As filed with the Securities and Exchange Commission on June 23, 2015

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

POST-EFFECTIVE AMENDMENT NO. 2 TO FORM S-1 ON FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933 Lion Biotechnologies, Inc.

(Exact name of registrant as specified in its charter)

Nevada (State or other jurisdiction of incorporation or organization) 2834 (Primary Standard Industrial Classification Code Number) 75-3254381 (I.R.S. Employer Identification No.)

21900 Burbank Boulevard, Third Floor Woodland Hills, California 91367 (818) 992-3126 (Address, including zip code and telephone number, including area code, of registrant's principal executive offices) Dr. Elma Hawkins Lion Biotechnologies, Inc. 21900 Burbank Boulevard, Third Floor Woodland Hills, California 91367 (818) 992-3126 (Name, address, including zip code and telephone number, including area code, of agent for service)

Copies to: Istvan Benko Dietrick Miller TroyGould PC 1801 Century Park East, 16th Floor Los Angeles, California 90067

Approximate date of commencement of proposed sale to 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, 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 of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. b

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) 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 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. \Box

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

Large accelerated filer \Box

Accelerated filer þ

Non-accelerated filer \Box (Do not check if a smaller reporting company)

Smaller reporting company \Box

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 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

Explanatory Note

On December 4, 2013, Lion Biotechnologies, Inc. (the "Company") filed a registration statement with the Securities and Exchange Commission (the "Commission") on Form S-1 (Registration No. 333-192649). The Registration Statement was declared effective on January 30, 2014 and thereafter updated and amended on September 11, 2014 (as so amended, the "Registration Statement" or the "Form S-1").

This Post-Effective Amendment No. 2 to the Registration Statement is being filed by the Company to include the information contained in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2014 that was filed with the Commission on March 17, 2015 and certain of the Company's current reports on Form 8-K that have been filed with the Commission since December 31, 2014, as well as to convert the Form S-1 into a registration statement on Form S-3. This Post-Effective Amendment No. 2 to the Form S-1 contains an updated prospectus relating to the offering and sale of the shares that were registered for resale on the Form S-1, including the exclusion from the prospectus of shares of common stock that are no longer required to be registered.

All applicable registration fees were paid at the time of the original filing of such Registration Statement on December 4, 2013.

The information contained in this prospectus is not complete and may be changed. The selling stockholders named in this prospectus may not sell these securities until the registration statement filed with the Commission is effective. This prospectus is not an offer to sell securities, and the selling stockholders are not soliciting offers to buy these securities, in any state where the offer or sale is not permitted.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with 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 June 23, 2015

PROSPECTUS



LION BIOTECHNOLOGIES, INC.

16,385,975 Shares of Common Stock Offered By Selling Stockholders

This prospectus relates to the sale of up to 4,539,856 shares of our currently outstanding shares of common stock that are owned by some of our stockholders, 1,847,000 shares of our common stock issuable upon the conversion of currently outstanding shares of our Series A Convertible Preferred Stock that are owned by some of our stockholders, and 9,999,119 shares issuable upon the exercise of currently outstanding common stock purchase warrants held by some of the warrant holders. All of the shares included in this prospectus were sold on November 5, 2013 in a \$23.3 million private placement of our securities to various institutional and individual accredited investors. For a list of the selling stockholders, please see "Selling Stockholders." The selling stockholders may sell these shares from time to time in the principal market on which our common stock is traded at the prevailing market price or in negotiated transactions. The selling stockholders may be deemed underwriters within the meaning of the Securities Act of 1933, as amended, of the shares of common stock that they are offering. We will pay the expenses of registering these shares. We will not receive proceeds from the sale of our shares by the selling stockholders that are covered by this prospectus. However, we will receive payment in cash upon any exercise of the warrants, and any proceeds we receive will be used for general corporate purposes and for working capital.

The securities are being registered to permit the selling stockholders to sell the securities from time to time in the public market. The selling stockholders may sell the securities through ordinary brokerage transactions or through any other means described in the section titled "Plan of Distribution." We do not know when or in what amount the selling stockholders may offer the securities for sale. The selling stockholders may sell some, all or none of the securities offered by this prospectus.

Our common stock is traded on The NASDAQ Global Market under the symbol "LBIO." On June 22, 2015, the last reported sale price of our common stock on The NASDAQ Global Market was \$9.50 per share.

You should understand the risks associated with investing in our common stock. Before making an investment, read the "Risk Factors," which begin on page 4 of this prospectus.

We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus and any amendments or supplements carefully before you make your investment decision.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is _____, 2015

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed on behalf of the selling stockholders with the Securities and Exchange Commission, or the SEC, to permit the selling stockholders to sell the shares described in this prospectus in one or more transactions. The selling stockholders and the plan of distribution of the shares being offered by them are described in this prospectus under the headings "Selling Stockholders" and "Plan of Distribution."

As permitted by the rules and regulations of the SEC, the registration statement filed by us includes additional information not contained in this prospectus. You may read the registration statement and the other reports we file with the SEC at the SEC's web site or its offices described below under the heading "Where You Can Find More Information."

You should rely only on the information that is contained in this prospectus or that is incorporated by reference into this prospectus. We and the selling stockholders have not authorized anyone to provide you with information that is in addition to or different from that contained in, or incorporated by reference into, this prospectus. If anyone provides you with different or inconsistent information, you should not rely on it.

The shares of common stock offered by this prospectus are not being offered in any jurisdiction where the offer or sale of such common stock is not permitted. You should not assume that the information contained in, or incorporated by reference into, this prospectus is accurate as of any date other than the date of this prospectus or, in the case of the documents incorporated by reference, the date of such documents, regardless of the date of delivery of this prospectus or any sale of the common stock offered by this prospectus. Our business, financial condition, liquidity, results of operations and prospects may have changed since those dates.

Unless the context otherwise requires, references in this prospectus to "the company," "we," "us" and "our" refer to Lion Biotechnologies, Inc.

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PROSPECTUS SUMMARY

This summary highlights selected information appearing elsewhere in this prospectus or incorporated by reference in this prospectus and does not contain all of the information that may be important to you or that you should consider before investing in our common stock. This prospectus includes or incorporates by reference information about the common stock being offered by the selling stockholders, as well as information regarding our business and industry and detailed financial data. Before making an investment decision, you should read this prospectus and the information incorporated by reference herein in their entirety, including "Risk Factors" beginning on page 4 of this prospectus.

All references to the number of shares issued or outstanding in this prospectus, and all per share and other similar data, reflect a 1-for-100 reverse stock split that we effected on September 26, 2013.

About Lion Biotechnologies

Lion Biotechnologies, Inc. ("we," "us," "our," "Lion Biotechnologies" or the "company") is a clinical-stage biopharmaceutical company focused on the development and commercialization of novel cancer immunotherapy products designed to harness the power of a patient's own immune system to eradicate cancer cells. Our lead program is an adoptive cell therapy utilizing tumor-infiltrating lymphocytes (TIL), which are T cells derived from patients' tumors, for the treatment of metastatic melanoma. TIL therapy is being developed in collaboration with Steven Rosenberg, M.D., Ph.D., Chief of Surgery Branch at the National Cancer Institute (NCI). Dr. Rosenberg is a recognized pioneer in immuno-oncology and adoptive cell therapy.

A patient's immune system, particularly their TIL, plays an important role in identifying and killing cancer cells. TIL consist of a heterogeneous population of T cells that can recognize a wide variety of cancer-specific mutations and can overcome tumor escape mechanisms. TIL therapy involves growing a patient's TIL in special culture conditions outside the patient's body, or ex vivo, and then infusing the T cells back into the patient in combination with interleukin-2 (IL-2). By taking TIL away from the immune-suppressive tumor microenvironment in the patient, the T cells can rapidly proliferate. Billions of TIL, when infused back into the patient, are more able to search out and eradicate the tumor.

We have a Cooperative Research and Development Agreement (CRADA) with the U.S. Department of Health and Human Services, as represented by the NCI, through which we are funding the research and development of TIL-based product candidates for the treatment of advanced solid tumors. Pursuant to the CRADA, we fund NCI clinical trials with TIL therapy that are being conducted in collaboration with Dr. Rosenberg. In a 101-patient, Phase 2 clinical trial conducted at the NCI, about half of the patients with relapsed/refractory metastatic melanoma treated with TIL therapy achieved an objective response. An objective response occurs when there is a complete remission or a partial remission of the tumor. A complete remission requires a complete disappearance of all detectable evidence of disease, and a partial remission typically requires at least approximately 50% regression of measurable disease without new sites of disease. As of November 2014, 14 out of the 101 patients had experienced a complete remission and continue to remain in remission. Severe and life threatening toxicities occurred mostly in the first week after cell infusion and generally resolved within a few weeks. We are also funding an NCI-sponsored, Phase 2 clinical trial of a TIL therapy utilizing enriched tumor-reactive T cells to treat patients with metastatic melanoma. In addition to melanoma, we expect to fund multiple NCI-sponsored clinical trials involving TIL therapy to treat a variety of solid tumors, including, cervical, head and neck, bladder, breast, and lung cancers. Dr. Rosenberg has filed or intends to file investigational new drug applications (INDs) with the FDA in order to conduct these trials. Depending on the availability of funding, our evaluation of commercial viability of some of these product candidates and other factors, our goal is to submit separate INDs to conduct our own clinical trials relating to some or all of these product candidates. The CRADA provides us with an option to negotiate commercialization licenses from the N

We have a worldwide, exclusive patent license from the National Institutes of Health (NIH) for intellectual property to develop, manufacture and commercialize TIL therapy for the treatment of melanoma, and a worldwide, non-exclusive license to this intellectual property for the treatment of ovarian cancer, breast cancer, and colorectal cancer. We also have an exclusive license from the NIH for intellectual property relating to a TIL-based therapy utilizing enriched tumor reactive T cells patients with metastatic melanoma.



In January 2015 our IND for a company-sponsored, Phase 2 clinical trial designed to establish the feasibility of our lead product candidate, LN-144, and assess its overall safety in patients with metastatic melanoma was allowed by the U.S. Food and Drug Administration (FDA). We expect to initiate this trial later this year. The trial's primary objective is to determine the safety and feasibility of the administration of TIL therapy. Our company-sponsored, Phase 2 trial will use a protocol that is nearly identical to one which is currently being used at the NCI to treat patients. However, we believe we have streamlined and improved the NCI's manufacturing process of TIL production for our LN-144 product candidate. Assuming that the trial results meet our expectations, we plan to initiate a pivotal trial for regulatory approval for LN-144 in 2016. If the data from this pivotal trial are compelling, we intend to discuss with the FDA the filing of a Biologics License Application (BLA) for accelerated approval of LN-144 as a therapy for refractory metastatic melanoma.

On June 9, 2015, the FDA granted orphan drug designation for LN-144 for the treatment of stage 2b to stage 4 malignant melanoma in the United States. This designation may provide us with seven years of market exclusivity in the United States, subject to certain limited exceptions. However, the orphan drug designation does not convey any advantage in or shorten the duration of the regulatory review or approval process.

We are pursuing relapsed/refractory metastatic melanoma as our first target indication because of the promising initial NCI results and the commercial opportunity inherent in the significant unmet need of this patient population. Melanoma is a common type of skin cancer, accounting for approximately 76,000 patients diagnosed and 9,700 deaths each year in the United States according to the NCI. About 4% of patients with melanoma have metastatic disease. Patients with relapsed/refractory metastatic melanoma following treatment under the current standards of care have a particularly dire prognosis with very few curative treatment options.

In addition to the research and development being conducted under the CRADA, in 2014 we established our own internal research and development capabilities in Tampa, Florida, near the H. Lee Moffitt Cancer & Research Institute (Moffitt) on the campus of the University of South Florida, to explore the next-generation of TIL technology and new product candidates, as well as generate new intellectual property.

Company History

We filed our original Articles of Incorporation with the Secretary of State of Nevada on September 17, 2007. Until March 2010, we were an inactive company known as Freight Management Corp. On March 15, 2010, we changed our name to Genesis Biopharma, Inc., and in 2011 we commenced our current business. In May 2013 we completed a restructuring of our outstanding debt and equity securities (the "Restructuring") and raised \$1.25 million through the sale of our common stock. As part of the Restructuring, we converted \$7.2 million of senior secured promissory notes, \$1.7 million of bridge promissory notes, and \$0.3 million in other outstanding debt into shares of common stock at a conversion price of \$1.00 per share. In connection with, and shortly after the Restructuring, we replaced our Chief Executive Officer and most of our directors. On July 24, 2013, we acquired Lion Biotechnologies, Inc., a Delaware corporation. On September 26, 2013, we amended and restated our Articles of Incorporation to, among other things, change our name to Lion Biotechnologies, Inc., effect a 1-for-100 reverse stock split (pro-rata reduction of outstanding shares) of our common stock, increase (after the reverse stock split) the number of our authorized number of shares of common stock to 150,000,000 shares, and authorize the issuance of 50,000,000 shares of "blank check" preferred stock, \$0.001 par value per share.

Our principal executive offices are currently located at 21900 Burbank Boulevard, 3rd Floor, Woodland Hills, California 91367, and our telephone number at that address is (818) 992-3126. Our website is located at www.lionbio.com. Information on our website is not, and should not be considered, part of this prospectus.

The Private Placement--Selling Stockholders' Securities

On November 5, 2013, we sold \$23.3 million of our securities to various institutional and individual accredited investors in a private placement (the "Private Placement"). In the Private Placement, we issued (i) 3,145,300 shares of our common stock, (ii) 17,000 shares of our new Series A Convertible Preferred Stock (the "Series A Preferred"), and (iii) warrants ("Warrants") to purchase a total of 11,645,300 shares of common stock. The purchasers of common stock received warrants to purchase the same number of shares of common stock as such investors purchased in the Private Placement, and the investors who purchased shares of Series A Preferred received warrants to purchase the number of shares of common stock into which the Series A Preferred is initially convertible. The purchase price of each common stock/Warrant unit was \$2.00, and the purchase price of each Series A Preferred/Warrants unit was \$1,000. The Series A Preferred is convertible into shares of common stock at any initial conversion price of \$2.00 per share. We received net proceeds of approximately \$21.8 million from the Private Placement, after paying placement agent fees and estimated offering expenses, which we will use to fund our research and development and for working capital purposes.

Since the completion of the Private Placement, investors in the Private Placement have exercised Warrants for the purchase of an aggregate of 2,100,550 shares of our common stock (with an aggregate exercise price of \$5,251,375) and have converted 13,306 shares of the Series A Preferred into 6,653,000 shares of common stock.

Roth Capital Partners, LLC acted as the lead placement agent for the Private Placement. As compensation for the services of Roth Capital Partners, LLC and the other participating placement agents, we paid a total of approximately \$1,454,000 of placement agent fees, and issued to the placement agents common stock purchase warrants to purchase up to 726,856 shares of our common stock with the same initial exercise price and terms as the Warrants. The shares underlying the warrants that we issued to the placement agents are included in this prospectus. Since the issuance of these warrants, the placement agents have exercised warrants for the purchase of an aggregate of 272,487 shares of our common stock (with an aggregate exercise price of \$681,218).

We filed the registration statement of which this prospectus is a part to fulfill certain of our contractual obligations to the investors in the Private Placement under a registration rights agreement we entered into pursuant to the Securities Purchase Agreement.

The Offering

Common Stock offered by the selling stockholders	16,385,975 shares (1)
Common Stock offered by us	None
Common Stock currently outstanding	45,034,495 shares(2)
Common Stock to be outstanding after the offering	56,880,614 shares (1)(3)
NASDAQ Global Market listing	Our common stock is listed on The NASDAQ Global Market under the symbol "LBIO."
Use of proceeds	We will not receive any proceeds from the sale of the common stock offered hereby. However, to date we have received \$5,932,593 of proceeds from the exercise of the warrants sold in the Private Placement and issued to the placement agents, and we may receive up to an additional maximum of approximately \$24,997,798 of gross proceeds from the exercise of warrants by the remaining selling stockholders. All proceeds we receive from the exercise of Warrants have been used, and are expected to be used in the future for general working capital. No assurances can be given, however, that any portion or all of the remaining Warrants will ever be exercised.
Risk Factors	An investment in our common stock involves significant risks. See "Risk Factors" beginning on page 4, below.

⁽¹⁾ Represents the number of shares of common stock that may hereafter be sold under this prospectus. Includes shares of common stock issued to investors in the Private Placement, shares of common stock currently issuable upon the conversion of the Series A Preferred, and shares of common stock issuable upon the exercise of the warrants issued in the Private Placement to investors and to the placement agents.

- (2) As of June 19, 2015, and does not include (i) 12,295,246 shares of common stock issuable upon the exercise of outstanding options (with exercise prices ranging from \$3.125 to \$119.00 per share) and warrants (with exercise prices ranging from \$2.50 to \$126.00), or (ii) the 1,847,000 shares of common stock issuable upon the conversion of all of the Series A Preferred and the exercise of all of the remaining outstanding warrants issued in the Private Placement. Includes 782,500 shares of outstanding restricted stock held by certain of our executive officers as of June 22, 2015, which shares are subject to forfeiture if the executives terminate their employment with us before all such shares fully vest in 2017.
- (3) Assumes the conversion of all of the remaining outstanding shares of Series A Preferred and the exercise of all of the remaining warrants by the selling stockholders at an exercise price of \$2.50, but does not include the 2,296,127 shares of common stock issuable upon the exercise of outstanding options and other warrants.

RISK FACTORS

Investing in our common stock involves certain risks. Before you decide whether to purchase any shares of our common stock, in addition to the other information in this prospectus, you should carefully consider the risks described under the heading "Risk Factors" in our most recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q, which are incorporated by reference into this prospectus, as such risk factors may be updated from time to time by our future filings with the SEC. If one or more of these risks materializes, our business, financial condition and results of operations may be adversely affected. In that event, the value of our common stock could decline. The risks that are described in this prospectus or in any document that is incorporated by reference into this prospectus are not the only risks that we face. Additional risks not presently known to us or that we currently believe to be immaterial may also adversely affect our business, financial condition and results of operations.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements other than statements of historical facts, including statements regarding our future results of operations and financial position, business strategy, prospective products, regulatory filings and initiation of clinical trials and other research and development activities, intellectual property rights and license agreements, and other future events, are forward-looking statements. You can generally identify these forward-looking statements by forward-looking words such as "anticipates," "believes," "expects," "intends," "future," "could," "estimates," "plans," "would," "should," "potential," "continues" and similar words or expressions (as well as other words or expressions referencing future events, conditions or circumstances). These forward-looking statements involve risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements, including, but not limited to:

- our current unprofitability and the risk that we may never become profitable;
- our limited operating history;
- our lack of revenue and our need for additional funding, which may not be available, and the risks associated with raising additional capital;
- risks related to our clinical trials, including the uncertainty that results will support our product candidate claims;
- our plans and timing with respect to seeking regulatory approvals and uncertainties regarding the regulatory process;
- risks associated with litigation or SEC and other regulatory investigations, including expending substantial resources and distracting personnel from their normal responsibilities;
- · delays in enrollment of patients in our clinical trials, which could delay or prevent regulatory approvals;
- the dependence of our development program upon third-parties who are outside our control;
- failure to compete successfully against other actual and potential future competitors;
- developments by competitors that may render our products or technologies obsolete or non-competitive;

- failure to comply with obligations of our intellectual property licenses;
- our or our licensors' inability to obtain and maintain patent protection for technology and products;
- the risk that other companies may license the same intellectual properties that we have licensed, including as a result of our inability to obtain exclusive rights from the NIH or NCI, or that other companies may otherwise duplicating our business model and operations;
- risks related to our dependence on third party vendors to design, build, maintain and support our manufacturing and cell processing facilities and our information technology infrastructure and systems;
- · risks related to our compliance with patent application requirements;
- · risks related to our infringement of third parties' rights;
- · risks associated with intellectual property litigation;
- risks associated with healthcare reform;
- our reliance on key executive officers and advisors;
- our inability to hire additional qualified personnel;
- volatility in the price of our common stock; and
 - capital appreciation being the only source of gain for our common stock.

All forward-looking statements attributable to us or to persons acting on our behalf are expressly qualified in their entirety by the cautionary statements and risk factors set forth under "Risk Factors" and elsewhere in this prospectus and set forth in our Form 10-K for the year ended December 31, 2014 and subsequent Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q filed with the SEC. See "Where You Can Find More Information" and "Incorporation of Certain Documents by Reference" in this prospectus for information on how to access or obtain our reports filed with the SEC. These forward-looking statements speak only as of the date of this prospectus. Except to the extent required by applicable laws and regulations, we undertake no obligation to update these forward-looking statements to reflect new information, events or circumstances after the date of this prospectus may not occur and actual results could differ materially from those anticipated or implied in the forward-looking statements. Accordingly, you are cautioned not to place undue reliance on these forward-looking statements.

USE OF PROCEEDS

We are registering these shares pursuant to the registration rights granted to the investors and placement agents in the Private Placement. As a result, we will not receive any proceeds from the sale of the common stock by the selling stockholders pursuant to this prospectus. All proceeds from the sale of the shares will be for the account of the selling stockholders. The selling stockholders may sell these shares in the over-the-counter market or otherwise, at market prices prevailing at the time of sale, at prices related to the prevailing market price, or at negotiated prices. However, we may receive proceeds upon the cash exercise of the common stock purchase warrant, the underlying shares of which are offered by this prospectus. As of the date of this prospectus, selling stockholders have exercised warrants to purchase a total of 2,373,037 shares, for which we have received a total purchase price of \$5,932,593. If all of the remaining unexercised warrants issued in the Private Placement are exercised at the initial exercise price of \$2.50 per share (which exercise price is subject to adjustment under customary anti-dilution protections), then we will receive additional proceeds of approximately \$25 million. We currently expect that any additional proceeds we receive from the exercise of warrants will be used for working capital and general corporate purposes. No assurance can be given, however, that all or any portion of the remaining outstanding warrants will be exercised.



SELLING STOCKHOLDERS

Selling Stockholders Table

This prospectus covers an aggregate of 16,385,975 shares of our common stock, consisting of (i) 4,539,856 outstanding shares of common stock, (ii)1,847,000 shares issuable upon the conversion of the Series A Preferred, (iii) 9,544,750 shares issuable upon the exercise of the Warrants, and (iv) 454,369 shares of common stock issuable upon the exercise of the common stock purchase warrants that we issued to the placement agents who participated in the Private Placement. The foregoing outstanding shares of common stock, Series A Preferred and Warrants were issued under the Securities Purchase Agreement in the Private Placement.

We are registering the shares of common stock in accordance with the terms of a Registration Rights Agreement we entered into with the selling stockholders as part of the Private Placement in order to permit the selling stockholders to offer the shares of common stock for resale from time to time. The selling stockholders may from time to time offer and sell pursuant to this prospectus any or all of the below listed shares of common stock owned by them. The registration of these shares does not require that any of the shares be offered or sold by the selling stockholders. The selling stockholders may from time to time offer and sell all or a portion of their shares in the over-the-counter market, in negotiated transactions, or otherwise, at prices then prevailing or related to the then current market price or at negotiated prices.

The registered shares may be sold directly or through brokers or dealers, or in a distribution by one or more underwriters on a firm commitment or best efforts basis. To the extent required, the names of any agent or broker-dealer and applicable commissions or discounts and any other required information with respect to any particular offer will be set forth in a prospectus supplement. Please see "Plan of Distribution." The selling stockholders and any agents or broker-dealers that participate with the selling stockholders in the distribution of registered shares may be deemed to be "underwriters" within the meaning of the Securities Act, and any commissions received by them and any profit on the resale of the registered shares may be deemed to be underwriting commissions or discounts under the Securities Act.

No estimate can be given as to the amount or percentage of common stock that will be held by the selling stockholders after any sales made pursuant to this prospectus because the selling stockholders are not required to sell any of the shares being registered under this prospectus. The following table assumes that the selling stockholders will sell all of the shares listed in this prospectus.

Transferees, successors and donees of identified selling stockholders will not be able to use this prospectus for resales until they are named in the table below by prospectus supplement or post-effective amendment. If required, we will add transferees, successors and donees by prospectus supplement in instances where the transferee, successor or donee has acquired its shares from holders named in this prospectus after the effective date of this prospectus.

The following table sets forth the current beneficial ownership of the selling stockholders as reported to us by the selling stockholders. Initially, we registered 24,017,456 shares of our common stock for resale by the selling stockholders. The shares listed below represent the shares known to us to be owned by the selling stockholders as of June 22, 2015. The term "selling stockholder" or "selling stockholders" includes the stockholders listed below and their respective transferees, assignees, pledges, donees or other successors. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Shares of common stock subject to options, warrants and convertible securities currently exercisable or convertible or convertible within 60 days are deemed outstanding, including for purposes of computing the percentage ownership of the person holding the option, warrant or convertible security, but not for purposes of computing the percentage of any other holder.

Beneficial Ownership

	Beneficial Ownership Before Offering Number of			After Offering ⁽¹⁾		
	Number of			Shares Being	Number	
	<u>Shares</u>		<u>Percent</u>	<u>Offered</u>	<u>of Shares</u>	<u>Percent</u>
Ronald Bartlett & Valerie Bartlett, JT WROS	75,000		*	75,000	0	0
Istvan Benko	2,500		*	2,500	0	0
Robbie Bensley	13,000	(2)	*	13,000	0	0
Nitin Bhatnagar	6,250	(2)	*	6,250	0	0
Kamilla Bjorlin	150,000	(2)	*	100,000	50,000	*
Neal Bloom & Frank Delillo	20,000	(2)	*	20,000	0	0
Anton Bogner & Barbara D. Bogner	45,300	(2)	*	45,000	300	*
Jay E. Bradbury	45,300	(2)	*	45,000	300	*
Larry Caillouet	25,000	(2)	*	25,000	0	0
Sudip Chakrabortty & Anshu S. Chakrabortty, JT WROS	90,000	(2)	*	90,000	0	0
Maida Chicon	5,000	(2)	*	5,000	0	0
Carol Cody	110,000	(2)	*	110,000	0	0
Gerald Cohen	38,250	(2)	*	38,250	0	0
Michael Crawford	80,000	(2)	*	80,000	0	0
Elizabeth Crothers	10,000	(2)	*	10,000	0	0
Karen Crothers & Arielle Crothers, JTIC	74,000	(2)	*	74,000	0	0
William A Crothers & JoAnn Crothers, JTWROS	5,300	(2)	*	5,300	0	0
DHS International Advisors LLC	25,500(*	25,500	0	0
Steven Elias & Bessie Elias	19,000		*	19,000	0	0
Phylis M. Esposito			*	50,000	0	0
Ficksman Family Trust	25,000	(2)	*	25,000	0	0
Finkelstein Living Trust, William Finkelstein, Trustee	25,000	(2)	*	25,000	0	0
Stanley Friedman & Leslie Friedman JT WROS	25,000	(2)	*	25,000	0	0
Marc Fuhrman	25,000	(2)	*	25,000	0	0
Ruchir Gatha	87,000	(2)	*	87,000	0	0
The Rosalinde and Arthur Gilbert Foundation	100,000	(2)	*	100,000	0	0
Carol Giorello and Anthony Giorello, JTWROS	12,000	(2)	*	12,000	0	0
Martin Goldblum	40,000	(2)	*	40,000	0	0
William D. Gould	20,000		*	20,000	0	0
Gunn Trust DTD 4/20/1998, Charles K. Gunn, Trustee	6,250	(2)	*	6,250	0	0
Ravi Gutta	100,000	(2)	*	100,000	0	0
Jennifer Nugent	50,000	(2)	*	50,000	0	0
Andrew Hodge	35,000	(2)	*	35,000	0	0
Andrei Iancu	37,500	(2)	*	37,500	0	0
Christofer Innace	70,000	(2)	*	70,000	0	0
Kevin Jacques	107,000	(2)	*	107,000	0	0
Ashish Jhingan	43,000		*	43,000	0	0
Ashish Jhingan & Dolly Jhingan JT WROS	7,000		*	7,000	0	0
Dolly Jhingan	16,520		*	16,520	0	0
Martin J. Junge	55,000		*	55,000	0	0
Narendra Kadaba	21,000		*	21,000	0	0
William Kadi	115,000		*	115,000	0	0
Peter Karp	115,000	(2)	*	16,000	0	0
Shruti Keerti	70,000		*	70,000	0	0
Behzad Kianmahd	4,000	(2)	*	4,000	0	0
Edward King	85,000		*	85,000	0	0
George A. Kingsley, Jr. and Nadine J. Kingsley JT WROS	58,000		*	58,000	0	0
George A. Kingsley, Jr. and Maunie J. Kingsley JT WKOS	50,000	(2)		50,000	0	0

Beneficial Ownership After Offering⁽¹⁾ **Beneficial Ownership Before Offering** Number of Number of **Shares Being** Number **Shares** Offered of Shares Percent Percent Paul Frederick Lawrence and Rachelle Anne Lawrence, Trustees of the 25,000 25,000 Rachelle and Paul Lawrence Living Trust, dated Aug. 1, 2008 0 0 (2) Lazar Family Trust 4/15/92, Gary Lazar, Trustee * 0 25,000 (2) 25,000 0 * Thomas Leith 105,000 (2) 105,000 0 0 Jeffrev Lieberman * 0 0 25,000 (2) 25,000 * Robert H. Lipp Separate Property Trust 25,000 (2) 25,000 0 0 * Daniel MacMullin 100,000 (2) 100,000 0 0 Richard M. Madison * 18,900 (2) 0 0 18,900 Kevin McCormack * 5,000 0 0 5,000 (2) * Rvan McCormack 5,000 (2) 5,000 0 0 Michael McFerrin Trust, a RevocableTrust, Michael McFerrin Trustee * 5,000 0 0 5,000 (2) Robert McGrath 9,000 (2) * 9,000 0 0 Merrill McPeak 511,332 (3) 1.1% 100,000 411,332 * 0 Dorice Melamed 8,500 (2) 8,500 0 Brian M. Miller * 25,000 0 0 25,000 (2) Anthony Naer 4,000 (2) * 4,000 0 0 Rudolph Nisi 20,000 (2) * 20.000 0 0 * Kenneth E Normann 6,000 (2) 6,000 0 0 Vibha Patel 12,500 (2) * 12,500 0 0 * Vibha Patel LLC 0 0 75,000 (2) 75,000 * * Steven Pisacano 4,200 4,000 200 (2) Platt Living Trust UA Oct. 5, 1990, Jeffrey S. Platt, Trustee * 0 5,000 (2) 5,000 0 * Prasad Family Trust UAD 08/18/11, Subir Prasad, Trustee 25,000 (2) 25,000 0 0 * R&I Family Trust u/a/d 3/15/90, Richard N. Kipper & Inta A. Kipper, 13.500 13,500 0 0 Trustees (2) Jeff Rennell & Christine Kellye Rennell, JT WROS 185,000 (2) * 185,000 0 0 Charles F. Richter 97,000 (2) * 97,000 0 0 * Bruce Rosen 3,500 0 0 3,500 (2) Richard Salzer & Anca M. Cretan-Salzer JT WROS * 5,000 0 0 5,000 (2) * Bradlev F. Schwartz 10,950 (2) 10,950 0 0 * Mark W. Schwartz 19,000 (2) 19,000 0 0 Randall A. Sebring & Alice M. Sebring JT WROS 90,000 (2) * 90,000 0 0 * 0 0 Peter Selvin 50,000 (2) 50,000 Howard L. Simon & Dana B. Simon as Trustees of the Howard and 17,000 * 17,000 0 0 Dana Simon 2000 Revocable Trust (2)Manish Singh 614,300 (4) 1.4% 250,000 364,300 * Sneh Singhal 45,000 (2) 45,000 0 * James Smith 20,000 (2) 20,000 0 0 Daryl Squicciarini 60,000 (2) * 60,000 0 0 * 30,000 0 William Sykes 30,000 (2) 0 * Joseph Telushkin 26,000 (2) 26,000 0 0 The Thunen Family Trust dated 10/4/05, Garret G. Thunen and Carol 55,000 * 55,000 Thunen, Trustees (2) 0 0 Lisa Torsiello 50,000 (2) * 50,000 0 0 * K. David Tritsch 10,000 (2) 10,000 0 0 Ninish Ukkan 43,100 (2) * 43,100 0 0

				Beneficial	Jwnersnip
	Beneficial Owr	ership Be	fore Offering Number of	After Of	fering ⁽¹⁾
	Number of		Shares Being	Number	
	<u>Shares</u>	Percent	Offered	of Shares	Percent
Cynthia Warenik Serini	10,000 (2)	*	10,000	0	0
Raymond Warenik	24,000 (2)	*	24,000	0	0
Windward Venture Partners	25,000(2)(17)	*	25,000	0	0
Terry Wohlberg & David Wohlberg JT WROS	42,500 (2)	*	42,500	0	0
Daniel Yankelevits	5,000 (2)	*	5,000	0	0
Amir Zaghloul & Mona Zaghloul, JT WROS	27,000 (2)	*	27,000	0	0
Leland Zurich & Valerie Zurich, JT WROS	66,000 (2)	*	66,000	0	0
		*			
Placement Warrants					
James J. Cahill	4,804 (5)	*	4,804	0	0
Barry Cohn	4,321 (5)	*	4,321	0	0
Roth Capital Partners, LLC	444,369(5)(16)	*	444,369	0	0
Gregory R. Swenson	4,803 (5)	*	4,803	0	0
OTA LLC	86,458(5)(19)	*	86,458	0	0
Series A Preferred Investors					
Perceptive Life Sciences Master Fund Ltd.	3,922,316(8)(20)	8.7%	2,902,000	1,020,316	1.8%
Titan-Perc Ltd.	219,367(8)(21)	*	195,000	24,367	*
Quogue Capital LLC	4,000,000 (6)(9)	4.9% ⁽⁷⁾	4,000,000	0	0
Entities affiliated with Longwood Capital Partners, LLC	2,320,192 (10)		$1,500,000^{(11)}$		
	(12)	4.9% ⁽⁷⁾	_,_ , , , , , , , , , , , , , , , , , ,	820,192	1.4%
Broadfin Healthcare Master Fund, Ltd	3,062,419 ₍₁₃₎	4.9% ⁽⁷⁾	1,500,000	1,562,419	2.8%
Mark H Rachesky	500,000 (2)	1.1%	500,000	0	0
Jason Stein	50,000 (2)	*	50,000	0	0
Michael Weiser	25,000 (2)	*	25,000	0	0
Elizabeth Weiser	25,000 (2)	*	25,000	0	0
venBio Select Fund LLC	911,700 ₍₁₄₎	2.0% ⁽⁷⁾	862,700	49,000	*
Doverhill Partners LLC	275,000 (15)	*	275,000	0	0
			, ,		

Beneficial Ownershin

* Less than 1%

- (1) Assumes the selling stockholder sells all of the shares of common stock included in this prospectus.
- (2) Represents currently outstanding shares of common stock and/or shares of common stock issuable upon the exercise of the stockholder's Warrant issued in connection with the Offering.
- (3) Represents 446,432 shares of our common stock and 65,000 shares issuable upon the exercise of outstanding stock options.
- (4) Represents 489,300 shares of our common stock and 125,000 shares of our common stock issuable upon exercise of a Warrant.
- (5) Represents shares of common stock issuable, or issued, upon the exercise of warrants granted to broker-dealers as compensation for placement agent services provided in the Private Placement.
- (6) Represents shares of common stock issuable to the listed selling stockholder upon the conversion of that stockholder's Series A Preferred and the exercise of that stockholder's Warrants. One half of these shares are issuable upon the conversion of the Series A Preferred owned by the selling stockholder, and one half of the shares represent shares of common stock issuable upon the exercise of the stockholder's Warrant.
- (7) Under the terms of the Series A Preferred and the Warrants, these securityholders are prohibited from converting the shares of their Series A Preferred or exercising their Warrants if such conversion or exercise would result in them owning beneficially more than 4.99% of the outstanding shares of our common stock as determined under Section 13(d) of the Securities Exchange Act of 1934. As a result of these provisions, under the beneficial ownership rules of the SEC, none of these securityholders has beneficial ownership in excess of 4.99% of the outstanding shares of our common stock. However, the foregoing beneficial ownership limitation may be changed by the securityholders in their sole discretion to 9.99% upon notice to us.

- (8) Perceptive Advisors LLC is the advisor of Perceptive Life Sciences Master Fund Ltd. and Titan-Perc Ltd. Perceptive Advisors LLC and Joseph Edelman claim shared voting power and shared dispositive power over the 4,141,683 shares held by Perceptive Life Sciences Master Fund Ltd. and Titan-Perc Ltd. Mr. Edelman is the managing member of Perceptive Advisors LLC.
- (9) Quogue Capital LLC and Wayne P. Rothbaum claim shared voting power and shared dispositive power of the 4,000,000 shares. Mr. Rothbaum is the managing member of Quogue Capital LLC and so may be deemed to beneficially own such shares of common stock. Mr. Rothbaum disclaims such beneficial ownership.
- (10) Consists of (1) 286,180 shares of common stock held by Longwood Capital, LP and 1,055,232 shares of common stock issuable upon the exercise of the stockholder's Warrants; (2) 106,512 shares of common stock held by Longwood Opportunity Fund, LP and 444,768 shares of common stock issuable upon the exercise of the stockholder's Warrants; and (3) 427,500 shares of common stock held by 2B LLC.
- (11) The 1,500,000 shares included in this prospectus consist of 1,055,232 shares of common stock issuable upon the exercise of Warrants held by Longwood Capital, LP and 444,768 shares of common stock issuable upon the exercise of Warrants held by Longwood Opportunity Fund, LP.
- (12) Richard Lin is the Managing Member of Longwood Capital Partners, LLC (the general partner of Longwood Capital, LP and Longwood Opportunity Fund, LP, and an investment manager for 2B LLC), which has voting and investment power over all of the shares held by Longwood Capital, LP, Longwood Opportunity Fund, LP and 2B LLC. Mr. Lin and Longwood Capital Partners, LLC disclaim beneficial ownership over all of the shares held by Longwood Capital, LP, Longwood Opportunity Fund, LP and 2B LLC, except to the extent of their pecuniary interests therein.
- (13) Represents 1,562,419 shares of our common stock, 750,000 shares of common stock issuable upon conversion of Series A Preferred, and 750,000 shares of our common stock issuable upon exercise of a Warrant. Kevin Kotler in his capacity as investment manager of Broadfin Health Master Fund, Ltd., may also be deemed to have investment discretion and voting power over the shares held by that selling stockholder. Mr. Kotler disclaims any beneficial ownership of these shares.
- (14) Represents 386,700 shares of common stock and 525,000 shares of common stock issuable upon the exercise of the stockholder's Warrants. Kurt von Emster in his capacity as investment managers of venBio Select Fund LLC, may also be deemed to have investment discretion and voting power over the shares held by that selling stockholder. Mr. von Emster disclaims any beneficial ownership of these shares.
- (15) Represents 125,000 shares of our common stock and 150,000 shares of our common stock issuable upon exercise of a Warrant. Brian Wornow in his capacity as investment manager of Doverhill Partners LLC, may also be deemed to have investment discretion and voting power over the shares held by that selling stockholder. Mr. Wornow disclaims any beneficial ownership of these shares.
- (16) Represents 100,00 shares of our common stock and 444,369 shares of our common stock issuable upon exercise of warrants issued for services provided in our private placement. Byron Roth and Gordon Roth, as members of the selling stockholder have shared voting and investment power over the shares.
- (17) Peter D. Kozlowski, the Managing Director of Windward Venture Partners, has investment discretion and voting power over the shares held by that selling stockholder.
- (18) Daniel Sigg is the manager and principal of DHS International Advisors LLC.

- (19) Ira Leventhal, a senior managing director of the selling stockholder OTA LLC has investment discretion and voting power over the shares held by that selling stockholder.
- (20) Consists of (i) 1,020,316 shares of common stock currently owned that are not included in this prospectus, (ii) 97,000 shares of common stock issuable upon the conversion of the 194 shares of Series A Preferred, and (iii) 2,805,000 shares issuable upon the exercise of a Warrant owned by Perceptive Life Sciences Master Fund Ltd.
- (21) Represents 24,367 shares of our common stock that are not covered by this prospectus, and 195,000 shares of our common stock issuable upon exercise of a Warrant.

Relationships with Selling Stockholders

All stockholders, other than those discussed below, are investors who acquired their securities in the Private Placement and who have had no position, office, or other material relationship (other than as purchasers of securities) with us or any of our affiliates within the past three years. Based on representations made to us by the selling stockholders, except as noted below, no selling stockholder is a registered broker-dealer or an affiliate of a registered broker-dealer.

Manish Singh was our Chief Executive Officer until December 31, 2014. Dr. Singh also was a member of our Board of Directors until November 12, 2014.

Merrill McPeak is a member of our Board of Directors. On July 24, 2013, General Merrill McPeak received 133,532 shares of common stock for consideration of services rendered as a director. In addition, General McPeak, from time to time, receives compensation in the form of options to purchase additional shares and cash compensation for services rendered as a director.

Roth Capital Partners LLC acted as lead placement agent in the Private Placement, and Highline Research Advisors LLC a division of Agincourt, Ltd., and American Portfolio Financial Services, Inc. as the co-placement agents. As compensation for its services, these registered broker-dealers received cash compensation and warrants to purchase common stock. Roth Capital Partners, LLC received a Warrant to purchase 544,369 shares of common stock and \$896,608 of cash compensation. American Portfolio Financial Services, Inc., a registered broker-dealer, received \$172,844 and warrants to purchase 86,422 shares of common stock. Highline Research Advisors LLC, a registered broker-dealer, received a Warrant to purchase 96,065 shares, which Warrant it assigned to its affiliates, Jainal Bhuiyan (Warrant to purchase 8,646 shares), Marta Zylka (Warrant to purchase 8,646 shares), Theodore Kalem (Warrant to purchase 34,583 shares), Nickolay Kukekov (Warrant to purchase 34,583 shares), James J. Cahill (Warrant to purchase 4,804 shares), and Gregory R. Swenson (Warrant to purchase 4,803 shares). All of the shares of common stock underlying the warrants were registered for resale As of the date of this prospectus, certain of the foregoing warrants have been exercised, and the underlying shares may have been sold. Each of the foregoing broker-dealers, or affiliates of broker-dealers, received the warrants, the selling stockholders had no agreements or understandings, directly or indirectly, with us, or to our knowledge with any other person, to distribute the warrants or the underlying securities.

Peter Selvin, William Gould, Istvan Benko, David Ficksman, Martin Goldblum, and David Wohlberg are attorneys at TroyGould PC, a law firm. TroyGould PC has, since February 2011, from time to time acted as one of this company's corporate/securities law firms. These members of TroyGould PC purchased \$210,000 of common stock and Warrants in the Private Placement and are included as selling stockholders with respect to the securities they purchased in the Private Placement. In addition, Sanford J. Hillsberg, one of the directors on this company's Board of Directors, also is an attorney at TroyGould PC.

In September 2013, we engaged Lidingo Holdings, LLC to provide media and financial relations services to us for a one-year period. Under the consulting agreement, as partial payment for the services to be rendered to us under the consulting agreement, we issued 50,000 shares to Lidingo Holdings LLC. The President of Lidingo Holdings, LLC, Kamilla Bjorlin, also made a \$100,000 investment in the Private Placement and is a selling stockholder. The foregoing consulting agreement was terminated effective April 1, 2014.



The information in the above table is as of the date of this prospectus. Information concerning the selling stockholders may change from time to time and any such changed information will be described in supplements to this prospectus if and when necessary.

PLAN OF DISTRIBUTION

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares 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;
- · short sales effected after the date the registration statement of which this prospectus is a part is declared effective by the SEC;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- · broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- · a combination of any such methods of sale; and
 - any other method permitted by applicable law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our common stock 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 common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock 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 the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering. Upon any exercise of the warrants by payment of cash, however, we will receive the exercise price of the warrants.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act of 1933, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act. Selling stockholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act. Selling stockholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, to the extent applicable we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the selling stockholders to keep the registration statement of which this prospectus constitutes a part effective until the earlier of (1) such time as all of the shares covered by this prospectus have been disposed of pursuant to and in accordance with the registration statement or (2) the date on which all of the shares may be sold without restriction pursuant to Rule 144 of the Securities Act.

DESCRIPTION OF SECURITIES

The following is a summary of all material characteristics of our capital stock as set forth in our amended and restated articles of incorporation and bylaws, as amended. Copies of these documents are filed or incorporated by reference as exhibits to the registration statement, of which this prospectus forms a part.

We are presently authorized to issue 150,000,000 shares of \$0.00041666 par value common stock and 50,000,000 shares of \$0.001 par value preferred stock. As of the date of this prospectus, we had 45,034,495 shares of common stock issued and outstanding and 3,694 shares of Series A Preferred issued and outstanding. There are no other series of shares of our preferred stock currently issued or outstanding.

Common Stock

The holders of our common stock are entitled to equal dividends and distributions per share with respect to the common stock when, as and if declared by the Board of Directors from funds legally available therefore. No holder of any shares of common stock has a preemptive right to subscribe for any of our securities, nor are any common shares subject to redemption or convertible into other securities. Upon liquidation, dissolution or winding-up of our company, and after payment of creditors and preferred stockholders, if any, the assets will be divided pro rata on a share-for-share basis among the holders of the shares of common stock. All shares of common stock now outstanding are fully paid, validly issued and non-assessable. Each share of our common stock is entitled to one vote with respect to the election of any director or any other matter upon which stockholders are required or permitted to vote.

Preferred Stock

Under our articles of incorporation, the Board of Directors has the power, without further action by the holders of the common stock, to designate the relative rights and preferences of the preferred stock, and to issue the preferred stock in one or more series as designated by the Board of Directors. The designation of rights and preferences could include preferences as to liquidation, redemption and conversion rights, voting rights, dividends or other preferences, any of which may be dilutive of the interest of the holders of the common stock or the preferred stock of any other series. The issuance of preferred stock may have the effect of delaying or preventing a change in control of the company without further stockholder action and may adversely affect the rights and powers, including voting rights, of the holders of the common stock.

In October 2013, we created a new class of preferred stock designated as Series A Convertible Preferred Stock (the "Series A Preferred"). The shares of Series A Preferred have a stated value of \$1,000 per share and are initially convertible into shares of common stock at a price of \$2.00 per share (subject to adjustment as described below). The rights of the Series A Preferred are set forth in the Certificate of Designation Of Preferences And Rights Of Series A Convertible Preferred Stock (the "Certificate of Designation"), which gives the holders of the Series A Preferred the following rights, preferences and privileges:

The Series A Preferred may, at the option of the holder, be converted at any time or from time to time into fully paid and non-assessable shares of common stock at the conversion price in effect at the time of conversion; <u>provided</u>, that a holder of Series A Preferred may at any given time convert only up to that number of shares of Series A Preferred so that, upon conversion, the aggregate beneficial ownership of the common stock (calculated pursuant to Rule 13d-3 of the Securities Exchange Act of 1934, as amended) of such holder and all persons affiliated with such holder, is not more than 4.99% of the common stock then outstanding (subject to adjustment up to 9.99% solely at the holder's discretion upon 60 days' prior notice). The number of shares into which one share of Series A Preferred shall be convertible is determined by dividing the stated value of \$1,000 per share by the initial Conversion Price. The "Conversion Price" per share for the Series A Preferred is initially equal to \$2.00 (subject to appropriate adjustment for certain events, including stock splits, stock dividends, combinations, recapitalizations or other recapitalizations affecting the Series A Preferred).

The Series A Preferred will automatically be converted into common stock at the then applicable Conversion Price (i) upon the written consent of the holders holding at least a majority of the outstanding shares of Series A Preferred or (ii) if required by us to be able to list our common stock on a national securities exchange; provided, any such conversions will continue to be limited by, and subject to the beneficial ownership conversion limitations set forth above.

Except as otherwise required by law, the holders of shares of Series A Preferred do not have the right to vote on matters that come before the stockholders; provided, that we may not, without the prior written consent of a majority of the outstanding Series A Preferred: (i) amend, alter, or repeal any provision of our Articles of Incorporation (including the Certificate of Designation) or Bylaws in a manner adverse to the Series A Preferred; (ii) create or authorize the creation of or issue any other security convertible into or exercisable for any equity security, having rights, preferences or privileges senior to or on parity with the Series A Preferred, or increase the authorized number of shares of Series A Preferred; or (iii) enter into any agreement with respect to any of the foregoing.

In the event of any dissolution or winding up of this company, whether voluntary or involuntary, the proceeds shall be paid pari passu among the holders of the shares of common stock and the Series A Preferred, pro rata based on the number of shares held by each such holder, treating for this purpose all such securities as if they had been converted to common stock.

We may not declare, pay or set aside any dividends on shares of any class or series of our capital stock (other than dividends on shares of common stock payable in shares of common stock) unless the holders of the Series A Preferred shall first receive, or simultaneously receive, an equal dividend on each outstanding share of Series A Preferred.

Private Placement Warrants

Each Warrant issued in the Private Placement entitles the holder thereof to purchase the number of shares of common stock purchased by such investor in the Private Placement or into the number of shares into which such investor's Series A Preferred is initially convertible. The Warrants are exercisable in whole or in part, at an initial exercise price per share of \$2.50, and may be exercised in a cashless exercise if, after six months, there is no effective registration statement registering, or no current prospectus available for, the resale of the Warrant shares. The exercise price and number of shares of common stock issuable under the Warrants are subject to adjustments for stock dividends, splits, combinations and similar events. The Warrants may be exercised at any time upon the election of the holder, beginning on the date of issuance and ending on the fifth anniversary of the date of issuance.

Transfer Agent

Our transfer agent currently is Corporate Stock Transfer, Inc., 3200 Cherry Creek South Drive, Suite 430, Denver, Colorado 80209.

DISCLOSURE OF SEC POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our Amended and Restated Articles of Incorporation provide to the maximum extent permitted under applicable law, there shall be no personal liability of a director or an officer to this corporation or its stockholders for damages for breach of fiduciary duty as a director or an officer. Our bylaws and Amended and Restated Articles of Incorporation also provide that we shall indemnify and hold harmless each person who serves at any time as a director or officer of this company from and against any and all claims, judgments and liabilities to which such person shall become subject by reason of the fact that he is or was a director or officer, and shall reimburse such person for all legal and other expenses reasonably incurred by him or her in connection with any such claim or liability. We also have the power to defend such person from all suits or claims in accordance with the Nevada Revised Statutes. The rights accruing to any person under our bylaws and Amended and Restated Articles of Incorporation do not exclude any other right to which any such person may lawfully be entitled, and we may indemnify or reimburse such person in any proper case, even though not specifically provided for by the bylaws and Amended and Restated Articles of Incorporation.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling this company pursuant to the foregoing provisions, we have been informed 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 a claim for indemnification against such liabilities (other than payment by us for expenses incurred or paid by a director, officer or controlling person of our company in successful defense of any action, suit, or proceeding) is asserted by a director, officer or controlling person of our company in generated, 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 of whether such indemnification by it is against public policy in the Securities Act and will be governed by the final adjudication of such issue.

LEGAL MATTERS

TroyGould PC, Los Angeles, California, has rendered an opinion with respect to the validity of the shares of common stock covered by this prospectus. Certain members, employees and of counsel of that firm beneficially own in the aggregate 464,000 shares and options or warrants to acquire shares of our common stock. The beneficial ownership of our shares described above includes all options that may be exercised within 60 days from the date of this prospectus.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over the financial reporting of Lion Biotechnologies, Inc. included in this prospectus and registration statement by reference to the Annual Report on Form 10-K for the year ended December 31, 2014, filed with the Securities and Exchange Commission, have been so incorporated in reliance on the reports of Weinberg & Company, P. A. an independent registered public accounting firm, given on the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 with respect to this offering of our common stock. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, some items of which are contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. Statements contained in this prospectus as to the contents of any contract, agreement or other document are summaries of the material terms of that contract, agreement or other document. With respect to each of these contracts, agreements or other documents filed or incorporated by reference as an exhibit to the registration statement, reference is made to the exhibits for a more complete description of the matter involved. A copy of the registration statement, and the exhibits and schedules thereto, may be inspected without charge at the public reference facilities maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. Copies of these materials may be obtained by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities. The SEC maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the SEC's website is http://www.sec.gov.

We file periodic reports and other information with the SEC. Such periodic reports and other information are available for inspection and copying at the public reference room and website of the SEC referred to above. We maintain a website at http://www.lionbio.com. You may access our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The information and other content contained on our website are not part of the prospectus.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus the information we have filed with the SEC. The information we incorporate by reference into this prospectus is an important part of this prospectus. Any statement in a document we incorporate by reference into this prospectus will be considered to be modified or superseded to the extent a statement contained in this prospectus or any other subsequently filed document that is incorporated by reference into this prospectus modifies or supersedes that statement. The modified or superseded statement will not be considered to be a part of this prospectus, except as modified or superseded.

We incorporate by reference into this prospectus the information contained in the documents listed below, which is considered to be a part of this prospectus:

- our Annual Report on Form 10-K for the year ended December 31, 2014 filed with the SEC on March 17, 2015;
- our Current Reports on Form 8-K filed with the SEC on January 27, 2015, February 12, 2015, February 18, 2015, February 25, 2015, March 3, 2015, April 17, 2015, May 1, 2015, May 4, 2015, June 9, 2015, and June 15, 2015; and
- the description of our stock contained in our registration statement on Form 8-A filed on February 25, 2015 pursuant to Section 12 of the Exchange Act, as such statement may be amended from time to time.

We also incorporate by reference into this prospectus all documents filed pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and prior to the termination of the offering by the selling stockholders; provided, however, that we are not incorporating any information furnished under Item 2.02 or Item 7.01 of any Current Report on Form 8-K we may subsequently file.

You may request a copy of the documents incorporated by reference into this prospectus, at no cost, by writing or telephoning us at the following address: Lion Biotechnologies, Inc., 21900 Burbank Boulevard, 3rd Floor, Woodland Hills, California 91367, and our telephone number at that address is (818) 992-3126.

Copies of these documents are also available, without charge, through the "Investors" section of our website (www.lbio.com) as soon as reasonably practicable after they are filed with the SEC. The information contained on our website is not a part of this prospectus.

PROSPECTUS



LION BIOTECHNOLOGIES, INC.

16,385,975 Shares of Common Stock Offered by the Selling Stockholders

The date of this prospectus is _____, 2015

PART II – INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

We estimate that expenses in connection with the distribution described in this registration statement (other than brokerage commissions, discounts or other expenses relating to the sale of the shares by the selling stockholders) will be as set forth below. We will pay all of the expenses with respect to the distribution, and such amounts, with the exception of the Securities and Exchange Commission registration fee, are estimates.

SEC registration fee	\$ 15,563.18
Accounting fees and expenses	\$ 23,000.00
Legal fees and expenses	\$ 60,000.00
Printing and related expenses	\$ 2,000.00
Total	\$ 100,563.18

Item 15. Indemnification of Directors and Officers.

Pursuant to our amended and restated articles of incorporation, none of our directors or officers will have any personal liability to us or our stockholders for damages for breach of fiduciary duty as a director or officer, except for damages for breach of fiduciary duty resulting from (1) acts or omissions which involve intentional misconduct, fraud or a knowing violation of law or (2) the payment of dividends in violation of the applicable statutes of Nevada.

Section 78.7502 of the Nevada Revised Statutes permits a corporation to indemnify a present or former director, officer, employee or agent of the corporation, or of another entity or enterprise for which such person is or was serving in such capacity at the request of the corporation, who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, except an action by or in the right of the corporation, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred in connection therewith, arising by reason of such person's service in such capacity if such person (1) is not liable pursuant to Section 78.138 of the Nevada Revised Statutes, which sets forth standards for the corporation and, with respect to a criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. In the case of actions brought by or in the right of the corporation, however, no indemnification may be made for any claim, issue or matter as to which such person has been adjudged by a court of competent jurisdiction, after exhaustion of all appeals therefrom, to be liable to the corporation or for amounts paid in settlement to the corporation, unless and only to the extent that the court in which the action or suit was brought or other court of competent jurisdiction determines upon application that in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper.

Section 78.751 of the Nevada Revised Statutes permits any discretionary indemnification under Section 78.7502 of the Nevada Revised Statutes, unless ordered by a court or advanced to a director or officer by the corporation in accordance with the Nevada Revised Statutes, to be made by a corporation only as authorized in each specific case upon a determination that indemnification of the director, officer, employee or agent is proper in the circumstances. Such determination must be made (1) by the stockholders, (2) by the board of directors by majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding, (3) if a majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding so orders, by independent legal counsel in a written opinion, or (4) if a quorum consisting of directors who were not parties to the action, suit or proceeding cannot be obtained, by independent legal counsel in a written opinion.

Our amended and restated bylaws require us to indemnify our directors and officers in a manner that is consistent with the provisions of Nevada law described in the preceding two paragraphs.



We maintain a general liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers. Furthermore, we have entered into indemnification agreements with our directors that among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors.

Item 16. Exhibits.

A list of exhibits filed with this Registration Statement on Form S-3 is set forth in the Exhibit Index and is incorporated by reference into this Item 16.

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

- (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 of 1933;

(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 the registration statement; notwithstanding the foregoing, any increase or decrease in the 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 Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 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 the registration statement or any material change to such information in the registration statement; provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Securities and Exchange Commission by the registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the 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 of 1933, 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 of 1933 to any purchaser, 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 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 prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of 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.

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(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) 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.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant 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, the registrant 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 of 1933 and will be governed by the final adjudication of such issue.

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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-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Los Angeles, California, on June 23, 2015.

LION BIOTECHNOLOGIES, INC.

By: <u>/s/ ELMA HAWKINS</u> Elma Hawkins Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints, jointly and severally, Elma Hawkins, Ph.D. and Molly Henderson, and each of them, as his/her true and lawful attorney-in-fact and agent, with full power of substitution, for him and in his/her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement on Form S-3, and to sign any registration statement for the same offering covered by this registration statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act of 1933, and all post-effective amendments thereto, and to file the same and all prospectus supplements, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneyin-fact and agent 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 he/she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his/her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated on June 23, 2015:

Signature	Title
/s/ ELMA HAWKINS Elma Hawkins	Chief Executive Officer (Principal Executive Officer)
/s/ MOLLY HENDERSON Molly Henderson	Chief Financial Officer (Principal Financial and Accounting Officer)
/s/ MERRILL A. McPEAK Merrill A. McPeak	Director
/s/ JAY VENKATESAN Jay Venkatesan	Director
/s/ SANFORD J. HILLSBERG Sanford J. Hillsberg	Director
/s/ RYAN D. MAYNARD Ryan D. Maynard	Director

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EXHIBIT INDEX

Exh	ibit	Description
3.1		Certificate Of Designation Of Preferences And Rights Of Series A Convertible Preferred Stock (incorporated herein by reference to the Registrant's Form 8-K filed with the Commission on November 6, 2013)
4.1		Form of Registration Rights Agreement to be entered into by and among Lion Biotechnologies, Inc. and the Investors under the Securities Purchase Agreement (incorporated herein by reference to the Registrant's Form 8-K filed with the Commission on October 31, 2013).
4.2		Securities Purchase Agreement, dated October 30, 2013, by and among Lion Biotechnologies, Inc. and the Investors thereunder (incorporated herein by reference to the Registrant's Form 8-K filed with the Commission on October 31, 2013).
4.3		Form of Warrant to be issued to the Investors under the Securities Purchase Agreement, dated November 5, 2013, by and among Lion Biotechnologies, Inc. and such Investors (incorporated herein by reference to the Registrant's Form 8-K filed with the Commission on October 31, 2013).
4.4		Form of Registration Rights Agreement to be entered into by and among Lion Biotechnologies, Inc. and the Investors under the Securities Purchase Agreement (incorporated herein by reference to the Registrant's Form 8-K filed with the Commission on October 31, 2013).
5.1		Opinion of counsel as to the legality of the securities being registered. **
23.	L	Consent of Weinberg & Company*
23.2	2	Consent of TroyGould PC (included in Exhibit 5.1)
* **	Filed herewith. Previously filed.	

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to incorporation by reference in the foregoing Post-Effective Amendment No. 2 to Form S-1 on Form S-3 (File No. 333-192649) of our reports dated March 16, 2015, relating to the financial statements of Lion Biotechnologies, Inc. (the "Company") and the effectiveness of the Company's internal control over financial reporting, which appear in the Company's Annual Report on Form 10-K for the year ended December 31, 2014 filed with the Securities and Exchange Commission. We also consent to the reference to us under the caption "Experts" in the Registration Statement.

/s/ Weinberg & Company, P.A.

Los Angeles, California June 23, 2015