



DIVISION OF
CORPORATION FINANCE

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

August 20, 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. 10 to Registration Statement on Form S-1
Filed August 8, 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. Unless we note otherwise, any references to prior comments are to comments in our July 26, 2024 letter.

Amendment No. 10 to Registration Statement Form S-1 Filed August 8, 2024

Prospectus Summary

Note Transactions in 2022, 2023 and 2024, page 8

1. We note your response to prior comment 6, including your revised disclosures on pages 10, Alt-1, Alt-13, and Alt-19 providing additional detail about the securities that are covered by the resale prospectus. In these revised disclosures, you refer to "the Consolidated Note in the principal amount of \$4,150,000." However, other disclosures in your prospectus indicate that the Consolidated Note has an aggregate principal amount of \$4,125,000. Please reconcile your disclosures or advise.
2. Please further revise this section to disclose how you determined the number of shares underlying the Consolidated Note. For example, we note your disclosure that 984,848 shares are issuable upon conversion of \$1,625,000 in principal amount of the Consolidated Note pursuant to an optional conversion feature under the note, equal to

200% of the shares issuable at an assumed conversion price of \$3.30. However, we do not see any discussion of this optional conversion feature and it is unclear why the number of shares being registered is equal to 200% of the shares issuable.

3. Please further revise to clarify when the shares issuable upon conversion of the Consolidated Note will be issued and whether interest will continue accruing on the note after the closing of your primary offering. In this regard, we note from your disclosures that the Consolidated Note is convertible commencing on the maturity date, which appears to be October 16, 2024 or, at your election, November 16, 2024, except that the maturity date will automatically be extended to 180 days from closing of your primary offering if such offering closes on or before October 16, 2024 or November 16, 2024, as applicable. To the extent that the beneficial ownership limitation will require Target Capital 16 LLC to sell significant quantities of your common stock on or prior to the maturity date of the Consolidated Note, please discuss whether these sales could exert downward pressure on your stock price.
4. Please revise this section to clarify if the default referenced on page 18 has caused or will cause you to default on any of your other notes.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Liquidity and Capital Resources, page 74

5. Please update your discussion of liquidity and capital resources to the most recent practicable date, including the letter agreement entered into on July 16, 2024, as disclosed on page 10, and debt outstanding in default, as disclosed on page 18. Please also clarify if the debt default has caused you, or will cause you, to default on any of your other outstanding indebtedness.

The Resale Offering, page Alt-17

6. Please update the numbers in this section to reflect the increase in the number of shares being registered for resale.
7. Please revise your disclosure in the first bullet point on page Alt-18 to clarify what "1,276,342" represents at the end of the bullet point.

General

8. We note your response to prior comment 17. Given, among other things, the pricing protection of the convertible notes, the size of the investment, and the affiliate status of the selling stockholders, please revise the registration statement to identify Target Capital 16, LLC and Alchemy Advisory LLC as underwriters and state that they will resell their shares at a fixed price.

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.

August 20, 2024

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Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Ross Carmel, Esq.