and Restated Loan and Security Agreement dated September 9, 2011.		8-K	001-34375 Exhibit 10.87	09/15/2011
4.9	Warrant to Purchase Common Stock issued by the Company on June 28, 2013 in favor of Oxford Finance LLC pursuant to the Loan and Security Agreement dated June 28, 2013.		10-Q	001-34375 Exhibit 4.17	08/09/2013
4.10	Warrant to Purchase Common Stock issued by the Company on June 28, 2013 in favor of Oxford Finance LLC pursuant to the Loan and Security Agreement dated June 28, 2013.		10-Q	001-34375 Exhibit 4.18	08/09/2013
4.12	Warrant to Purchase Common Stock issued by the Company on June 28, 2013 in favor of Oxford Finance LLC pursuant to the Loan and Security Agreement dated June 28, 2013.		10-Q	001-34375 Exhibit 4.19	08/09/2013
4.13	Warrant to Purchase Common Stock issued by the Company on June 28, 2013 in favor of Oxford Finance LLC pursuant to the Loan and Security Agreement dated June 28, 2013.		10-Q	001-34375 Exhibit 4.20	08/09/2013
4.14	Warrant to Purchase Common Stock issued by the Company on June 28, 2013 in favor of Silicon Valley Bank pursuant to the Loan and Security Agreement dated June 28, 2013.		10-Q	001-34375 Exhibit 4.21	08/09/2013
4.15	Form of Warrant to Purchase Common Stock for Investors in the Units		8-K	001-34375	05/30/2014

4.16	Form of Warrant to Purchase Common Stock for Placement Agent of the Units		8-K	001-34375	05/30/2014
4.17	Form of Amendment to Warrant to Purchase Common Stock.		8-K	001-34375	09/08/2014
4.18	Form of Warrant to Purchase Common Stock.		8-K	001-34375	09/08/2014
4.19	Form of Warrant for Purchasers in the Units		8-K	001-034375	10/08/2014
4.20	Form of Initial Warrant to Purchase Common Stock		8-K	001-034375	05/05/2015
4.21	Form of Additional Warrant to Purchase Common Stock		8-K	001-034375	05/05/2015
4.22	Form of Pre-Funded Warrant to Purchase Common Stock		8-K	001-034375	05/05/2015
4.23**	Amendment to Common Stock Purchase Warrant	X			
4.4**	Amendment to Series A-1 Warrant to Purchase Common Stock	X			
4.25**	Amendment to Series A-2 Warrant to Purchase Common Stock	X			
10.1#	Amended and Restated 1997 Stock Option and Stock Purchase Plan.		10	000-32501 Exhibit 10.1	03/30/2001
10.1.1#	Board of Directors resolution adopted November 9, 2006 regarding determination of fair market value for stock option grant purposes (incorporated by reference to Exhibit 10.10.1 filed as Exhibit 10.10.1 to our Form 10-K Annual Report, as filed on March 30, 2007 and incorporated by reference herein)		10-K	000-32501 Exhibit 10.10.1	03/30/2007
10.2	2004 Equity Incentive Plan of Cytori Therapeutics, Inc		8-K	000-32501 Exhibit 10.1	08/27/2004
10.3#	Board of Directors resolution adopted November 9, 2006 regarding determination of fair market value for stock option grant purposes.		10-K	000-32501 Exhibit 10.10.1	03/30/2007
10. 4#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Nonstatutory).		10-Q	000-32501 Exhibit 10.19	11/15/2004
10.5#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Nonstatutory) with Cliff.		10-Q	000-32501 Exhibit 10.20	11/15/2004
10.6#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Incentive).		10-Q	000-32501 Exhibit 10.21	11/15/2004
10.7#	Notice and Agreement for Stock Options Grant Pursuant to Cytori Therapeutics, Inc. 1997 Stock Option and Stock Purchase Plan; (Incentive) with Cliff.		10-Q	000-32501 Exhibit 10.22	11/15/2004
10.8#	Form of Options Exercise and Stock Purchase Agreement Relating to the 2004 Equity Incentive Plan.		10-Q	000-32501 Exhibit 10.23	11/15/2004
10.9#	Form of Notice of Stock Options Grant Relating to the 2004 Equity Incentive Plan.		10-Q	000-32501 Exhibit 10.24	11/15/2004
10.10	Sublease Agreement dated May 24, 2005, between Biogen Idec, Inc. and the Company.		10-Q	000-32501 Exhibit 10.21	08/15/2005
10.11+	License & Royalty Agreement, effective August 23, 2007, by and between Olympus-Cytori, Inc. and Cytori Therapeutics, Inc.		10-Q	000-32501 Exhibit 10.49	11/13/2007
10.69	Lease Agreement entered into on April 2, 2010, between HCP Callan Rd, LLC. and Cytori Therapeutics, Inc.		10-Q	001-34375 Exhibit 10.69	05/06/2010
10.76	Common Stock Purchase Agreement, dated December 6, 2010, by and among Cytori Therapeutics, Inc. and Astellas Pharma Inc.		8-K	001-34375 Exhibit 10.76	12/09/2010
10.77	Form of Notice and Restricted Stock Award Agreement for grants of performance-based restricted stock awards under the 2004 Equity Incentive Plan.		8-K	001-34375 Exhibit 10.1	03/04/2011

10.88	First Amendment to Lease Agreement entered into on November 4, 2011, between HCP Callan Rd. LLC. and the Company.		10-Q	001-34375 Exhibit 10.88	11/08/2011
10.89#	2011 Employee Stock Purchase Plan		DEF 14A	001-34375 Appendix A	05/02/2011
10.90+	Contract HHSO100201200008C dated September 27, 2012, by and between the Company and the U.S. Department of Health and Human Services Biomedical Advanced Research and Development Authority (portions of the exhibit have been omitted pursuant to a request for confidential treatment).		8-K	001-34375 Exhibit 10.90	10/03/2012
10.91	Joint Venture Termination Agreement dated May 8, 2013 by and between the Company and Olympus Corporation.		10-Q	001-34375 Exhibit 10.91	05/10/2013
10.93+	Puregraft Sale-License-Supply Agreement, dated July 30, 2013, by and among the Company and Bimini Technologies LLC.		10-Q/A	001-34375 Exhibit 10.93	11/12/2013
10.94+	Amended and Restated License and Supply Agreement dated January 30, 2014, by and between the Company and Lorem Vascular Pty. Ltd.		8-K	001-34375	02/04/2014
10.95	Sales Agreement, dated May 12, 2014, by and between Cytori Therapeutics, Inc. and Cowen and Company, LLC.		8-K	001-34375	05/12/2014
10.98	Cytori Therapeutics, Inc. 2014 Equity Incentive Plan.		DEF 14A	001-34375	06/12/2014
10.99	Contract HHSO100201200008C Amendment No. 1 dated August 13, 2014, by and between the Company and the U.S. Department of Health and Human Services Biomedical Advanced Research and Development Authority.		8-K	001-34375	08/19/2014
10.103	Confidential Separation Agreement and General Release of all claims dated October 2, 2014, by and among the Company, and Clvde Shores.		10-Q	001-34375	11/06/2014
10.104	Form of Securities Purchase Agreement by and between Cytori Therapeutics, Inc. and the Purchasers (as defined therein), dated as of October 8, 2014.		8-K	001-034375	10/08/2014
10.105	Placement Agency Agreement, dated October 8, 2014, between Cytori Therapeutics, Inc. and Roth Capital Partners, LLC.		8-K	001-034375	10/08/2014
10.106	Amendment One to the Securities Purchase Agreement, dated March 16, 2015, between the Company and certain institutional investors		10-Q	001-034375	05/11/2015
1.107	Form of Securities Purchase Agreement, dated May 5, 2015, by and among Cytori Therapeutics, Inc. and the investors named therein		8-K	001-034375	05/05/2015
1.108	Placement Agency Agreement, dated May 5, 2015, by and between Cytori Therapeutics, Inc. and Mizuho Securities USA Inc.		8-K	001-034375	05/05/2015
1.109	Amendment One to Joint Venture Termination Agreement, dated April 30, 2015, by and between Cytori Therapeutics, Inc. and Olympus Corporation		8-K	001-034375	05/05/2015
1.110	Loan and Security Agreement, dated May 29, 2015, by and between Cytori Therapeutics, Inc. and Oxford Finance, LLC		10-Q	001-034375	08/10/2015
1.111**	Amendment One to the Securities Purchase Agreement between the Company and certain institutional investors dated May 5, 2015	X			
1.112#	2015 New Employee Incentive Plan		8-K	001-034375	January 5, 2016
1.113#**	Form of Agreement for Acceleration and/or Severance	X			
23.1**	Consent of KPMG LLP, Independent Registered Public Accounting Firm	X			
31.1	Certification of Principal Executive Officer Pursuant to Securities Exchange Act Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
31.2	Certification of Principal Financial Officer Pursuant to Securities Exchange Act Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			

32.1	Certifications Pursuant to 18 U.S.C. Section 1350/ Securities Exchange Act Rule 13a-14(b), as adopted pursuant to Section 906 of the Sarbanes - Oxley Act of 2002	X			
101.INS**	XBRL Instance Document	X			
101.SCH**	XBRL Schema Document	X			
101.CAL**	XBRL Calculation Linkbase Document	X			
101.DEF**	XBRL Definition Linkbase Document	X			
101.LAB**	XBRL Label Linkbase Document	X			
**	XBRL Presentation Linkbase Document	X			

+ Confidential treatment has been granted with respect to certain portions of this exhibit.

Indicates management contract or compensatory plan or arrangement.

** Previously filed.

**Certification of Principal Executive Officer Pursuant to
Securities Exchange Act Rule 13a-14(a)
As Adopted Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002**

I, Marc H. Hedrick, certify that:

1. I have reviewed this Amendment No. 1 to Annual Report on Form 10-K of Cytori Therapeutics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Date: March 24, 2016

/s/ Marc H. Hedrick, MD

Marc H. Hedrick,

President & Chief Executive Officer

**Certification of Principal Financial Officer Pursuant to
Securities Exchange Act Rule 13a-14(a)
As Adopted Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002**

I, Tiago M. Girão, certify that:

1. I have reviewed this Amendment No. 1 to Annual Report on Form 10-K of Cytori Therapeutics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Date: March 24, 2016

/s/ Tiago M. Girão

Tiago M. Girão,
VP of Finance and Chief Financial Officer

CERTIFICATIONS PURSUANT TO 18 U.S.C. SECTION 1350/ SECURITIES EXCHANGE ACT RULE 13a-14(b), AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES – OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of Cytori Therapeutics, Inc. for the year ended December 31, 2015 as filed with the Securities and Exchange Commission on the date hereof (the "Report") Marc H. Hedrick, as President & Chief Executive Officer of Cytori Therapeutics, Inc., and Tiago Girão, as VP of Finance and Chief Financial Officer of Cytori Therapeutics, Inc., each hereby certifies, respectively, that:

1. The Report that this certification accompanies fully complies with the requirements of section 13(a) of the Securities Exchange Act of 1934.
2. The information contained in the Report that this certification accompanies fairly presents, in all material respects, the financial condition and results of operations of Cytori Therapeutics, Inc.

Dated: March 24, 2016

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

Dated: March 24, 2016

By: /s/ Tiago M. Girão
Tiago M. Girão
VP of Finance and Chief Financial Officer