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November 7, 2023

VIA EDGAR AND OVERNIGHT COURIER

Office of Life Sciences
Division of Corporation Finance
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549
Attention: Cindy Polynice
Joe McCann
Tracie Mariner
Angela Connell

Re: FibroBiologics, Inc.
Amendment No. 2 to Draft Registration Statement on Form S-1
Submitted October 13, 2023
CIK No. 0001958777

Ladies and Gentlemen:

This letter is submitted on behalf of FibroBiologics, Inc. (the "Company") in response to comments of the staff (the "Staff") of the U.S. Securities and Exchange Commission (the "Commission") with respect to the Company's Amendment No. 2 to Draft Registration Statement on Form S-1 confidentially submitted on October 13, 2023 (the "Draft Registration Statement"), as set forth in the Staff's letter dated October 27, 2023 (the "Comment Letter").

Set forth below are the Company's responses to the Staff's comments in the Comment Letter. For reference purposes, the text of the Staff's comments are reproduced in bold below, followed by the Company's response to the comment. The numbered paragraphs below correspond to the numbered comments in the Comment Letter.

Additionally, the Company is concurrently submitting a Registration Statement on Form S-1 (the "Registration Statement"), which reflects revisions in response to the Comment Letter and certain other updates. For the convenience of the Staff, we are also sending, by overnight courier, copies of this letter and copies of the Registration Statement, marked to show changes to the Draft Registration Statement as originally confidentially submitted.

Cover Page

1. We note your revised disclosure that upon the Direct Listing you will have 2,500 shares of Series C Preferred Stock with super-voting rights. Please advise whether you will be a controlled company under the Nasdaq rules. If so, please include appropriate disclosure on the prospectus cover page, in the Prospectus Summary, provide risk factor disclosure of this status and disclose the corporate governance exemptions available to a controlled company. To the extent you will be a controlled company, the cover page and Prospectus Summary disclosure should include the identity of your controlling stockholder, the amount of voting power the controlling stockholder will own following the completion of the offering and whether you intend to rely on any exemptions from the corporate governance requirements that are available to controlled companies.

Company Response: We will be a "controlled company" within the meaning of the listing rules of The Nasdaq Stock Market LLC after the Direct Listing. In response to the Staff's comment, the Company has included the requested controlled company disclosure in the Registration Statement.

Sale Price History of Our Capital Stock, page 121

2. Please revise your disclosure on page 121 to further clarify what is meant by a "loyalty, early-bird timing, amount based, and/or StartEngine owners bonus requirements" and tell us whether any of the bonus shares were issued for purposes of meeting the Nasdaq listing requirements and standards for the Direct Listing.

Company Response: In response to the Staff's comment, the Company has revised the referenced disclosure to further clarify what is meant by a "loyalty, early-bird timing, amount based, and/or StartEngine owners bonus requirements." None of the bonus hares were issued for the purpose of meeting the Nasdaq listing requirements and standards for the Direct Listing.

General

3. Please tell us the specific NASDAQ listing requirements and standards that you intend to rely on in order to list your shares on the Nasdaq Global Market and how you intend to meet those requirements and standards.

Company Response: The Company intends to rely on the Market Value Standard of the Nasdaq Global Market: Direct Listing Financial and Liquidity Requirements, which include the following requirements that we intend to meet or exceed at the time of our Direct Listing:

- Valuation based Market Value of Listed Securities \$150 million;
- Unrestricted Publicly Held Shares: 1.1 million;
- Valuation based Market Value of Unrestricted Publicly Held Shares of \$40 million;
- Valuation based Bid Price \$8;
- Unrestricted Round Lot Shareholders: 400; and
- Market Makers: 4.

Remainder of page intentionally blank. Signature page follows.

Should the Staff have additional questions or comments regarding this submission, please do not hesitate to contact the undersigned at (713) 651-5557 or brian.fenske@nortonrosefulbright.com.

Sincerely,

NORTON ROSE FULBRIGHT US LLP

/s/ Brian P. Fenske

Brian P. Fenske

Enclosure

cc: Pete O'Heeron, Chief Executive Officer Mark Andersen, Chief Financial Officer

Fibro Biologics, Inc.