

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

FORM S-3  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

\_\_\_\_\_  
MELA Sciences, Inc.

(Exact name of Registrant as specified in its charter)

\_\_\_\_\_  
Delaware

(State or other jurisdiction of  
incorporation or organization)

\_\_\_\_\_  
13-3986004

(I.R.S. Employer  
Identification No.)

\_\_\_\_\_  
MELA Sciences, Inc.  
100 Lakeside Drive, Suite 100  
Horsham, Pennsylvania 19044  
(215) 619-3200

(Address, including zip code, and telephone number, including area code,  
of Registrant's principal executive offices)

\_\_\_\_\_  
Michael R. Stewart  
President and Chief Executive Officer  
MELA Sciences, Inc.  
100 Lakeside Drive, Suite 100  
Horsham, Pennsylvania 19044  
(215) 619-3200

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

Copies to:

John W. Kauffman, Esq.  
Duane Morris LLP  
30 South 17th Street  
Philadelphia PA, 19103  
(215) 979-1227

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

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If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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 definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

#### CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered(1)	Proposed maximum offering price per unit(2)	Proposed maximum aggregate offering price	Amount of registration fee
Common stock, \$0.001 per share	2,992,259(3)	1.195(2) \$	3,575,749.51(2) \$	415.50

(1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement includes an indeterminate number of additional shares that may be offered and sold to prevent dilution resulting from stock splits, stock dividends or similar transactions.

(2) In accordance with Rule 457(c) under the Securities Act, the aggregate offering price of the common stock is estimated solely for the calculation of the registration fees due for this filing. This estimate was based on the average of the high and low sales price of our stock reported by The Nasdaq Capital Market on July 17, 2015.

(3) Represents shares of common stock that may be issued upon the conversion of convertible debentures with a principal amount of \$2,244,194.

**The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.**

**The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.**

**Subject to completion, dated July 22, 2015**

## **PROSPECTUS**

### **MELA SCIENCES, INC.**

#### **2,992,259 Shares of Common Stock**

This prospectus relates to the resale of up to 2,992,259 shares (the “Shares”) of our common stock by the selling stockholders named herein, or the Selling Stockholders. On June 22, 2015, we entered into a securities purchase agreement with the investors identified therein, or together, the Purchasers, pursuant to which we sold to the Purchasers an aggregate of \$32,500,000 of 2.25% senior secured convertible debentures, or the Debentures, convertible into 43,333,333 shares of common stock based upon an initial conversion price of \$0.75 per share, an aggregate of \$10,000,000 senior secured notes, or the Notes, and warrants, or the Warrants, to the Purchasers of the Notes, to purchase up to 3,000,000 shares of common stock at an exercise price of \$0.75 per share. Under the terms of the Debentures and the Warrants, the issuances of shares of the common stock upon conversion of the Debentures and upon exercise of the Warrants, including the Shares covered by this prospectus, are subject to stockholder approval of such issuances and an amendment to our certificate of incorporation to increase our authorized shares of common stock, or, as more fully described below, the Stockholder Approval Requirement. The Shares offered under this prospectus relate to up to 2,992,259 Shares issuable upon conversion of up to \$2,244,194 aggregate principal amount of Debentures at a conversion price of \$0.75 per Share, subject to the Stockholder Approval Requirement. To the extent that one or more Purchasers elects to convert their Debentures to acquire Shares, this prospectus may be used by the Selling Stockholders named under the section titled “Selling Stockholders” to resell their Shares. We are not selling any securities under this prospectus and will not receive any of the proceeds from the sale of Shares by any Selling Stockholder.

The Selling Stockholders may sell their respective Shares described in this prospectus in a number of different ways and at varying prices. We provide more information about how the Selling Stockholders may resell their respective Shares in the section titled “Plan of Distribution” beginning on page 14. Although we will pay the expenses incurred in registering the Shares, we will not be paying any underwriting discounts or commissions in connection with the resale of the Shares.

Our common stock is listed on the Nasdaq Capital Market under the symbol “MELA.” On July 17, 2015, the last reported sale price of our common stock, as reported on the Nasdaq Capital Market, was \$1.20 per share.

**Investing in our securities involves a high degree of risk. We refer you to “Risk Factors” on page 5, as well as the risks discussed under the caption “Risk Factors” in the documents we have filed and will subsequently file with the Securities and Exchange Commission, or the SEC.**

**Neither the SEC, any state securities commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.**

**This prospectus is dated \_\_\_\_\_, 2015.**

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In this prospectus, unless we indicate otherwise, “we,” “us,” “our,” “the Company” and “MELA” refer to MELA Sciences, Inc.

This prospectus contains references to our United States registered trademarks: MELA®, MELA Sciences®, MelaFind®, MELARecord®, VTRAC®, XTRAC® and XTRAC VELOCITY®. All other trademarks, tradenames and service marks appearing in this prospectus are the property of their respective owners.

You should rely only on the information contained in this prospectus. We have not authorized any other person to provide you with different information. This prospectus may only be used where it is legal to sell these securities. The information in this prospectus is accurate as of the date on the front cover. You should not assume that the information contained in this prospectus is accurate as of any other date.

This prospectus does not constitute an offer to sell, or a solicitation of an offer to purchase, the securities offered by this prospectus in any jurisdiction to or from any person to whom or from whom it is unlawful to make an offer or solicitation of an offer in that jurisdiction.

## PROSPECTUS SUMMARY

*This summary highlights certain information appearing elsewhere in this prospectus and in the documents we incorporate by reference. This summary is not complete and does not contain all the information that may be important to you in deciding whether to invest in our securities. After you read this summary, you should read and consider carefully the more detailed information and financial statements and related notes that we include in and/or incorporate by reference into this prospectus, especially the section entitled "Risk Factors" before making an investment decision. If you invest in our securities, you are assuming a high degree of risk.*

### **Our Company**

We are a medical technology company dedicated to developing and commercializing innovative products for the diagnosis and treatment of serious dermatological disorders. In June 2015 we completed the acquisition of the XTRAC excimer laser and the VTRAC excimer lamp from PhotoMedex, Inc., products approved for the treatment of psoriasis, vitiligo and other skin disorders for which there are no cures. The purchase price was \$42.5 million plus the assumption of certain business-related liabilities. These products generated \$30.6 million in revenues in 2014 and achieved year-over-year growth of 41% with a gross margin of 60.1%. We intend to use this business to finance our combined operations, to provide us the capability with which to continue to commercialize our legacy product, the MelaFind® system, or MelaFind, and to become a platform on which to transform MELA into a leading medical dermatology company.

XTRAC is an ultraviolet light excimer laser system utilized to treat psoriasis, vitiligo and other skin diseases. XTRAC received FDA clearance in 2000 and has since become a widely recognized treatment among dermatologists. The device delivers targeted ultraviolet B, or UVB, light to affected areas of skin. A series of treatments can result in clearing of psoriasis plaque or vitiligo repigmentation. As of March 31, 2015, there were 640 installed XTRAC systems in the United States, up from 527 at the end of March 2014. XTRAC is endorsed by the National Psoriasis Foundation, and its use for psoriasis is covered by nearly all major insurance companies, including Medicare. The VTRAC Excimer Lamp system, offered internationally, provides targeted therapeutic efficacy demonstrated by excimer technology with the simplicity of design and reliability of a lamp system. There are approximately 7.5 million people in the United States and up to 125 million people worldwide suffering from psoriasis, and 1% to 2% of the world's population suffers from vitiligo. In 2014, over 300,000 XTRAC laser treatments were performed on approximately 19,000 patients in the United States.

The financial results of the XTRAC and VTRAC businesses will be included in our results of operations beginning June 23, 2015. The assets of the businesses purchased and liabilities assumed will be consolidated as of June 23, 2015 and will be reported in our second quarter financial statements at June 30, 2015.

We anticipate that the acquisition of the XTRAC and VTRAC businesses will help to facilitate the commercialization of MelaFind, as well as the further design and development of this technology. MelaFind is a non-invasive, point-of-care (i.e., in the doctor's office) instrument to aid in the detection of melanoma. MelaFind provides information to assist in the management of the patient's disease, including information useful in the dermatologist's biopsy decision. We anticipate that it will require several years of continued effort before the success of our strategy to commercialize MelaFind can be assessed. We expect the insurance reimbursement process to take several years to complete.

To finance the purchase of the XTRAC and VTRAC businesses, we entered into a securities purchase agreement with institutional investors in connection with a private placement. We sold \$10.0 million aggregate principal amount of Notes bearing interest at 9% per year, with a maturity date of the earlier of 30 days after the Company obtains stockholder approval of stock issuances under the Debentures and the Warrants or November 30, 2015. The Purchasers of the Notes were issued Warrants to purchase an aggregate of 3.0 million shares of common stock, having an exercise price of \$0.75 per share. We also issued \$32.5 million aggregate principal amount of Debentures that, subject to certain ownership limitations and stockholder approval conditions, will be convertible into 43,333,333 shares of common stock at an initial conversion price of \$0.75 per share. The Debentures bear interest at the rate of 2.25% per year, and, unless previously converted, will mature on the five-year anniversary of the date of issuance. Our obligations under the Notes and Debentures are secured by a first priority lien on all of our assets. Under the terms of the Debentures and the Warrants, the issuances of shares of the common stock, including the Shares, upon conversion of the Debentures and upon exercise of the Warrants are subject to the Stockholder Approval Requirement. Effective upon the date the Stockholder Approval Requirement is satisfied, of which we provide no assurance, we have also agreed to reprice outstanding Warrants held by certain investors to reduce the exercise price to \$0.75 per share.

Historically, we have not generated significant revenues and as a result we have experienced recurring losses from operations. For the year ended December 31, 2014 and the three months ended March 31, 2015 our net losses amounted to approximately \$14.1 million and \$7.3 million, respectively. In their opinion issued in connection with the audit of our 2014 financial statements, our independent registered public accountants expressed substantial doubt about our ability to continue as a going concern. Following the completion of our acquisition of the XTRAC and VTRAC businesses, we believe that our cash as of March 31, 2015 of \$8.2 million combined with our anticipated revenues from the sale of our products will be sufficient to cover our operations for the foreseeable future.

### **Corporate Information**

We were incorporated in the State of New York in 1989 under the name Electro-Optical Sciences, Inc. and subsequently reincorporated under the laws of the State of Delaware in 1997. In April 2010, we changed our name to MELA Sciences, Inc. Our executive offices are located at 100 Lakeside Drive, Suite 100, Horsham, Pennsylvania 19044. Our telephone number is (215) 619-3200. Our website is [www.melasciences.com](http://www.melasciences.com). The information contained on our website is not a part of this prospectus and should not be relied upon. We have included our website address in this document as an inactive textual reference only.

## RISK FACTORS

*Investing in our common stock involves risk. Before deciding whether to invest in our common stock, you should consider carefully the risks and uncertainties described below. You should also consider the risks, uncertainties and assumptions discussed under the heading “Risk Factors” included in our most recent annual report on Form 10-K, as revised or supplemented by our most recent quarterly report on Form 10-Q and our current reports on Form 8-K, each of which is on file with the SEC and is incorporated herein by reference, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future including any applicable prospectus supplement. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our future results. If any of these risks actually occurs, our business, business prospects, financial condition or results of operations could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. Please also read carefully the section below titled “Special Note Regarding Forward-Looking Statements.”*

### **Risks Relating to the Private Placement Transaction**

***The Debentures and the Notes contain covenants that could limit our financing options and liquidity position, which would limit our ability to grow our business.***

The Debentures and the Notes contain certain covenants and representations limiting our ability to incur additional indebtedness, other than specified permitted indebtedness, and from entering into or creating any liens on our assets, other than certain permitted liens. Our obligations under the Notes and Debentures are secured by a first priority lien on all of our assets, except for a second lien on our intellectual property. These restrictions may limit our ability to obtain additional financing, withstand downturns in our business or take advantage of business opportunities. Moreover, additional debt financing we may seek may contain terms that include more restrictive covenants, may require repayment on an accelerated schedule or may impose other obligations that limit our ability to grow our business, acquire needed assets, or take other actions we might otherwise consider appropriate or desirable.

***Our failure to avoid events of default as defined in the Debentures and the Notes could require us to redeem such Debentures and Notes at a premium.***

The Debentures and the Notes provide that, upon the occurrence of an “Event of Default,” the interest rate on the Debentures and the Notes increases to 12%. Events of Default under the Debentures and the Notes include, among other things: (1) suspension or removal from the Nasdaq Capital Market or other permissible trading market for specified time periods; (2) failure to pay principal, interest, late charges and other amounts due under the Debentures or the Notes; (3) certain events of bankruptcy or insolvency of our company; (4) failure to make payment with respect to any indebtedness in excess of \$150,000 to any third party, or the occurrence of a default or event of default under certain agreements binding our company; and (5) our failure to satisfy the Stockholder Approval Requirement by November 30, 2015.

Our ability to avoid such Events of Default may be affected by changes in our business condition or results of our operations, or other events beyond our control. If we were to experience an Event of Default and the holders elected to have us redeem their Debentures and Notes, we may not have sufficient resources to do so, and we may have to seek additional debt or equity financing to cover the costs of redeeming the Debentures and the Notes. Any additional debt or equity financing that we may need may not be available on terms favorable to us, or at all.

***Issuance of shares of our common stock upon the exercise of options or warrants and upon conversion of convertible debentures will dilute the ownership interest of our existing stockholders and could adversely affect the market price of our common stock.***

The exercise of outstanding stock options and warrants and conversions of outstanding convertible debentures, including the Debentures and the Warrants, and the sales of stock issuable pursuant to them would reduce a stockholder's percentage voting and ownership interest. The exercise, or potential exercise, of these options and warrants and the conversion, or potential conversion, of the debentures could adversely affect the market price of our common stock and the terms on which we could obtain additional financing. The ownership interest of our existing stockholders may be further diluted through adjustments to certain outstanding Warrants and Debentures under the terms of their anti-dilution provisions.

***We may become obligated to pay liquidated damages if we fail to file, obtain effectiveness and maintain effectiveness of a registration statement under a registration rights agreement we entered into with the Selling Stockholders.***

We have granted to the Purchasers resale registration rights with respect to the shares of common stock underlying the Debentures and the Warrants pursuant to the terms of a registration rights agreement. In addition to the registration rights, the Selling Stockholders are entitled to receive liquidated damages upon the occurrence of a number of events relating to filing, becoming effective and maintaining an effective registration statement covering the shares underlying the Debentures and the Warrants. The liquidated damages will be payable upon the occurrence of each of those events and each monthly anniversary thereof until cured. The amount of liquidated damages payable is equal to 2.0% of the aggregate purchase price paid by each Purchaser, provided, however, the maximum aggregate liquidated damages payable to a Purchaser shall be 12% of the aggregate subscription amount paid by such Purchaser pursuant to the Purchase Agreement. The liquidated damages shall accrue interest at a rate of 12% per annum (or such lesser maximum amount that is permitted to be paid by applicable law), accruing on a daily basis for each event until such event is cured.



## Risks Relating to Our Common Stock

### *An active trading market for our common stock may not be sustained if our common stock is delisted from Nasdaq.*

Currently, our common stock trades on the Nasdaq Capital Market. If we fail to maintain compliance with any Nasdaq listing requirements, we could be delisted. If that were to occur, selling our common stock could be more difficult because smaller quantities of shares would likely be bought and sold, transactions could be delayed, and security analysts' coverage of us may be reduced. Furthermore, while we believe that our common stock would trade on the OTC Bulletin Board, we would lose various advantages attendant to listing on a national securities exchange, including but not limited to, eligibility to register the sale or resale of our shares on Form S-3 and the automatic exemption from registration under state securities laws for exchange listed securities, which could have a negative effect on our ability to raise funds.

### *Our stock price may be volatile, meaning purchasers of our common stock could incur substantial losses.*

Our stock price has been and is likely to continue to be volatile. The stock market in general and the market for medical technology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. The following factors, in addition to other risk factors described in this section and general market and economic conditions, may have a significant impact on the market price of our common stock:

- failure of any of our products to achieve or continue to have commercial success;
- the timing of regulatory approval for our future products;
- results of our research and development efforts and our clinical trials;
- the announcement of new products or product enhancements by us or our competitors;
- regulatory developments in the United States and foreign countries;
- our ability to manufacture our products to commercial standards;
- developments concerning our clinical collaborators, suppliers or marketing partners;
- changes in financial estimates or recommendations by securities analysts;
- public concern over our products;
- developments or disputes concerning patents or other intellectual property rights;
- product liability claims and litigation against us or our competitors;
- the departure of key personnel;
- the strength of our balance sheet;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in the structure of third-party reimbursement in the United States and other countries;
- changes in accounting principles or practices;
- general economic, industry and market conditions; and

- future sales of our common stock.

A decline in the market price of our common stock could cause you to lose some or all of your investment, limit your ability to sell your shares of stock and may adversely impact our ability to attract and retain employees and raise capital. In addition, stockholders have, and may in the future, initiate securities class action lawsuits if the market price of our stock drops significantly. Whether or not meritorious, litigation brought against us could result in substantial costs and could divert the time and attention of our management. Our insurance to cover claims of this sort may not be adequate.

***Our charter documents and Delaware law may inhibit a takeover that stockholders consider favorable and could also limit the market price of our stock.***

Provisions of our restated certificate of incorporation and bylaws and applicable provisions of Delaware law may make it more difficult for or prevent a third party from acquiring control of us without the approval of our board of directors. These provisions:

- limit who may call a special meeting of stockholders;
- establish advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted upon at stockholder meetings;
- do not permit cumulative voting in the election of our directors, which would otherwise permit less than a majority of stockholders to elect directors;
- prohibit stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of our stockholders; and
- provide our board of directors the ability to designate the terms of and issue a new series of preferred stock without stockholder approval.

In addition, Section 203 of the Delaware General Corporation Law generally limits our ability to engage in any business combination with certain persons who own 15% or more of our outstanding voting stock or any of our associates or affiliates who at any time in the past three years have owned 15% or more of our outstanding voting stock.

These provisions may have the effect of entrenching our management team and may deprive you of the opportunity to sell your shares to potential acquirers at a premium over prevailing prices. This potential inability to obtain a control premium could reduce the price of our common stock.

#### **SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS**

The statements contained or incorporated by reference in this prospectus that are not historical facts are forward-looking. These statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Such statements include, without limitation, our expectations regarding sales, earnings or other future financial performance and liquidity, conduct and completion of clinical trials, product introductions, entry into new geographic regions, and general optimism about future operations or operating results. Some of these statements can be identified by the use of forward-looking terminology such as “prospects,” “outlook,” “believes,” “estimates,” “intends,” “may,” “will,” “should,” “anticipates,” “expects” or “plans,” or the negative or other variation of these or similar words, or by discussion of trends and conditions, strategy or risks and uncertainties.

These forward-looking expectations are based on current assumptions within the bounds of management's knowledge of our business and operations and which management believes are reasonable. These assumptions are subject to risks and uncertainties, and actual results could differ materially from expectations because of issues and uncertainties such as those listed under the caption "Risk Factors" and elsewhere in this prospectus and in documents incorporated into this prospectus which, among others, should be considered in evaluating our future financial performance. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements in this prospectus. Readers are advised to consult any further disclosures we may make on related subjects in subsequent reports filed with the SEC.

Additional information on factors that may affect our business and financial results can be found in our filings with the SEC. All forward-looking statements should be considered in light of these risks and uncertainties. We assume no responsibility to update forward-looking statements made in this prospectus.

#### **USE OF PROCEEDS**

We will not receive any of the proceeds from the sale of the securities by the Selling Stockholders.

## SELLING STOCKHOLDERS

This prospectus relates to the possible resale by the Selling Stockholders of up to 2,992,259 Shares that we may issue upon conversion of a portion of the Debentures that we issued to the Selling Stockholders. We are filing the registration statement, of which this prospectus forms a part, and are registering the Shares pursuant to the provisions of the registration rights agreement (the "Registration Rights Agreement") we entered into with the Purchasers on June 22, 2015. Each Selling Stockholder may from time to time offer and sell pursuant to this prospectus any or all of the Shares that it acquires upon conversion of a portion of its respective Debentures.

The following table presents information regarding the Selling Stockholders, and the Shares that they may offer and sell from time to time under this prospectus. This table is prepared based on information supplied to us by the Selling Stockholders. As used in this prospectus, the term "Selling Stockholder" includes any donees, pledges, transferees or other successors in interest selling Shares received after the date of this prospectus from a Selling Stockholder as a gift, pledge, or other non-sale related transfer. The number of Shares in the column "Number of Shares Being Offered" represents all of the Shares that the Selling Stockholders may offer under this prospectus. The Selling Stockholders may sell some, all or none of its respective Shares. We do not know how long any selling stockholder will hold their respective Shares before selling them, and we currently have no agreements, arrangements or understandings with any Selling Stockholder regarding the sale of any of the Shares.

Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the SEC under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The percentage of shares of common stock beneficially owned after the offering shown in the table below is based on an aggregate of 8,996,686 shares of our common stock outstanding on June 30, 2015.

<u>Selling Stockholder</u>	<u>Shares Owned Prior to the Offering</u>	<u>Number of Shares Being Offered(1)</u>	<u>Shares Owned After the Offering</u>	<u>Percentage of Ownership After the Offering</u>
Broadfin Healthcare Master Fund, LTD(2)	383,615(3)	1,381,043	383,615(3)	9.99%
Sabby Healthcare Master Fund Ltd.(4)	225,128(5)	1,104,834	225,128(5)	9.99%
Sabby Volatility Warrant Master Fund Ltd.(6)	279,331(7)	460,347	279,331(7)	9.99%
Intracoastal Capital, LLC(8)	104,515(9)	46,035	58,480(9)	4.99%

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- (1) Assumes that \$2,244,194 aggregate principal of Debentures are converted to Shares, in full without regard to any conversion limitations contained therein; provided, however, that the issuance of the Shares is subject to the Stockholder Approval Requirement.
- (2) The business address of Broadfin Healthcare Master Fund, LTD ("Broadfin") is 20 Genesis Close Ansbacher House, Second Floor, P.O. Box 1344, Grand Cayman KY1-1108, Cayman Islands and the business address of each of Broadfin Capital, LLC and Kevin Kotler is 237 Park Avenue, 9th Floor, New York, NY 10017. Broadfin, Broadfin Capital, LLC and Kevin Kotler have shared voting and investment control of the securities held by Broadfin.

- (3) Broadfin holds the following securities: (i) 383,615 shares of common stock; (ii) warrants to purchase 1,559,454 shares of common stock at \$2.45 per share; (iii) warrants to purchase 1,267,849 shares of common stock at \$2.45 per share; (iv) warrants to purchase 432,433 shares of common stock at \$7.40 per share; and (v) 1,267,849 shares of common stock issuable upon conversion of \$3,252,033 principal amount of 4% convertible debentures issued in July 2014. In addition, subject to the Stockholder Approval Requirement, (a) 20,000,000 shares of common stock issuable upon conversion of \$15,000,000 principal amount of Debentures, including 1,381,043 Shares covered by this prospectus, and (b) Warrants to purchase 1,500,000 shares of common stock at an exercise price of \$.75 per share. The conversion of all debentures and the exercise of all warrants referenced in this footnote are subject to a 9.99% blocker. This information is based upon a Selling Stockholder Notice and Questionnaire provided by Broadfin on July 14, 2015.
- (4) The business address of Sabby Healthcare Master Fund Ltd. (“Sabby HMF”) is c/o Sabby Management LLC, 10 Mountainview Road, Suite 205, Upper Saddle River, NJ 07458. Sabby Management, LLC serves as the investment manager of Sabby HMF. Hal Mintz is the manager of Sabby Management, LLC and has voting and investment control of the securities held by Sabby HMF. Each of Sabby Management, LLC and Hal Mintz disclaims beneficial ownership over the securities beneficially owned by Sabby HMF except to the extent of their respective pecuniary interest therein.
- (5) Sabby HMF holds the following securities: (i) 225,128 shares of common stock; (ii) warrants to purchase 514,285 shares of common stock at \$8.50 per share; (iii) warrants to purchase 2,183,603 shares of common stock at \$2.45 per share; (iv) warrants to purchase 2,339,181 shares of common stock at \$2.45 per share; (v) warrants to purchase 648,648 shares of common stock at \$7.40 per share; (vi) 2,339,182 shares upon conversion of \$6,000,000 of Series B convertible preferred stock and (vii) 2,183,603 shares of common stock issuable upon conversion of \$5,600,941 principal amount of 4% convertible debentures issued in July 2014. In addition, subject to the Stockholder Approval Requirement, (a) 16,000,000 shares of common stock issuable upon conversion of \$12,000,000 principal amount of Debentures, including 1,104,834 Shares covered by this prospectus, and (b) warrants to purchase 1,500,000 shares of common stock at an exercise price of \$.75 per share. The conversion of all debentures and the exercise of all warrants referenced in this footnote are subject to a 9.99% blocker. This information is based upon a Selling Stockholder Notice and Questionnaire provided by Sabby HMF on July 16, 2015.
- (6) The business address of Sabby Volatility Warrant Master Fund Ltd. (“Sabby VWMF”) is c/o Sabby Management LLC, 10 Mountainview Road, Suite 205, Upper Saddle River, NJ 07458. Sabby Management, LLC serves as the investment manager of Sabby VWMF. Hal Mintz is the manager of Sabby Management, LLC and has voting and investment control of the securities held by Sabby VWMF. Each of Sabby Management, LLC and Hal Mintz disclaims beneficial ownership over the securities beneficially owned by Sabby VWMF except to the extent of their respective pecuniary interest therein.
- (7) Sabby VWMF holds the following securities: (i) 279,331 shares of common stock; (ii) warrants to purchase 171,428 shares of common stock at \$8.50 per share; (iii) warrants to purchase 837,048 shares of common stock at \$2.45 per share; (iv) warrants to purchase 896,686 shares of common stock at \$2.45 per share ; (v) warrants to purchase 248,648 shares of common stock at \$7.40 per share; (vi) 196,687 shares upon conversion of \$504,500 of Series B convertible preferred stock and (vii) 837,048 shares of common stock issuable upon conversion of \$2,147,028 principal amount of 4% convertible debentures issued in July 2014. In addition, subject to the Stockholder Approval Requirement, 6,666,667 shares of common stock issuable upon conversion of \$5,000,000 principal amount of Debentures, including 460,347 Shares covered by this prospectus. The conversion of all debentures and the exercise of all warrants referenced in this footnote are subject to a 9.99% blocker. This information is based upon a Selling Stockholder Notice and Questionnaire provided by Sabby VWMF on July 16, 2015.
- (8) The business address of Intracoastal Capital, LLC (“Intracoastal”) is 245 Palm Trail, Delray Beach, FL 33483. Mitchell P. Kopin and Daniel B Asher, each of whom are managers of Intracoastal, have shared voting control and investment discretion over these securities that are held by Intracoastal, which are described in footnote (9) below, and may be deemed to have beneficial ownership of such securities. Mr. Kopin is the president, the sole member and the sole member of the Board of Directors of Cranshire Capital Advisors, LLC (“CCA”), which is the investment manager of Cranshire Capital Master Fund, Ltd. (“Cranshire Master Fund”). As the owner of voting control over CCA, Mr. Kopin and CCA may be deemed to have beneficial ownership of the securities held by Cranshire Master Fund, which are described in footnote (9) below. Mr. Asher, who is a manager of Intracoastal, is also a control person of a broker-dealer. As a result of such common control, Intracoastal may be deemed to be an affiliate of a broker-dealer. Intracoastal acquired the shares of common stock being registered hereunder in the ordinary course of business, and at the time of the acquisition of the shares of common stock and warrants described herein, Intracoastal did not have any arrangements or understandings with any person to distribute such securities.

- (9) Intracoastal holds warrants to purchase 58,480 shares of common stock at \$2.45 per share. In addition, subject to the Stockholder Approval Requirement, Intracoastal holds 666,667 shares of common stock issuable upon conversion of \$500,000 principal amount of Debentures, including 46,035 Shares covered by this prospectus. Mr. Kopin may also be deemed to own the following securities held by Cranshire Master Fund: (i) warrants to purchase 331,394 shares of common stock at \$2.45 per share and (ii) 39,966 shares issuable upon conversion \$102,513 principal amount of 4% convertible debentures issued in July 2014. The conversion of all debentures and the exercise of all warrants referenced in this footnote are subject to a 4.99% blocker. This information is based upon a Selling Stockholder Notice and Questionnaire provided by Intracoastal on July 20, 2015.

### **Relationships with Selling Stockholders**

On October 29, 2013, we entered into a securities purchase agreement with certain funds managed by Sabby Management, LLC in connection with a \$6.0 million registered offering of our common stock, pursuant to which we issued 422,819 shares of our common stock, fully paid Series B prefunded warrants to purchase up to 434,325 shares of our common stock and additional warrants to purchase up to 685,715 shares of our common stock at an exercise price of \$8.50 per share. The offering closed on October 31, 2013.

On February 5, 2014, pursuant to a securities purchase agreement, dated as of January 31, 2014, with certain funds managed by Sabby Management, LLC and Broadfin Capital, LLC, we sold (i) an aggregate of 12,300 shares of Series A Convertible Preferred Stock, par value \$0.10 and a stated value of \$1,000 per share, convertible into approximately 1.5 million shares of common stock at an initial conversion price of \$8.40, and (ii) warrants to purchase up to approximately 1.3 million shares of common stock for aggregate gross proceeds of \$12.3 million. The warrants have an exercise price of \$7.40 per share, are immediately exercisable and have a term of five years.

As part of the February 2014 financing, we entered into an agreement granting to Broadfin the right to designate one director to our Board of Directors, so as long as Broadfin retained 30% of its investment in the Series A Preferred Stock (or the shares of common stock underlying the Preferred Stock) or held any warrants. Samuel Navarro, Managing Partner at Gravitas Healthcare, LLC, a firm which provides strategic advisory services to medical technology companies, was appointed to serve on our Board of Directors in March 2014 pursuant to this designation right. On March 31, 2014, Broadfin and we agreed to terminate this designation right. Notwithstanding this termination, our Board of Directors determined that having Mr. Navarro on the Board of Directors would be in our best interests and those of our stockholders, and therefore decided to include Mr. Navarro on the slate of directors to be nominated for election at the 2014 annual meeting of stockholders.

In July 2014, we raised additional net proceeds of approximately \$13.8 million through the issuance of 4% senior secured convertible debentures due July 2019 and 6.2 million warrants expiring five years from the date of issuance from certain funds managed by Sabby Management, LLC and Broadfin Capital, LLC and other investors. The debentures were convertible at any time into an aggregate of approximately 5.8 million shares of our common stock at a price of \$2.565 per share. Our obligations under the debentures are secured by a first priority lien on all of our intellectual property. In connection with the transaction, we also exchanged 12,300 shares of Series B Preferred Stock, convertible at any time into an aggregate of approximately 4.8 million shares of common stock at a conversion price of \$2.565 per share, for all of our outstanding Series A Preferred Stock that was issued in February 2014. We also issued warrants to purchase common stock at an exercise price of \$2.45 per share, with 4.8 million warrants expiring in eighteen months from the date of issuance. In September 2014, we amended the registration statement related to the Series A Preferred Stock to deregister those shares that would have been issuable upon conversion of the Series A Preferred Stock. We entered into a registration rights agreement with the investors pursuant to which we were obligated to file a registration statement to register the resale of the shares of common stock issuable upon conversion of the Series B Preferred Stock and Debentures and upon exercise of the warrants. That registration statement was declared effective in October 2014.

On June 22, 2015, we entered into a securities purchase agreement with the Purchasers in connection with a private placement. We sold \$10.0 million aggregate principal amount of Notes bearing interest at 9% per year, with a maturity date of the earlier of 30 days after the Company obtains stockholder approval of stock issuances under the Debentures and the Warrants or November 30, 2015. The Purchasers of the Notes were issued Warrants to purchase an aggregate of 3.0 million shares of common stock, having an exercise price of \$0.75 per share. We also issued \$32.5 million aggregate principal amount of Debentures that, subject to certain ownership limitations and stockholder approval conditions, will be convertible into 43,333,333 shares of common stock at an initial conversion price of \$0.75 per share. The Debentures bear interest at the rate of 2.25% per year, and, unless previously converted, will mature on the five-year anniversary of the date of issuance. Our obligations under the Notes and Debentures are secured by a first priority lien on all of our assets, except for a second lien on our intellectual property. Under the terms of the Debentures and the Warrants, the issuances of shares of the common stock, including the Shares, upon conversion of the Debentures and upon exercise of the Warrants are subject to the Stockholder Approval Requirement. Effective upon the date the Stockholder Approval Requirement is satisfied, of which we provide no assurance, we have also agreed to reprice outstanding Warrants held by certain investors to reduce the exercise price to \$0.75 per share.

In connection with this financing, we also granted to the Purchasers resale registration rights with respect to the shares of common stock underlying the Debentures and the Warrants pursuant to the terms of the Registration Rights Agreement. In addition to the registration rights, the Selling Stockholders are entitled to receive liquidated damages upon the occurrence of a number of events relating to filing, becoming effective and maintaining an effective registration statement covering the shares underlying the Debentures and the Warrants, including a failure to file a resale registration statement by no later than July 22, 2015, and a failure to have such resale registration statement declared effective by the SEC by no later than October 20, 2015. The liquidated damages will be payable upon the occurrence of each of those events and each monthly anniversary thereof until cured. The amount of liquidated damages payable is equal to 2.0% of the aggregate purchase price paid by each Purchaser, provided, however, the maximum aggregate liquidated damages payable to a Purchaser shall be 12% of the aggregate subscription amount paid by such Purchaser pursuant to the Purchase Agreement. The liquidated damages shall accrue interest at a rate of 12% per annum (or such lesser maximum amount that is permitted to be paid by applicable law), accruing on a daily basis for each event until such event is cured.

The Registration Rights Agreement requires us to file one or more registration statements for all of the securities that may be issued upon conversion of the Debentures and exercise of the Warrants issued to the Purchasers. Pursuant to the applicable transaction documents, however, no Purchaser may exercise its conversion/exercise rights for that number of shares of common stock which, together with all other shares owned by it and its affiliates would result in more than 9.99% of our issued and outstanding shares of common stock calculated on the basis of the then outstanding shares. Under the terms of the Debentures and the Warrants, the issuances of shares of the common stock upon conversion of the Debentures and upon exercise of the Warrants are subject to the Stockholder Approval Requirement.

The term "Stockholder Approval Requirement," as used in this prospectus, is subject to the condition that until the later of (i) six months after the initial issue date of the Debentures and the Warrants (December 22, 2015), or (ii) such later date that the Company no longer seeks stockholder approval at the request of the holders of the Debentures or the Warrants, the holders will have the right to convert the Debentures and exercise the Warrants so that in the aggregate the total number of shares of common stock of the Company issuable upon such conversions or exercises, in the aggregate amongst all holders, will not exceed 1,622,612 shares.

## PLAN OF DISTRIBUTION

Each Selling Stockholder of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the Nasdaq Stock Market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. A Selling Stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- in transactions through broker-dealers that agree with the Selling Stockholders to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The Selling Stockholders may also sell securities under Rule 144 under the Securities Act of 1933, as amended (the “Securities Act”), if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with the Financial Industry Regulatory Authority (“FINRA”) Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

In connection with the sale of the securities or interests therein, the Selling Stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Selling Stockholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The Selling Stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).



The Selling Stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each Selling Stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities. In no event shall any broker-dealer receive fees, commissions and markups which, in the aggregate, would exceed eight percent (8%).

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has agreed to indemnify the Selling Stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because Selling Stockholders may be deemed to be “underwriters” within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 thereunder. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. The Selling Stockholders have advised us that there is no underwriter or coordinating broker acting in connection with the proposed sale of the resale securities by the Selling Stockholders.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the Selling Stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the common stock by the Selling Stockholders or any other person. We will make copies of this prospectus available to the Selling Stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

#### **LEGAL MATTERS**

The validity of the Shares offered hereby will be passed upon by Duane Morris LLP, Philadelphia, Pennsylvania.

#### **EXPERTS**

The financial statements of MELA Sciences, Inc. as of December 31, 2014 and 2013, and the related statements of operations, stockholders’ equity, and cash flows for each of the years then ended have been audited by EisnerAmper LLP, independent registered public accounting firm, as stated in their report which is incorporated herein by reference, which report contained an explanatory paragraph about the existence of substantial doubt concerning the Company’s ability to continue as a going concern. Such financial statements have been incorporated herein by reference in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

The financial statements of XTRAC/VTRAC division (a carve-out of PhotoMedex, Inc.) as of December 31, 2014 and 2013, and for each of the two years then ended, incorporated in this prospectus by reference from our Current Report on Form 8-K dated June 23, 2015, have been audited by Fahn Kanne & Co. Grant Thornton Israel, independent certified public accountants, as stated in their report which is incorporated herein by reference. Such financial statements have been incorporated herein by reference in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

## WHERE YOU CAN FIND MORE INFORMATION

Federal securities laws require us to file information with the SEC concerning our business and operations. Accordingly, we file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's public reference rooms, including those located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on public reference rooms. Our SEC filings are also available to the public from the SEC's web site at <http://www.sec.gov>.

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities being offering under this prospectus. This prospectus, which is a part of that registration statement, does not include all the information contained in the registration statement and its exhibits. For further information with respect to our Company and the securities, you should consult the registration statement and its exhibits. Statements contained in this prospectus concerning the provisions of any documents are summaries of those documents, and we refer you to the document filed with the SEC for more information. The registration statement and any of its amendments, including exhibits filed as a part of the registration statement or an amendment to the registration statement, are available for inspection and copying as described above.

## INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" certain information we file with them in this prospectus. This means that we can disclose important information to you by referring you to the other information we have filed with the SEC. The information that we incorporate by reference is considered to be part of this prospectus. Information that we file later with the SEC will automatically update and supersede this information. Further, all filings we make under the Exchange Act prior to the termination of the offering shall be deemed to be incorporated by reference into this prospectus. The following documents filed by us with the SEC and any future filings under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (File No. 000-51481) made prior to the termination of this offering are incorporated by reference:

- our Annual Report on Form 10-K for the year ended December 31, 2014, filed with the SEC on March 30, 2015, as amended on Form 10-K/A for the year ended December 31, 2014, filed with the SEC on April 28, 2015;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, filed with the SEC on May 14, 2015;
- our Current Reports on Form 8-K filed on March 10, 2015, June 23, 2015 and July 21, 2015; and
- the description of our common stock contained in our registration statement on Form 8-A, filed with the SEC on August 8, 2005, and any amendments or reports filed for the purpose of updating such description.

In addition, all reports and other documents filed by us pursuant to the Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement shall be deemed to be incorporated by reference into this prospectus.

This prospectus may contain information that updates, modifies or is contrary to information in one or more of the documents incorporated by reference in this prospectus. Reports we file with the SEC after the date of this prospectus may also contain information that updates, modifies or is contrary to information in this prospectus or in documents incorporated by reference in this prospectus. Investors should review these reports as they may disclose a change in our business, prospectus, financial condition or other affairs after the date of this prospectus.

We will also provide paper copies of our filings free of charge upon written or oral request. You can request a free copy of the above filings or any filings subsequently incorporated by reference into this prospectus by writing or calling us at:

MELA Sciences, Inc.  
100 Lakeside Drive, Suite 100  
Horsham, Pennsylvania 19044  
Attention: Michael R. Stewart  
(215) 619-3200

**WE HAVE NOT AUTHORIZED ANY DEALER, SALES PERSON OR OTHER PERSON TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATIONS OTHER THAN THOSE CONTAINED IN THIS PROSPECTUS. THIS PROSPECTUS IS NOT AN OFFER OF THESE SECURITIES IN ANY STATE WHERE AN OFFER IS NOT PERMITTED. THE INFORMATION IN THIS PROSPECTUS IS CURRENT AS OF THE DATE OF THIS PROSPECTUS AND YOU SHOULD NOT ASSUME THAT THIS PROSPECTUS IS ACCURATE AS OF ANY OTHER DATE.**

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2,992,259 Shares



Common Stock

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PROSPECTUS

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, 2015

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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the costs and expenses payable by MELA in connection with the issuance and distribution of the shares of common stock being registered. The selling stockholder will not bear any portion of such expenses. All such expenses are estimated except for the SEC registration fee.

SEC registration fee	\$	415.50
Legal fees and expenses(1)		25,000.00
Accounting fees and expenses(1)		15,000.00
Printing and miscellaneous expenses(1)		<u>1,584.50</u>
TOTAL(1)	\$	<u>42,000.00</u>

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(1) Estimated.

Item 15. Indemnification of Directors and Officers.

Our amended and restated certificate of incorporation includes provisions that eliminate, to the fullest extent permitted by the Delaware General Corporation Law (the "DGCL"), the personal liability of our directors to us or our stockholders for monetary damages for breach of fiduciary duty as a director. Our amended and restated bylaws require us to indemnify our directors and officers to the fullest extent permitted by the DGCL. Pursuant to these provisions, we have entered into indemnity agreements with our directors and officers.

Pursuant to Section 145 of the DGCL, a corporation generally has the power to indemnify its present and former directors, officers, employees and agents against expenses incurred by them in connection with any suit to which they are, or are threatened to be made, a party by reason of their serving in such positions so long as they acted in good faith and in a manner that they reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action, had no reasonable cause to believe their conduct was unlawful.

These provisions do not eliminate the duty of care, and in appropriate circumstances, equitable remedies, such as injunctive or other forms of non-monetary relief, may remain available under Delaware law. Each director will continue to be subject to liability for breach of the director's duty of loyalty to us or our stockholders, for acts or omissions not in good faith or involving intentional misconduct or knowing violations of law, for unlawful payments of dividends or unlawful stock repurchases or redemptions under Section 174 of the DGCL or for any transaction from which the director derived an improper personal benefit. These provisions also generally do not affect a director's responsibilities under any other laws, such as the federal securities laws.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable.

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Item 16.    Exhibits.

<u>No.</u>	<u>Description</u>
3.1	Fifth Amended and Restated Certificate of Incorporation of the Company. (Incorporated by reference to our Registration Statement on Form S-3 (File No. 333-167113), as filed on May 26, 2010.)
3.2	Certificate of Amendment to Fifth Amended and Restated Certificate of Incorporation of the Company (Incorporated by reference to our Registration Statement on Form S-3 (File No. 333-189118), as filed on June 5, 2013.)
3.3	Certificate of Amendment to Fifth Amended and Restated Certificate of Incorporation of the Company. (Incorporated by reference to Exhibit 3.1 contained in our Current Report on Form 8-K (File No. 000-51481), filed on July 10, 2014.)
3.5	Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock. (Incorporated by reference to Exhibit 3.1 contained in our Current Report on Form 8-K (File No. 000-51481), filed on July 24, 2014.)
3.6	Fourth Amended and Restated By-laws of Company. (Incorporated by reference to Exhibit 3.2 contained in our Current Report on Form 8-K (File No. 000-51481), as filed on July 21, 2015.)
4.1	Form of 2015 Warrant to purchase common stock issued to Purchasers. Incorporated by reference to Exhibit 4.1 contained in our Current Report on Form 8-K (File No. 000-51481), filed on June 23, 2015.)
4.2	Form of Senior Secured Convertible Debenture issued to Purchasers. (Incorporated by reference to Exhibit 4.2 contained in our Current Report on Form 8-K (File No. 000-51481), filed on June 23, 2015.)
5.1	Opinion of Duane Morris LLP (to be filed by amendment)
10.1	Form of Securities Purchase Agreement. (Incorporated by reference to Exhibit 10.1 contained in our Current Report on Form 8-K (File No. 000-51481), filed on June 23, 2015.)
10.2	Form of Registration Rights Agreement. (Incorporated by reference to Exhibit 10.2 contained in our Current Report on Form 8-K (File No. 000-51481), filed on June 23, 2015.)
10.3	Form of Security Agreement. (Incorporated by reference to Exhibit 10.3 contained in our Current Report on Form 8-K (File No. 000-51481), filed on June 23, 2015.)
23.1	Consent of Duane Morris LLP (to be included in Exhibit 5.1, to be filed by amendment)
23.2	Consent of Independent Registered Public Accounting Firm (filed herewith)
23.3	Consent of Independent Certified Public Accountants (filed herewith)
24.1	Powers of Attorney (included in signature pages)

Item 17.    Undertakings.

We hereby undertake:

(1)    To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i)    to include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii)    to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii)    to include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

provided, however, that paragraphs (i), (ii) and (iii) above do not apply if the information required to be included in a post-effective amendment by those clauses is contained in reports filed with or furnished to the SEC by us pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2)    That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3)    To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4)    That, for the purpose of determining liability under the Securities Act, to any purchaser:

(i)    If we are relying on Rule 430B:

(A)    Each prospectus filed by us pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B)    Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which the prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(ii) If we are subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) That, for the purpose of determining our liability under the Securities Act, to any purchaser in the initial distribution of the securities, we undertake that in a primary offering of our securities pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, we will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of ours relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of us or used or referred to by us;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about us or our securities provided by or on behalf of us; and

(iv) Any other communication that is an offer in the offering made by us to the purchaser.

(6) That, for purposes of determining any liability under the Securities Act, each filing of our annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons pursuant to the provisions described in Item 15 above, or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities, other than the payment by us of expenses incurred or paid by a director, officer or controlling person of us in the successful defense of any action, suit or proceeding, is asserted by such director, officer or controlling person in connection with the securities being registered, that we will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.



## SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Horsham, Commonwealth of Pennsylvania, on July 22, 2015.

MELA SCIENCES, INC.

By:           /s/ Michael R. Stewart            
Michael R. Stewart  
President and Chief Executive Officer

Know all men by these present, that each person whose signature appears below constitutes and appoints Michael R. Stewart and Robert W. Cook, 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, the registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Michael R. Stewart</u> Michael R. Stewart	President and Chief Executive Officer (principal executive officer)	July 22, 2015
<u>/s/ Robert W. Cook</u> Robert W. Cook	Chief Financial Officer, Secretary and Treasurer (principal financial and accounting officer)	July 22, 2015
<u>/s/ Jeffrey O'Donnell</u> Jeffrey O'Donnell	Director	July 22, 2015
<u>/s/ Samuel E. Navarro</u> Samuel E. Navarro	Director	July 22, 2015
<u>/s/ David K. Stone</u> David K. Stone	Director	July 22, 2015
<u>/s/ Kathryn Swintek</u> Kathryn Swintek	Director	July 22, 2015
<u>/s/ LuAnn Via</u> LuAnn Via	Director	July 22, 2015

**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-3, to be filed on or about July 22, 2015, of our report dated March 27, 2015, on our audits of the financial statements as of December 31, 2013 and 2014 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. We also consent to the reference to our firm under the caption "Experts" in the Registration Statement on Form S-3.

/s/ EisnerAmper LLP

New York, New York  
July 22, 2015

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**CONSENT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS**

We have issued our report dated May 27, 2015 with respect to the financial statements of XTRAC/VTRAC division (a carve-out of PhotoMedex, Inc.) included in the Current Report on Form 8-K dated June 23, 2015 of MELA Sciences, Inc., which is incorporated by reference in this Registration Statement. We consent to the incorporation by reference of the aforementioned report in this Registration Statement, and to the use of our name as it appears under the caption "Experts."

/s/ **FAHN KANNE & CO. GRANT THORNTON ISRAEL**  
Tel Aviv, Israel  
July 22, 2015

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