



DIVISION OF
CORPORATION FINANCE

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

May 10, 2022

Maria Zannes
Chief Executive Officer
bioAffinity Technologies, Inc.
22211 W Interstate 10
Suite 1206
San Antonio, Texas 78257

Re: bioAffinity Technologies, Inc.
Registration Statement on Form S-1
Filed April 25, 2022
File No. 333-264463

Dear Ms. Zannes:

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 March 15, 2022 letter.

Registration Statement on Form S-1 Filed April 25, 2022

Underwriters' Compensation, page 10

1. We note your amended disclosure in response to comment 11, including that "if more than twenty-five percent (25.0%) of the shares offered hereby are sold to existing investors in the Company, then the cash fee to the underwriters will be reduced to four percent (4.0%) of the aggregate gross proceeds from the existing investors." Please amend your disclosure to clarify whether any of your current shareholders have indicated an interest in purchasing shares in the offering, and if so, disclose the estimated percentage of the offering these shareholders currently intend to purchase.

Capitalization, page 44

2. Please revise to place a double line below the cash line in the tabular disclosure.

Business, page 54

3. We note your revised disclosure in response to our prior comment 16. Please further revise to disclose the termination provisions of the Company's agreement with GO2 Partners. Please also discuss the material terms of your licensing agreement with Precision Pathology Services, including any revenue sharing terms related to Precision Pathology Services' sales of your tests. Finally, please file the licensing agreement as an exhibit to your registration statement, or tell us why you believe you are not required to do so.

Certain Relationships and Related Party Transactions, page 97

4. We note you have revised this section to cover the period since January 1, 2021. Please revise to also include disclosure with respect to the fiscal year preceding the company's last fiscal year. Refer to Instruction 2 to Item 404(d) of Regulation S-K.

Description of Securities, page 98

5. Please include in this section a description of the exclusive forum provision mentioned in your risk factor on page 41.

Notes to Consolidated Financial Statements

Note 7. Fair Value Measurements, page F-14

6. Please revise to include a reconciliation from the opening balances to the closing balances, disclosing separately changes during the periods presented in accordance with ASC 820-10-50-2(c).

General

7. We note your response to our prior comment 6 and reissue our comment. Please ensure that where you present data from your clinical trials and test validation trials throughout your filing, you include a balanced description of each clinical trial, including the number of participants in the trial, length of the trial and number of follow ups, and specify the test data used. In this regard, we note your reference to many test validation trials throughout your filing, as well as the CyPath Lung Studies and Clinical Trials chart on page 59, but it is not clear which trial you are discussing in each instance, and the disclosure in each instance does not consistently address the number of participants in the trial, length of the trial and number of follow-ups, and test data used.
8. It appears from your filing fee table that you are registering warrants to purchase a number of securities equal to 8% of the shares of Common Stock sold in this offering at an exercise price equal to 115% of the public offering price per share. Please tell us if these are the warrants issued in connection with the Bridge Notes referenced on page F-20, and

Maria Zannes
bioAffinity Technologies, Inc.
May 10, 2022
Page 3

if so, please revise your registration statement to reflect the fact that such warrants will be offered for resale. If not, please more specifically identify the warrants being registered.

You may contact Stephen Kim at 202-551-3291 or Theresa Brilliant at 202-551-3307 if you have questions regarding comments on the financial statements and related matters. Please contact Taylor Beech at 202-551-4515 or Katherine Bagley at 202-551-2545 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Trade & Services

cc: Wilhelm E. Liebmann, Esq.