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) June 14, 2007

Electro-Optical 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.)

3 West Main Street, Suite 201, Irvington, New York (Address of principal executive offices)

10533 (Zip Code)

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

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):

- o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- o 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 June 14, 2007, the Registrant issued a press release providing an update on the development of the Registrant's MelaFind® product at the Needham & Co. Biotechnology and Medical Technology Conference in New York. A copy of the press release is furnished as Exhibit 99.1 to this report. Exhibit 99.1 is furnished to, but not filed with, the Securities and Exchange Commission. Registration statements or other documents filed with the Securities and Exchange Commission shall not incorporate this information by reference, except as otherwise expressly stated in such filing.

Item 9.01 — Financial Statements and Exhibits

(b) Exhibits.

Exhibit	
Number	Description
99.1	Press Release of the Registrant dated June 14, 2007 providing MelaFind® development update

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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.

Electro-Optical Sciences, Inc.

Date: June 14, 2007 By: /s/ Joseph V. Gulfo

President & Chief Executive Officer (Principal Executive Officer)

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EXHIBIT INDEX

EXHIBIT NO. 99.1 DESCRIPTION
Press Release of the Registrant dated June 14, 2007 providing MelaFind® development update



For further information contact:

David Carey Lazar Partners Ltd. (646) 239-6231 dcarey@lazarpartners.com

Electro-Optical Sciences Provides Melafind® Development Update

IRVINGTON, NY, June 14, 2007 — Electro-Optical Sciences, Inc. ("EOS") (NASDAQ: MELA), today provided an update on the development of MelaFind®, a non-invasive, point-of-care instrument to assist in the early diagnosis of melanoma, at the Needham & Co. Biotechnology and Medical Technology Conference in New York.

Joseph V. Gulfo, MD, MBA, President & CEO of EOS announced that accrual in the final blinded pivotal trial of MelaFind is over 20 percent complete. Four pivotal study sites are active, and additional pivotal trial sites will be activated in the upcoming weeks.

"We are very pleased with the operation of the MelaFind systems in the pivotal clinical trial, which validates the manufacturing development effort we have undertaken over the past 18 months," Gulfo said. "We expect additional clinical trial sites to come online soon and anticipate accrual to proceed well toward our goal of completing the study in the second half of 2007."

Dr. Gulfo also announced the company's intention to initiate discussions with potential commercialization partners. "This is an appropriate time for us to begin proactive partnering discussions in anticipation of a potential mid-2008 MelaFind launch, subject to U.S. regulatory clearance, having demonstrable progress in the execution of the pivotal trial and a solid manufacturing capability to support commercial roll-out."

About Electro-Optical Sciences

EOS is a medical device company focused on designing and developing a non-invasive, point-of-care instrument to assist in the early diagnosis of melanoma. MelaFind(R), EOS's flagship product, features a hand-held imaging device that

emits light of multiple wavelengths to capture images of suspicious pigmented skin lesions and extract data. Using sophisticated algorithms, the data are then analyzed against a proprietary database of melanomas and benign lesions in order to provide information to the physician and produce a recommendation of whether the lesion should be biopsied.

Melanoma is the deadliest of skin cancers, responsible for approximately 80% of all skin cancer deaths. Unless melanoma is detected early and excised with proper margins, the patient survival rate is poor, as there is currently no cure for advanced stage melanoma.

For more information on EOS, visit www.eosciences.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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