Table of Contents

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) October 12, 2006

Electro-Optical Sciences, Inc.

(Exact name of registrant as specified in its charter)

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

3 West Main Street, Suite 201, Irvington, New York	**10533**
(Address of principal executive offices)	(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))

TABLE OF CONTENTS

Table of Contents

Item 8.01 — Other Events

On October 12, 2006 the Registrant issued a press release announcing that the United States Food and Drug Administration informed the Registrant that, when submitted, the MelaFind® Premarket Approval (PMA) application will receive expedited review processing.

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 October 12, 2006 titled “Electro-Optical Sciences’ MelaFind® Receives Expedited Review Status”

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.

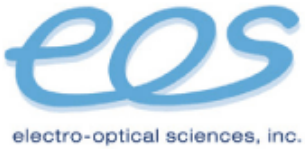
Date: October 12, 2006

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 October 12, 2006 titled “Electro-Optical Sciences’ MelaFind ® Receives Expedited Review Status”

Exhibit 99.1



For further information contact:

David Carey
Lazar Partners Ltd.
212-867-1762
dcarey@lazarpartners.com

Electro Optical Sciences' MelaFind® Receives Expedited Review Status

IRVINGTON, New York – **October 12, 2006** – Electro-Optical Sciences, Inc. ("EOS") [NASDAQ: MELA], a medical device company focused on the design and development of MelaFind®, a non-invasive, point-of-care instrument to assist in the early diagnosis of melanoma, today announced that the U.S. Food and Drug Administration (FDA) has informed EOS that, when submitted, the MelaFind Premarket Approval (PMA) application will receive expedited review processing. Expedited review means that upon filing a PMA with the FDA, it is placed at the beginning of the FDA's review queue and receives additional review resources.

Expedited review status was granted for the MelaFind PMA for the following reasons: (1) MelaFind meets the criteria of a device intended to affect a condition that is life-threatening and is irreversibly debilitating; (2) use of MelaFind has potential significant benefit to patients by reducing unnecessary biopsies for suspicious melanomas thus reducing patient anxiety as well as potential biopsy adverse events such as scarring, infection, and pain, and; (3) MelaFind is breakthrough technology in that it uses multiple wavelengths of light to produce multiwavelength reflected optical signals for lesion diagnosis.

"We are pleased that the FDA has granted Expedited review for MelaFind, which we believe represents a breakthrough technology for the early detection of melanoma. Under the auspices of the protocol agreement that we reached with the FDA, we look forward to initiating the MelaFind pivotal clinical trial later this year with the goal of submitting the Premarket Approval application to the FDA in 2007," said Joseph V. Gulfo, MD, MBA, EOS' president and chief executive officer.

According to the FDA Guidance Document for Expedited Review of PMA submissions, FDA takes most PMAs that are granted expedited review status to an advisory panel for review. While all device submissions granted expedited review status are subject to priority review, there is no assurance that the devices will receive FDA marketing authorization, or actually get to market, in a more timely manner when compared with submissions not granted expedited review status. Although FDA is committed to completing its evaluation of such submissions in the most expedient manner possible, incomplete submissions as well as unresolved scientific and regulatory issues can delay, or preclude, FDA clearance or approval.

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 multiple wavelengths of light to capture images of suspicious pigmented skin lesions and extract data. The data are then analyzed against EOS's proprietary database of melanomas and benign lesions using sophisticated algorithms 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.

# # #