

VIA FEDERAL EXPRESS AND EDGAR

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549
Attention: Max A. Webb, Assistant Director

Re: Lion Biotechnologies, Inc.
Registration Statement on Form S-1
Filed December 4, 2013
File No. 333-192649

Ladies and Gentlemen:

By letter dated December 27, 2013, the staff (the “Staff”) of the Securities and Exchange Commission (the “Commission”) provided Lion Biotechnologies, Inc. (the “Company”) with comments on the Company’s pre-effective Registration Statement on Form S-1 (the “Registration Statement”). This letter contains the Company’s response to the Staff’s comments. The numbered response and the heading set forth below correspond to the numbered comment and heading in the Staff’s letter dated December 27, 2013.

The Company has revised the Registration Statement in response to the Staff’s comments and concurrently is filing pre-effective Amendment No. 1 to the Registration Statement (the “Amended Registration Statement”). In addition to changes made in response to the Staff’s comments, the Amended Registration Statement contains updated information. These updates include the issuance of shares of common stock upon the conversion of some shares of preferred stock and the issuance of 675,000 shares pursuant to the earn-out arrangement described in the Registration Statement. In addition, the Registration Statement includes information regarding the new Vice President of Manufacturing who was hired effective January 6, 2014. In the Company’s view, the updated or changed information reflects no material changes from the Registration Statement as originally submitted.

To facilitate the Staff’s review of the Amended Registration Statement, we are providing supplementally with this letter a blacklined copy of the Registration Statement marked to show changes from the Registration Statement.

Prospectus Cover Page

1. Please refer to the last paragraph. We note your disclosure that you have not “registered the shares for sale by the selling stockholders under the securities laws of any state.” Please revise the Risk Factors section on page 3 to include a risk factor discussing the lack of blue sky registration in any state and any resulting risks to investors.

COMPANY’S RESPONSE

We believe that disclosure in the last paragraph is not required to be included (and normally is not included) on the cover page of the prospectus. Accordingly, we have removed the last paragraph. However, since some states do have restrictions on the re-sale of shares, as requested by the Staff, we have added a new Risk Factor on page 16 of the preliminary prospectus.

Prospectus Summary, page 1

Overview, page 1

2. Please note that your disclosure regarding your business and current operations should accurately describe your current company. The description should not unduly focus on or disproportionately emphasize your future plans or aspirations. Please revise to provide a more detailed summary of your business and current operations. To the extent that you discuss future business plans here, such as your intentions to develop, manufacture and commercialize adoptive cell therapies or to conduct clinical trials, the discussion should be balanced with a brief discussion on the time frame for implementing future plans, the steps involved, the associated costs, and any obstacles involved before you can commence the planned operations. This includes the need for any additional financing. If additional financing may not be available, please clarify that.

COMPANY’S RESPONSE

The Company has expanded and revised the disclosure on pages 1 and 2 of the preliminary prospectus as requested to more accurately describe the Company’s current business, the status of its operations, its anticipated future capital needs, and to provide a more balanced discussion of the Company’s plans or aspirations. We believe the expanded disclosures are responsive to the Staff’s comments.

3. Please revise to disclose your revenue and net losses from (i) inception to December 31, 2012 (your audited period) and (ii) December 31, 2012 to September 30, 2013 (your unaudited interim period).

COMPANY’S RESPONSE

The Company has revised the discussions on page 2 of the preliminary prospectus to disclose the lack of revenues and the net losses that it has incurred.

4. Please revise to disclose that you are a development stage company and that your auditors have issued a going concern opinion on your audited financial statements and that your management has included going concern disclosure in Note 1 to your unaudited interim financial statements.

COMPANY'S RESPONSE

Page 2 of the preliminary prospectus has been revised to disclose the Company's status as a development stage company and to include the foregoing information regarding the going concern qualifications.

Risk Factors, page 3

5. Please revise the last two sentences of the introductory paragraph of this section to clarify that all known material risks are discussed in this section. This section should identify all known material risks and should not reference unknown or immaterial risks.

COMPANY'S RESPONSE

The introduction to the Risk Factors has been amended as requested to confirm that the Company has identified all currently known material risks. The Company has also confirmed to us that it does not believe that the Risk Factors section contain unknown or immaterial risks.

Business, page 17

Technology and Proposed Products; Regulatory Strategy, page 20

6. Please revise to discuss in greater detail your principle products (or product candidates), their development status, their interaction with your license agreement, cooperative research and development agreement and manufacturing services agreement, and your role in the development, manufacture and commercialization of these products versus other third parties' roles. To the extent that you discuss future business plans here, such as your intentions to develop, manufacture and commercialize adoptive cell therapies or to conduct clinical trials, the discussion should be balanced with a brief discussion on the time frame for implementing future plans, the steps involved, the associated costs, and any obstacles involved before you can commence the planned operations. Refer to Item 101 (h)(4) of Regulation S-K.

COMPANY'S RESPONSE

The Company has supplemented its disclosure on pages 19-21 under "Technology and Proposed Products; Regulatory Strategy" to discuss, in greater detail, its product candidates, the status of the product candidates, the interaction with the license agreement and CRADA, its future business plans, and the cost, steps and other information related to its plans.

7. We note your disclosure in the third paragraph that you need FDA approval to initiate a Phase 3 clinical trial related to the treatment of metastatic melanoma patients. Please revise to discuss the status of this FDA approval . Refer to Item 101(h)(4)(vii i) of Regulation S-K. In this regard, we would expect you to discuss the time frame for obtaining approval, the steps involved and the associated costs to obtain approval. Please also revise to provide comparable information for the proposed clinical trials discussed in the last sentence of the third paragraph.

COMPANY'S RESPONSE

The disclosure on pages 20-21 under “Technology and Proposed Products; Regulatory Strategy” has been supplemented with additional disclosures regarding the need for FDA approval, the status of such FDA proceedings, and the costs involved. In addition, the disclosures on pages 25-26 under “Government Regulation” have also been supplemented with information specifically addressing the FDA proceedings.

8. We note that clinical trials are only one step in the process to obtain FDA approval of a new product, whether an NDA or BLA, as discussed in the Government Regulations section on page 25. If true, please revise this section to clarify that you do not have any products that have been approved by the FDA for commercial sale. Please also revise to briefly balance the disclosure in this section by detailing the process necessary to obtain final FDA approval for a new product, whether an NDA or BLA, and the associated costs to obtain approval. Please also clarify whether you have the funding necessary to complete this process. Additionally, consider adding a cross reference to the Government Regulations section on page 25.

COMPANY'S RESPONSE

The Company has supplemented pages 20-21 as requested, has added a cross reference to “Government Regulation,” and has significantly supplemented the disclosures in pages 25 and 26 of the Preliminary Prospectus with the NDA and BLA information requested by the Staff, including cost and timing estimates.

9. Please revise this section to clearly detail the steps that have been completed with respect to your product candidate related to the treatment of metastatic melanoma patients. In this regard, please detail whether an IND has been completed, whether Phase I and Phase II clinical trials have been completed and discuss the status of your BLA . Please include enough detail so that investors can clearly understand the development status of your first product candidate.

COMPANY'S RESPONSE

Pages 20 and 25 have been supplemented to clarify that the Company does not have an IND. In addition, page 25 has been supplemented to discuss the reason why the Company does not believe that it will have to conduct Phase 1 and 2 trials. Pages 20-21 and 25-26 have been supplemented with the BLA disclosures and a description of the product development status as requested by the Staff.

10. Please confirm whether any of the selling stockholders are broker-dealers or are affiliates of broker-dealers. Alternatively, please revise your prospectus to include appropriate disclosure regarding any broker-dealers or affiliates of broker-dealers.

COMPANY'S RESPONSE

The introduction on page 58 under the heading "Relationships with Selling Stockholders" and the third paragraph thereunder have been amended to identify the selling stockholders who are known to be broker-dealers or affiliates of broker-dealers. Footnote (5) to the Selling Stockholders table also identifies the selling broker-dealers, and their affiliates, who received common stock purchase warrants in the private placement.

* * *

If you have any questions regarding this response, please direct them to the undersigned

Very truly yours,

/s/ Istvan Benko
Istvan Benko

IB/wp
M. Singh