



DIVISION OF
CORPORATION FINANCE

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

November 17, 2022

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

Re: Vitro Biopharma, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed on November 2, 2022
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 October 6, 2022 letter.

Amendment No. 1 to Form S-1 filed November 3, 2022

Cover Page

1. Please revise your cover page to indicate whether your offering is contingent on final approval of your listing on NYSE American.

Summary, page 1

2. Please revise your summary to focus on your product candidates and your operations. Please move the discussion of studies conducted by other parties to the Business section. To the extent that you have included comparisons to other products, please confirm that the cited studies included head to head comparisons. If they did not, then remove any

discussions comparing your product candidates to other products or product candidates. The descriptions of trial results should be limited to objective observations. For example, rather than indicating that the UC-derived MSCs exhibited the highest proliferation rate and higher concentrations of immunomodulatory substances, disclose the observed rates and concentrations for UC-derived MSCs, AD-MSCs and PL-MSCs; and rather than indicating that you observed the highest IDO activity in UC-derived MCSs as compared to the other MSCs explain how you measured such activity and objectively describe your observations.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Comparison of the Years Ended October 31, 2021 and 2020

Cost of Goods Sold, page 55

3. Please refer to our prior comment 7. Reconcile your disclosure on page 55 that indicates that the inventory write-off is due to the fact that you were not able to complete an inventory with your disclosure on page F-13 that indicates that you periodically review the value of items in inventory and provide write-downs or write-offs of inventory based on your assessment of market conditions. Further, explain why the inability to complete a physical count of inventory resulted in a write-off of inventory and how you were able to determine the amount of the inventory write-off.

Consulting Revenue, page 55

4. Your disclosure indicates that your Consulting Revenue is related to your European Wellness contract and you recognized \$0 in consulting revenue in fiscal 2021. Your discussion of the increase in Costs of Goods Sold that follows attributes the increase to consulting revenue recorded in 2021. Please revise your disclosure to address this apparent inconsistency and to also quantify and discuss the consulting revenue related to Fitore.

Comparison of the Three and Nine Months Ended July 31 2022 to the Three and Nine Months Ended July 31, 2021

Consulting Revenue, page 56

5. Revise to disclose what milestones were met during the period. We note your disclosure on page 82 that you are currently in the early stage of identification and potential development of any key investigational product candidate.

Our Strategy, page 66

6. We note your response to comment 10 and your disclosure on page 67. Despite your references to "collaborative relationships" the expected agreements appear to be limited to service agreements for the performance of clinical trials and supply agreements. Please revise to clarify that these relationships do not involve the types of arrangements whereby you would share the risks and rewards with a collaborative

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partner. Alternatively, revise the disclosure to clarify the types of collaborative arrangements you expect to enter into, including a discussion of the role a collaborative partner may take in the development of your product candidates.

Preliminary Tolerability from Foreign Clinical Studies, page 73

7. We note your disclosure that you receive data related to the occurrence of serious adverse events. To the extent that there have been any serious adverse events related to treatment with AlloRx Stem Cells, please describe the events and disclose the number of incidents.

Notes to the Consolidated Financial Statements, page F-9

8. Please refer to our prior comment 16. In light of the significance of your research and development contract with European Wellness, revise to include a separate footnote to discuss the significant terms of the contract including what your obligations are under the contract, what payments you have received under the contract, what milestones you have reached, future milestones and payments, how you classify expenses incurred under the contract, termination rights, etc.

Note 4. Acquisitions, page F-14

9. Please refer to our prior comment 18. Please tell us how you considered whether to reflect the termination of the Fitore business in your pro forma income statement on page F-2, citing the applicable guidance on which you relied.

Revenue Recognition, page F-34

10. Revise your revenue recognition policy here and on page 61 to include your revenue recognition policy regarding milestone payments under your long term contract, including at what point the related revenue is recognized.

You may contact Julie Sherman at 202-551-3640 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 Suzanne Hayes at 202-551-3675 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Life Sciences

cc: David J. Babiarz