



DIVISION OF
CORPORATION FINANCE

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

July 26, 2024

Christopher Furman
Chief Executive Officer
Vitro Biopharma, Inc.
3200 Cherry Creek Drive South, Suite 410
Denver, CO 80209

Re: Vitro Biopharma, Inc.
Amendment No. 9 to Registration Statement on Form S-1
Filed July 1, 2024
File No. 333-267366

Dear Christopher Furman:

We have reviewed your amended registration statement and have the following comments.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe a comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this letter, we may have additional comments.

Amendment No. 9 to Registration Statement on Form S-1

Cover Page

1. We note that you now intend to list your common stock on the NYSE American. However, you still refer to Nasdaq on pages 141, 146, 155, 159 and 166. Please revise your registration statement to update these references as appropriate.
2. You state that your common stock has been “approved” for listing on the NYSE American, subject to your satisfaction of NYSE American’s initial listing criteria, including completion of this offering, and that this offering is contingent upon the successful listing of your common stock on the NYSE American. Please revise your disclosure in this paragraph to refrain from stating that your common stock has been “approved” for listing on the NYSE American if you do not yet meet the initial listing criteria or otherwise advise. You may state, if true, that you have applied to list your common stock on the NYSE American.

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3. Please revise the prospectus cover page to also disclose the resale offering. Consistent with your disclosure on the cover page to the resale prospectus, please also disclose here that the Selling Stockholders in the resale offering may not commence the resale of their shares pursuant to the resale prospectus until after your primary offering closes and that the resale offering will not proceed if your common stock is not approved for listing on the NYSE American.
4. Please revise the cover page to briefly describe the Representative's Warrants referenced elsewhere in the prospectus.

Prospectus Summary

Our Resale Offering, page 8

5. Please revise your disclosure in this section to clarify that the registration of the resale offering is in addition to your primary offering and that it will not commence until your primary offering has closed. In this regard, we note your disclosure on page Alt-1 that the resale offering is contingent upon the closing of your initial public offering.

Note Transactions in 2022, 2023 and 2024, page 8

6. Please revise your disclosures to clarify whether this offering is considered to be a qualified financing under any of the notes described. Please also revise to clarify which of the shares underlying the convertible notes and associated warrants are being registered for resale pursuant to the resale prospectus.

The Offering, page 13

7. You state here that you currently intend to use approximately \$0.15 million of the net proceeds from this offering to advance the continued development of AlloRx Stem Cell therapy for Lupus (SLE), MS, and "additional programs within autoimmune disorders and inflammatory diseases." However, in your discussion of your use of proceeds on page 61, you do not reference the "additional programs." Please revise your disclosures for consistency or otherwise advise.

Risk Factors

Risks Related to Ownership of our Common Stock and this Offering

If our common stock is accepted for listing on the NYSE American...., page 52

8. You state here that you "intend" to apply for listing of your common stock on the NYSE American, and you describe associated risks that may rise "if" you are successful in obtaining the listing. You make a similar statement about your intent to apply for listing on page 162. In addition, we note disclosures on pages Alt-1 and Alt-17 that you "have applied" to list your common stock on the NYSE American. However, on the prospectus cover page, you state that your common stock has been "approved" for listing on the NYSE American and that this offering is contingent upon the successful listing of your common stock on the NYSE American. Please revise your disclosures as appropriate to correct these apparent inconsistencies and clarify whether you have already applied to list your common stock on the NYSE American.

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As a result of the restatement of our financial statements for the three and nine months ended July 31, 2022....., page 53

9. Please expand your disclosure of this risk factor to update your conclusion on the effectiveness of internal control over financial reporting as of October 31, 2023. Revise to discuss any efforts undertaken to remediate the material weakness identified in your internal control over financial reporting and the extent to which remediation has occurred.

Management, page 125

10. We note that you removed the compensation committee interlocks disclosure at the end of this section. Please revise your prospectus to include the disclosures required by Item 407(e)(4) of Regulation S-K. Refer to Item 11(l) of Form S-1.

Board Committees, page 129

11. When available, please revise to disclose the members of your audit committee, compensation committee and nominating and corporate governance committee.

Principal Stockholders, page 146

12. Please revise your beneficial ownership table to be as of the most recent practicable date. Refer to Item 403 of Regulation S-K.

Resale Prospectus Cover Page, page Alt-1

13. With reference to your fee table filed as Exhibit 107, please revise the resale prospectus cover page to reference the warrants being registered. Please clarify, if true, that there is no trading market for the warrants.

The Resale Offering, page Alt-17

14. We note your statement in the "Shares of common stock outstanding after this offering" row that the number of shares outstanding includes shares underlying warrants issued in connection with the notes and shares of common stock underlying pre-funded warrants. We further note your disclosure in footnote (2) to this table indicating that the number of shares outstanding calculation excludes shares of common stock underlying warrants associated with your Series Secured Notes and pre-funded warrants. Please tell us if the shares of common stock underlying these warrants and pre-funded warrants are in addition to the shares of common stock being registered pursuant to the resale prospectus. Alternatively, please revise your disclosure.

Selling Stockholders, page Alt-18

15. Please revise the footnotes to the table in this section to disclose any material relationships between you, on the one hand, and any of the selling stockholders, on the other. In this regard, we note your disclosure on page 10 regarding your consulting agreement with Alchemy and your disclosure on page 125 that Anthony Pearl will become one of your directors upon the listing of your common stock on the NYSE American. For guidance, please refer to Item 507 of Regulation S-K.

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Selling Stockholder Plan of Distribution, page Alt-20

16. We note your disclosures that broker-dealers may agree with the Selling Stockholders to sell a specified number of shares at a stipulated price per share, that broker-dealers may receive commissions or discounts from the Selling Stockholders and that any profits on the resale of shares of common stock by a broker-dealer acting as principal might be deemed to be underwriting discounts or commissions. We further note your statement that if you are notified by any Selling Stockholder that any material arrangement has been entered into with a broker-dealer for the sale of shares of his, her or its common stock, you will file a supplement to this prospectus if required. Please confirm your understanding that the retention by a Selling Stockholder of an underwriter would constitute a material change to your plan of distribution requiring a post-effective amendment and revise your disclosure in this section accordingly. Refer to your undertaking provided pursuant to Item 512(a)(1)(iii) of Regulation S-K.

General

17. We refer to your explanatory note regarding the two prospectuses for the primary and secondary offering as well as your registration statement cover page, which appears to indicate that the resale offering will be made pursuant to Rule 415. Please provide us with an analysis explaining your basis for determining that Target Capital 16, LLC, Alchemy Advisory LLC and the Anthony J. Pearl Trust are eligible to participate in a resale offering to be made under Rule 415(a)(1)(i). In your response, consider the guidance provided in Question 612.09 of the Securities Act Rules Compliance and Disclosure Interpretations, available on our website

Please contact Tracie Mariner at 202-551-3744 or Kevin Vaughn at 202-551-3494 if you have questions regarding comments on the financial statements and related matters. Please contact Jessica Dickerson at 202-551-8013 or Alan Campbell at 202-551-4224 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Ross Carmel, Esq.