UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933



MELA SCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware	13-3986004
(State or other jurisdiction of	(I.R.S. employer
incorporation or organization)	identification no.)
100 Lakeside Drive, Suite 100	
Horsham, Pennsylvania	19044
(Address of principal executive offices)	(Zip code)

Amended and Restated 2013 Stock Incentive Plan (Full title of the plan)

Michael R. Stewart
President and Chief Executive Officer
MELA Sciences, Inc.
100 Lakeside Drive, Suite 100
Horsham, Pennsylvania 19044
(215) 618-3200

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

John W. Kauffman, Esq. Duane Morris LLP 30 South 17th Street Philadelphia, PA 19103 (215) 979-1227 Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b--2 of the Exchange Act.

Large accelerated filer £ Non-accelerated filer £ Accelerated filer £ (Do not check if a smaller reporting company)

Smaller reporting company Q

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered (1)(2)	Proposed maximum offering price per share(3)	Proposed maximum aggregate offering price(3)	Amount of registration fee(3)
Common Stock, \$0.001 par value	9,750,000 shares	N/A	\$11,310,000	\$1,138.92

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional securities that may be offered or issued in connection with any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the outstanding number of shares of Common Stock.
- (2) Represents 9,750,000 additional shares of Common Stock authorized to be issued under the Registrant's Amended and Restated 2013 Stock Incentive Plan (the "2013 Plan"). The Registrant previously registered shares available for issuance under the 2013 Plan on registration statements on Form S-8 filed with the Securities and Exchange Commission on June 5, 2013 (Registration No. 333-189119).
- (3) Pursuant to Rule 457(h), the price of \$1.16 per share based on the average of the high and low sale prices for the Registrant's Common Stock as reported on the Nasdaq Capital Market on December 4, 2015.

INTRODUCTORY NOTE

This Registration Statement relates solely to the registration of additional securities of the same class as other securities for which a registration statement on this form relating to an employee benefit plan is effective. Pursuant to General Instruction E of Form S-8, this Registration Statement hereby incorporates by reference the contents of the registration statement on Form S-8 the Registrant filed on June 5, 2013 with respect to the Registrant's 2013 Stock Incentive Plan (Registration Nos. 333-189119.)

Item 8. Exhibits.	
Exhibit No. 5.1	Description of Exhibit Opinion of Duane Morris LLP
23.1	Consent of Independent Registered Public Accounting Firm
23.2	Consent of Duane Morris LLP (included in Exhibit 5.1)
24.1	Powers of Attorney (included in signature pages)

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Horsham, Pennsylvania on December 9, 2015.

MELA SCIENCES, INC.

By: /s/ Michael R. Stewart

Michael R. Stewart

President and Chief Executive Officer

Know all men by these presents, that each person whose signature appears below constitutes and appoints Michael R. Stewart and Christina L. Allgeier, and each or either of them, as such person's true and lawful attorneys-in-fact and agents, with full power of substitution, for such person, and in such person's name, place and stead, in any and all capacities to sign any or all amendments or post-effective amendments to this Registration Statement, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them or their substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, the registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Michael R. Stewart Michael R. Stewart	President and Chief Executive Officer (principal executive officer)	December 9, 2015
/s/ Christina L. Allgeier Christina L. Allgeier	Chief Financial Officer and Treasurer (principal financial and accounting officer)	December 9, 2015
/s/ R. Rox Anderson R. Rox Anderson	Director	December 9, 2015
/s/ Jeffrey F. O'Donnell, Sr. Jeffrey F. O'Donnell, Sr.	Director	December 9, 2015
/s/ Samuel E. Navarro Samuel E. Navarro	Director	December 9, 2015
/s/ David K. Stone David K. Stone	Director	December 9, 2015
/s/ Kathryn Swintek Kathryn Swintek	Director	December 9, 2015
/s/ LuAnn Via LuAnn Via	Director	December 9, 2015

EXHIBIT INDEX

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December 9, 2015

Board of Directors MELA Sciences, Inc. 100 Lakeside Drive, Suite 100 Horsham, Pennsylvania

Re: MELA Sciences, Inc. (the "Corporation")

Registration Statement on Form S-8 (the "Registration Statement") Amended and Restated 2013 Stock Incentive Plan (the "2013 Plan")

Ladies and Gentlemen:

We have acted as special counsel to the Corporation in connection with the preparation and filing with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"), of the Registration Statement relating to the offer and sale by the Corporation of up to 9,750,000 shares (the "Shares") of common stock, \$0.001 par value, of the Corporation, which will be issuable under the 2013 Plan.

As counsel to the Corporation in connection with the Registration Statement, we have examined the proceedings taken by the Corporation in connection with the adoption of the 2013 Plan and the authorization of the issuance of the Shares. For the purpose of the opinion rendered below, we have assumed that, in connection with the issuance of the Shares, the Corporation will receive consideration in an amount not less than the aggregate par value of the Shares covered by each such issuance.

For purposes of rendering this opinion, we have examined originals or copies (certified or otherwise identified to our satisfaction) of:

- a. the 2013 Plan;
- b. the Fifth Amended and Restated Certificate of Incorporation of the Corporation, as amended, certified by the Secretary of State of the State of Delaware;

DUANE MORRIS LLP

30 SOUTH 17TH STREET PHILADELPHIA, PA 19103-4196PHONE: 215.979.1000 FAX: 215.979.1020

- c. the Fourth Amended and Restated By-laws of the Corporation, certified by the Secretary of the Corporation;
- d. resolutions of the Board of Directors and stockholders, certified by the Secretary of the Corporation.

We have also examined such other certificates of public officials, such certificates of officers of the Corporation and such other records, agreements, documents and instruments as we have deemed relevant and necessary as a basis for the opinions hereafter set forth.

In such examination, we have assumed: (i) the genuineness of all signatures; (ii) the legal capacity of all natural persons; (iii) the authenticity of all documents submitted to us as originals; (iv) the conformity to original documents of all documents submitted to us as certified, conformed or other copies and the authenticity of the originals of such documents; and (v) that all records and other information made available to us by the Corporation on which we have relied are complete in all material respects. As to all questions of fact material to this opinion, we have relied solely upon the above-referenced certificates or comparable documents, have not performed or had performed any independent research of public records and have assumed that certificates of or other comparable documents from public officials dated prior to the date hereof remain accurate as of the date hereof.

Based on the foregoing, we are of the opinion that the issuance of the Shares pursuant to the terms of the 2013 Plan against receipt by the Corporation of the consideration for the Shares in accordance with the 2013 Plan will result in the Shares being legally issued, fully paid and non-assessable.

The foregoing opinion is limited to the laws of the State of Delaware, and we do not express any opinion herein concerning any other law.

The opinion expressed herein is rendered as of the date hereof and is based on existing law, which is subject to change. Where our opinion expressed herein refers to events to occur at a future date, we have assumed that there will have been no changes in the relevant law or facts between the date hereof and such future date. We do not undertake to advise you of any changes in the opinion expressed herein from matters that may hereafter arise or be brought to our attention or to revise or supplement such opinions should the present laws of any jurisdiction be changed by legislative action, judicial decision or otherwise.

Our opinion expressed herein is limited to the matters expressly stated herein and no opinion is implied or may be inferred beyond the matters expressly stated.

We hereby consent to the use of this letter as an exhibit to the Registration Statement and to any and all references to our firm in the Registration Statement. In giving
this consent, we do not admit that we are "experts" within the meaning of Section 11 of the Securities Act or within the category of persons whose consent is required under
Section 7 of the Securities Act.

Respectfully,

/s/ DUANE MORRIS LLP

DUANE MORRIS LLP
30 SOUTH 17TH STREET PHILADELPHIA, PA 19103-4196PHONE: 215.979.1000 FAX: 215.979.1020

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement of MELA Sciences, Inc. (the "Company") on Form S-8 (No. 333-xxxx), to be filed on or about December 9, 2015, of our report dated March 27, 2015, on our audits of the financial statements as of December 31, 2014 and 2013 and for each of the years in the two-year period ended December 31, 2014, which report was included in the Annual Report on Form 10-K filed March 30, 2015 and includes an explanatory paragraph about the existence of substantial doubt concerning the Company's ability to continue as a going concern.

/s/ EisnerAmper LLP

New York, New York December 9, 2015