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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): July 21, 2010

**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**

**Electro-Optical Sciences, Inc.**  
(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))
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**Item 8.01 — Other Events**

On July 21, 2010, MELA Sciences, Inc. issued a press release, a copy of which is attached as Exhibit 99.1 to this report and is incorporated herein by reference.

**Item 9.01 — Financial Statements and Exhibits**

(d) Exhibits.

<u>EXHIBIT NO.</u>	<u>DESCRIPTION</u>
99.1	MELA Sciences, Inc. Press Release, dated July 21, 2010

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**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.

MELA Sciences, Inc.

Date: July 21, 2010

By: /s/ Richard I. Steinhart  
Chief Financial Officer  
(Principal Financial Officer)

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EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION
99.1	MELA Sciences, Inc. Press Release, dated July 21, 2010



**MELA Sciences Announces FDA Needs More Time to Arrange Panel Meeting to Review MelaFind® PMA Application**

IRVINGTON, NY (July 21, 2010) — MELA Sciences, Inc. (Nasdaq: MELA) announced today that the U.S. Food and Drug Administration (FDA) has informed the company that it is moving the General and Plastic Surgery Devices Panel for MelaFind®, which was originally scheduled for August 26, 2010, to November 2010.

“The FDA informed us today that more time is required to arrange the meeting,” said Joseph V. Gulfo, MD, President & CEO. “We are ready to go now, and we will maintain our state of preparedness. This is untimely, however, it is not totally surprising given that the meeting was originally scheduled for the last week of the summer. We look forward to the revised Federal Register announcement of the specific date in November.”

**About Melanoma**

Melanoma is the deadliest form of skin cancer, responsible for approximately 80% of skin cancer fatalities. The melanoma rate has continued to increase with an estimated 120,000 new cases projected in 2010. A recent National Cancer Institute report published in the July 10, 2008 online edition of the Journal of Investigative Dermatology indicates that annual incidence of melanoma among young adult Caucasian women rose 50% between 1980 and 2004. Melanoma is the most common cancer in women age 25 to 29 and the number one cancer killer of women age 30 to 35. Although no cure is currently available for advanced-stage melanoma, if caught early, melanoma is virtually 100% curable.

**About MELA Sciences**

MELA Sciences is a medical technology company focused on developing MelaFind®, a non-invasive and objective computer vision system intended to aid in the detection of early melanoma. MELA Sciences designed MelaFind to assist in the evaluation of pigmented skin lesions, including atypical moles, which have one or more clinical or historical characteristics of melanoma, before a final decision to biopsy has been rendered. MelaFind acquires and displays multi-spectral (from blue to near infrared) digital images of pigmented skin lesions and uses automatic image analysis and statistical pattern recognition to help identify lesions to be considered for biopsy to rule out melanoma.

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The MelaFind Pre-Market Approval (PMA) application was filed with the U.S. Food and Drug Administration (FDA) in June 2009 and is currently under review at the FDA. MELA Sciences cannot predict either the timing of the FDA's decision on the PMA application or the outcome. FDA approval is required prior to marketing MelaFind in the United States.

For more information on MELA Sciences, visit [www.melasciences.com](http://www.melasciences.com).

**Safe Harbor**

This press release includes "forward-looking statements" within the meaning of the Securities Litigation Reform Act of 1995. These statements include but are not limited to our plans, objectives, expectations and intentions and other statements that contain words such as "expects," "contemplates," "anticipates," "plans," "intends," "believes" and variations of such words or similar expressions that predict or indicate future events or trends, or that do not relate to historical matters. These statements are based on our current beliefs or expectations and are inherently subject to significant uncertainties and changes in circumstances, many of which are beyond our control. There can be no assurance that our beliefs or expectations will be achieved. Actual results may differ materially from our beliefs or expectations due to economic, business, competitive, market and regulatory factors.

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