UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K/A

(Amendment No. 1)

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): March 31, 2014

MELA Sciences, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation)

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

000-51481 (Commission File Number) 13-3986004 (IRS Employer Identification No.)

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)

Dere-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))

Explanatory Note

The Company is hereby amending its previous Current Report on Form 8-K, filed on April 1, 2014, to provide additional information.

Item 1.02 — Termination of a Material Definitive Agreement

On January 31, 2014, MELA Sciences, Inc. (the "Company") entered into an agreement (the "Agreement") granting to Broadfin Capital, LLC ("Broadfin"), in connection with its purchase of the Company's Series A Convertible Preferred Stock (the "Preferred Stock") and warrants to purchase common stock, the right to designate one director to the Company's Board of Directors, so as long as it retains 30% of its investment in the Preferred Stock (or the shares of common stock underlying the Preferred Stock) or holds any warrants. On March 31, 2014, the Company and Broadfin terminated this Agreement. Broadfin advised the Company that its decision to terminate the Agreement was made following the appointment of an acceptable designee to the Board of Directors and their satisfaction with the composition of the Board including their designee.

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: April 2, 2014

MELA Sciences, Inc.

By: /s/ Rose Crane

Rose Crane Chief Executive Officer