

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549**

**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)

75-3254381
(I.R.S. Employer
Identification Number)

**21900 Burbank Blvd, 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)

Elma Hawkins, Ph.D.
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)

With copies to:
Istvan Benko
Dale E. Short
TroyGould PC
1801 Century Park East, 16th Floor
Los Angeles, California 90067
(310) 553-4441

Approximate date of commencement of proposed sale to the public: As soon as practicable following the effectiveness 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.

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. 333-200418

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See 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

Accelerated filer

Non-accelerated filer

(Do not check if a smaller reporting company)

Smaller reporting company

CALCULATION OF REGISTRATION FEE

| Title of each class of securities to be registered | Proposed maximum aggregate offering price (1) | Amount of registration fee |
|--|---|----------------------------|
| Common Stock, \$0.000041666 par value per share | \$8,100,000 | \$941.22 |

- (1) The Registrant previously registered securities with a proposed maximum aggregate offering price of \$100,000,000 on a Registration Statement on Form S-3 (File No. 333-200418) filed by the Registrant on November 20, 2014 and declared effective by the Securities and Exchange Commission on December 10, 2014 (the "Prior Registration Statement"). As of the date hereof, a balance of \$65,500,000 of such securities remains to be offered and sold under the Prior Registration Statement. In accordance with Rule 462(b) under the Securities Act of 1933, an additional amount of common stock having a proposed maximum aggregate offering price of \$8,100,000 including shares issuable upon exercise of the underwriters' option to purchase additional shares, is hereby registered, representing no more than 20% of the maximum aggregate offering price of unsold securities under the Prior Registration Statement . In no event will the maximum aggregate offering price of all securities issued pursuant to this Registration Statement and the Prior Registration Statement exceed that registered under such Registration Statements.
 - (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933.
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EXPLANATORY NOTE

Lion Biotechnologies, Inc., a Nevada corporation (the “Company”), is filing this Registration Statement with the Securities and Exchange Commission pursuant to Rule 462(b) under the Securities Act of 1933, as amended. This Registration Statement relates to the public offering of securities contemplated by the Registration Statement on Form S-3 (File No. 333-200418) filed by the Company on November 20, 2014 and declared effective by the Securities and Exchange Commission on December 10, 2014 (the “Prior Registration Statement”). The Company is filing this Registration Statement to register an additional \$8,100,000 of the Company’s securities.

The contents of the Prior Registration Statement, including the prospectus contained therein, and any and all prospectus supplements and all exhibits thereto, are incorporated by reference into this Registration Statement in their entirety and are deemed to be part of this Registration Statement.

The required opinions and consents are listed on the Exhibit Index attached to and filed with this Registration Statement.

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 the requirements for filing on Form S-3 and 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 February 26, 2015.

LION BIOTECHNOLOGIES, INC.

By: /s/ ELMA HAWKINS
Elma Hawkins, Ph.D.
Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities indicated on February 26, 2015.

| <u>Signature</u> | <u>Title</u> |
|---|---|
| <u>/s/ ELMA HAWKINS</u> Elma Hawkins | Chief Executive Officer (Principal Executive Officer) |
| <u>/s/ MICHAEL HANDELMAN</u> Michael Handelman | Chief Financial Officer (Principal Financial and Accounting Officer) |
| <u>/s/ MERRILL A. McPEAK*</u> Merrill A. McPeak | Director |
| <u>/s/ JAY VENKATESAN*</u> Jay Venkatesan | Director |
| <u>/s/ SANFORD J. HILLSBERG*</u> Sanford J. Hillsberg | Director |
| <u>/s/ RYAN D. MAYNARD</u> Ryan D. Maynard | Director |
| <u>*By: /s/ ELMA HAWKINS</u> Elma Hawkins, Ph.D. Attorney-in-Fact | |

EXHIBIT INDEX

| Exhibit No. | Description |
|--------------------|---|
| 5.1 | Opinion of TroyGould PC |
| 23.1 | Consent of TroyGould PC (included in Exhibit 5.1) |
| 23.2 | Consent of Weinberg & Company |
| 24.1 | Powers of Attorney (included in registrant's Registration Statement on Form S-3 (File No. 333-200418) filed with the Securities and Exchange Commission on November 20, 2014 and incorporated herein by reference |

TroyGould PC
1801 Century Park East
Suite 1600
Los Angeles, California 90067

February 26, 2015

Lion Biotechnologies, Inc.
21900 Burbank Boulevard, Third Floor
Woodland Hills, California 91367

Ladies and Gentlemen:

We have acted as counsel to Lion Biotechnologies, Inc., a Nevada corporation (the "Company"), in connection with a Registration Statement on Form S-3 (the "462 Registration Statement") to be filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended (the "Securities Act"), with the Securities and Exchange Commission (the "Commission") on or about the date of this opinion letter, covering the offering of an aggregate of up to an additional \$8,100,000 of shares (the "Additional Shares") of common stock, par value \$0.000041666 per share, of the Company. The 462(b) Registration Statement incorporates by reference the contents of the Registration Statement on Form S-3 (File No. 333-200418) (together with the 462 Registration Statement, the "Registration Statement"), including the prospectus contained therein (the "Prospectus"), and the exhibits thereto, that was filed with the Commission on November 20, 2014 and declared effective on December 10, 2014. This opinion letter is furnished to you at your request and in connection with the requirements of Item 601(b)(5) of Regulation S-K and Rule 462(b).

As counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. We are opining herein as to the general corporation law of the State of Nevada as set for in Chapter 78 of the Nevada Revised Statutes (the "NRS"), and we express no opinion with respect to any other laws.

Based upon and subject to the foregoing, we are of the opinion that the Additional Shares have been duly authorized for issuance and, when the Additional Shares are issued and paid for in accordance with the terms and conditions of an underwriting agreement or similar agreement, the Additional Shares will be validly issued, fully paid and nonassessable.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act and to the use of our name therein and in the related Prospectus under the caption "Legal Matters." In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ TROYGOULD PC

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Lion Biotechnologies, Inc.
Woodland Hills, California

We hereby consent to the use in the foregoing Registration Statement on Form S-3 of our report dated March 27, 2014 relating to the balance sheets of Lion Biotechnologies, Inc. as of December 31, 2013 and 2012, and the related statements of operation, changes in stockholders' equity (deficiency) and cash flows for the years then ended. We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ WEINBERG & COMPANY

Los Angeles, California

February 26, 2015
