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 10, 2013

MELA Sciences, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 000-51481 (Commission File Number) 13-3986004 (IRS Employer Identification No.)

50 South Buckhout Street, Suite 1 Irvington, New York (Address of principal executive offices)

10533 (Zip Code)

Registrant's telephone number, including area code (914) 591-3783

(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 Instructions 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 2.01 — Termination of a Material Definitive Agreement

On September 10, 2013, MELA Sciences, Inc. (the "Company") and Hercules Technology Growth Capital, Inc. (the "Lender") executed an agreement to terminate the Loan and Security Agreement (the "Loan Agreement") entered into by the parties on March 15, 2013. The Company agreed to pay the Lender a total of \$6,440,675, representing \$6,000,000 in principal, \$15,675 in accrued interest and a \$425,000 end of term fee, as required under the terms of the Loan Agreement, in full satisfaction of all amounts due under the Loan Agreement. In consideration for this payment, the Lender agreed to waive the pre-payment penalty of \$180,000. As a result, the Lender released all liens and security interests held by the Lender in the Company's assets and the Lender has no further obligation to extend credit to the Company. Each party released the other party from any and all claims, causes of actions, damages and liabilities in connection with the Loan Agreement or the transactions related thereto; provided, however, that the Company's indemnification obligation to the Lender under the Loan Agreement. The warrant to purchase 693,202 shares of the Company's common stock at \$1.118 per share previously issued to the Lender remains outstanding and is not affected by termination of the Loan Agreement.

The decision to terminate the Loan Agreement resulted from discussions between the Company and the Lender. After review and consideration of various factors by the Company's Board of Directors, including the burden of the loan on the Company's expenses and the fact that the loan was not otherwise supporting the Company's overall financial condition as a result of the assertion by the Lender of new restrictions to be imposed on use of all Company funds, the Board determined that full repayment of the loan and termination of the Loan Agreement were in the best interest of the Company.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: September 12, 2013

MELA Sciences, Inc.

By: /s/ Richard I. Steinhart

Richard I. Steinhart Sr. VP & Chief Financial Officer