
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) January 9, 2008

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**

(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 January 9, 2008 the Registrant issued a press release announcing that the blinded pivotal trial of its MelaFind® product is over two-thirds complete. 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 January 9, 2008 titled “Electro-Optical Sciences Announces Melafind® Development Update”

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.

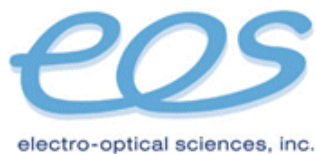
Electro-Optical Sciences, Inc.

Date: January 9, 2008

By: /s/ Joseph V. Gulfo
President & Chief Executive Officer
(Principal Executive Officer)

EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION
99.1	Press Release of the Registrant dated January 9, 2008 titled “Electro-Optical Sciences Announces Melafind® Development Update”



For Immediate Release

For further information contact:

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

Electro-Optical Sciences Announces MelaFind® Development Update

IRVINGTON, NY, January 9, 2008 — Electro-Optical Sciences, Inc. (“EOS”) (NASDAQ: MELA), today announced that the blinded pivotal trial of MelaFind®, a non-invasive, point-of-care instrument to assist in the early diagnosis of melanoma, is over two-thirds complete. Six pivotal trial study sites are currently active, and an additional seventh and final site is expected to be activated in the upcoming weeks.

“We are very pleased with our accomplishments in 2007 including progress in our pivotal trial and optimizing manufacturing methods to support commercial scale capability,” said Joseph V. Gulfo, MD, MBA, President & CEO of EOS. “Looking ahead, our near-term milestones include completion of the MelaFind® pivotal trial, analysis of trial results, and submission to the U.S. Food and Drug Administration of our Premarket Approval (PMA) filing which we have targeted for mid-2008.”

Dr. Gulfo will present today at the 10th Annual Needham Growth Stock Conference at 10:00 am ET. To access the live webcast of this presentation visit www.eosciences.com.

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®, 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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