



DIVISION OF
CORPORATION FINANCE

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

July 11, 2023

Christopher Furman
Chief Executive Officer
Vitro Biopharma, Inc.
3200 Cherry Creek Drive South
Suite 720
Denver, CO 80209

Re: Vitro Biopharma, Inc.
Amendment No. 4 to Registration Statement on Form S-1
Filed June 29, 2023
File No. 333-267366

Dear Christopher Furman:

We have reviewed your amended registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply 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 these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our June 12, 2023 letter.

Amendment No. 4 to Registration Statement on Form S-1, filed June 29, 2023

Reverse Stock Split, page iv

1. We note that on June 23, 2023, your Board of Directors approved a reverse split of your issued and outstanding common stock at a ratio of 1 share for 26 shares and a reduction of the number of shares of your authorized common stock by the same ratio, which you anticipate will become effective on or about June 30, 2023, prior to the closing of your offering. Please revise to reflect the reverse split in your historical financial information in accordance with SAB Topic 4:C, or tell us why you believe this guidance does not apply in your case.

Risk Factors, page 14

2. Please address the following regarding your stock compensation disclosures in general as well as your disclosure on page 50 that "it was recently discovered that three 2022 stock option grants were inadvertently incorrectly documented and initially recorded by us with an exercise price per share below what then may have been determined to be the estimated fair market value of the underlying shares of common stock (the exercise prices have since been increased and properly recorded without any material impact on our financial statements), which would have violated the terms of the 2022 Plan and the Board's authorization for such grants."
- Tell us why your response to comment nine from our letter to the Company dated October 6, 2022 and the Recent Sales of Unregistered Securities section on page 172 do not address the modifications made to these option grants.
 - Tell us the nature of the modification and how it was accounted for, including quantification of the amounts involved.
 - Tell us the date the documentation issues were identified.
 - Revise your discussion of relative fair values used in valuing your common stock for stock compensation purposes on page 78 to provide quantification of the amounts involved, including the per share valuations used as well as the amount of compensation expense recorded during the periods presented.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Comparison of the Three Months Ended April 30, 2023 to the Three Months Ended April 30,
2022, page 69

3. You disclose on page 70 that research and development product sales decreased by \$409,782 or 84% for the three months ended April 30, 2023 compared to the prior period. You also disclose that sales of AlloRx Stem Cells decreased by \$225,279 or 58% for the same periods. Revise this section as well as your section covering the six month periods ended April 30, 2023 and 2022 to more clearly identify the underlying reasons and trends that led to the diminished sales volumes you experienced.

You may 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 Joshua Gorsky at 202-551-7836 or Joe McCann at 202-551-6262 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: Tyler L. Weigel