

June 16, 2022

U.S. Securities and Exchange Commission Division of Corporate Finance Office of Trade & Services 100 F Street, N.E. Washington, D.C. 20549

Attention: Taylor Beech and Lilyanna Peyser

Re: bioAffinity Technologies, Inc. Registration Statement on Form S-1/A

> Filed May 25, 2022 File No. 333-264463

Dear Ms. Beech and Ms. Peyser:

Dykema Gossett PLLC Weston Centre 112 E. Pecan Street, Suite 1800 San Antonio, TX 78205

www.dykema.com Tel: (210) 554-5500

Wilhelm E. Liebmann Direct Dial: (210) 554-5414 Email: WLiebmann@dykema.com

VIA EDGAR

This response letter (this "Response") is submitted on behalf of bioAffinity Technologies, Inc. (the 'Company') in response to the comments that the Company received from the staff of the Division of Corporation Finance (the "Staff") of the U.S. Securities and Exchange Commission (the 'SEC") in a letter addressed to Ms. Maria Zannes, dated June 8, 2022 (the "Comment Letter"), with respect to the Company's amended registration statement on Form S-1/A, filed with the SEC on May 25, 2022 (the "Registration Statement"). The Company is concurrently submitting an amendment to the Registration Statement (the "Amendment No. 2"), which reflects the changes discussed as part of the Company's responses to the Staff's comments in this Response and other updates.

For reference purposes, the Company's responses are included below each of the Staff's bolded numbered comments, the text of which have been reproduced from the Comment Letter. All capitalized terms used but not defined in this Response have the meanings ascribed to them in the Amendment No. 2.

The responses below are based on information provided to Dykema Gossett PLLC by the Company.

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Amendment No.1 to Registration Statement on Form S-1 Filed May 25, 2022 Cover Page

1. We note your disclosure on page 10 that certain of your current stockholders have indicated an interest in purchasing approximately 10% of the units in this offering. Please include such disclosure on your prospectus cover and identify your current stockholders and their affiliated entities that have indicated an interest in purchasing securities in this offering. If your current stockholders and/or their affiliated entities are reflected in the beneficial ownership table on page 96, please disclose under the Principal Stockholders section the expected percentage ownership if the stockholder does purchase units in this offering as their indication of interest reflects. Additionally, please tell us whether these indications of interest could result in a stockholder that is not currently included in the table on page 96 beneficially owning more than 5% of your outstanding shares following the offering. Lastly, disclose whether there is a ceiling on the amount that may be purchased by your current stockholders and quantify any ceiling. If not, please disclose the potential material impact on public investors.

RESPONSE: The Company has revised the Registration Statement to add disclosure on the cover page of the prospectus identifying its current stockholders and/or their affiliates that have indicated an interest in purchasing securities in the offering. A table identifying each of the 14 existing stockholders that have indicated an interest in purchasing securities in the offering and the number of units they have indicated an interest in purchasing follows below. Six of those current stockholders or their affiliates are listed in the beneficial ownership table on page 96 of Amendment No. 2, and the Company has revised the beneficial ownership table to reflect the expected percentage ownership assuming such stockholder purchases units in this offering as their current indication of interest reflects. It is not anticipated that the purchase of securities in this offering by any other existing stockholders or their affiliates will result in any of them beneficially owning more than 5% of the Company's outstanding shares following the offering thereby necessitating that they be added to the beneficial ownership table. The Company hereby advises the Staff that there is no ceiling on the amount of securities that may be purchased by any of the Company's current stockholders. The Company does not anticipate that there will be any material impact on public investors as a result of the purchases of securities by existing investors.

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Name of Existing Stockholder	# of Units of Indicated Interest	% of Total Offering
Anderson, Robert	3,704	0.25%
Anello, Beth	3,704	0.25%
Barnett, Robert	7,408	0.49%
Cantor, Steven	3,704	0.25%
Diamond, Stuart	3,704	0.25%
Girgenti, Brian	2,222	0.15%
Girgenti, David	3,704	0.25%
Girgenti, Steven	37,037	2.47%
Goldstein, Alanna	1,481	0.10%
Goldstein, Lawrence	1,481	0.10%
Knight, Peter	7,408	0.49%
Kolomer, Brenna	1,481	0.10%
The Harvey Sandler Revocable Trust	14,814	0.99%
Zannes, Maria	7,408	0.49%
Total	99,260	6.62%

The Offering

Reverse Stock Split, page 11

2. Based on your disclosure on page 99, it appears you intend to effect a one-for-seven reverse stock split of your issued and outstanding common stock prior to the effectiveness of this registration statement. Please revise your historical financial statements along with relevant financial statement data appearing elsewhere in your filing to give retrospective effect to the stock split that you expect to occur prior to the effectiveness of this registration statement. Refer to ASC 505-10-S99-4 (SAB Topic 4:C) for guidance.

RESPONSE: The Company has revised its historical financial statements and other relevant financial statement data in the Registration Statement to give retrospective effect to the reverse stock split that is expected to occur prior to the effectiveness of the Registration Statement. Please see pages 12, F-2, F-4, F-9, F-16, F-17, F-20, F-22, F-27, F-33, F-34, F-35, F-36, F-37, and F-38 in Amendment No. 2.

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Risk Factors

The warrant certificate..., page 37

3. Your disclosure indicates that the warrant certificate applies to Securities Act claims, but not to Exchange Act claims, however the warrant agreement is silent as to such regulations. Please revise the warrant agreement to address the Securities Act and Exchange Act in this regard, or tell us how you will inform investors of these terms in future filings.

RESPONSE: The Company has revised this disclosure in the Registration Statement to clarify that the exclusive forum provision does not apply to Exchange Act claims. Please see page 37 of Amendment No. 2. The Company has also revised the warrant certificate to expressly state that the exclusive forum provision does not apply to claims under the Exchange Act. Please see Exhibit 4.6 to Amendment No. 2. We note that the existing risk factor disclosure already states that there is uncertainty about the enforceability of the exclusive forum provision with respect to claims brought under the Securities Act.

Dilution, page 45

- 4. Please address the following:
 - Tell us how you calculated your historical net tangible book deficit as of March 31, 2022 of \$(12.7) million. In this regard, it appears capitalized deferred offering costs are still included in this net tangible book deficit.

RESPONSE: The Company previously calculated the historical net tangible book deficit as the total assets of the Company, excluding intangibles, of \$1,353,015, less total liabilities of \$14,033,044, for a total historical net tangible book value of \$(12,680,029). The Company has revised the Registration Statement to exclude the amount of capitalized deferred offering costs from net tangible book deficit.

• Tell us how you calculated the pro forma as adjusted net tangible book value as of March 31, 2022 of \$8.6 million. In this regard, it appears that the amount of increase in the pro forma as adjusted net tangible book value is much greater than the anticipated total proceeds of the offering of \$10.1 million.

RESPONSE: The approximately \$25.3 million increase in the pro forma as adjusted net tangible book value from the starting value of approximately (\$17.0) million to approximately \$8.3 million is the result of (i) the estimated approximately \$8.2 million in net proceeds raised in this offering (\$10 million gross less underwriters fees of approximately \$0.9 million), and (ii) the conversion of approximately \$17.0 million in convertible preferred stock, convertible debt, accrued interest, debt discount, and fair value adjustments upon the completion of this offering.

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• Reconcile the difference between the number of shares of your common stock outstanding as of March 31, 2022 of 2,727,590 as disclosed on page 45, and shares purchased by existing shareholders of 5,995,206 in the tabular disclosure on page 46.

RESPONSE: The difference between the number of shares of the Company's Common Stock outstanding as of March 31, 2022 of 2,727,590 as disclosed on page 45 of Amendment No.2, and shares purchased by existing stockholders of 5,995,206 in the tabular disclosure on page 46 of Amendment No. 2 is that the share amount of 2,727,590 on page 45 reflects only common shares outstanding as of March 31, 2022, and the share amount of 5,995,206 includes the outstanding common shares plus 756,558 shares issuable upon the automatic conversion of the Company's outstanding Series A Preferred Stock and 2,511,058* shares issuable upon the automatic conversion of the Company's outstanding Convertible notes upon completion of the Offering (2,727,590 + 756,558 + 2,511,058 = 5,995,206).

* Note that this amount increases daily as interest continues to accrue on the outstanding convertible notes through the date of conversion.

Description of Securities

Anti-Takeover Effects of Delaware Law and Provisions of Our A&R Charter and A&R Bylaws Provisions of Our A&R Charter and A&R Bylaws, page 103

5. We note that Section 13 of your Form of Amended and Restated Certificate of Incorporation filed as Exhibit 3.3 and Section 2.13 of your Form of Amended and Restated Bylaws filed as Exhibit 3.6 provide that stockholders are not permitted to act by written consent. We also note the advance notice provisions for stockholder proposals in Section 2.12 of your Form of Amended and Restated Bylaws. Please include a description of these provisions in this section.

RESPONSE: The Company has revised its disclosure in the Registration Statement to include a description of the prohibition of stockholder action by written consent set forth in the Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws and the advance notice provisions for stockholder nominations and proposals in the Amended and Restated Bylaws. Please see page 104 of Amendment No. 2.

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Exclusive Forum, page 104

6. Please revise your disclosure here and in your risk factor on page 41 to state whether the exclusive forum provision in your Amended and Restated Certificate of Incorporation applies to claims arising under the Exchange Act. In this regard, we note that Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. Please also include in your disclosure a description of the exclusive forum provision in the Amended and Restated Bylaws. Given that the Amended and Restated Charter does not discuss the applicability of the exclusive forum provision to claims under the Exchange Act or Exchange Act and that the Amended and Restated Bylaws do not discuss the applicability of the exclusive forum provision to claims under the Exchange Act, please revise those documents to address the Securities Act and Exchange Act in this regard, or tell us how you will inform investors of these terms in future filings. Please also include a description in this section of the exclusive forum provision contained in your Form of Common Stock Purchase Warrant and referenced in the risk factor on page 37.

RESPONSE: The Company has revised this disclosure and the related risk factor disclosure to state that the exclusive forum provisions in both the Company's Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws do not apply to claims arising under the Exchange Act. Please see pages 41 and 104 in Amendment No. 2. The Company has also revised both its Amended and Restated Charter and Amended and Restated Bylaws to specifically address the applicability of the exclusive forum provisions to claims under the Securities Act and the Exchange Act. Please see Exhibit 3.3 and Exhibit 3.6 to Amendment No. 2. The Company has also revised the Registration Statement to include a description in this section of the exclusive forum provision contained in the Form of Common Stock Purchase Warrant and referenced in the risk factor on page 37. Please see page 100 of Amendment No. 2.

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Thank you for your review and consideration of the matters set forth in this Response and in the Amendment No. 2. If you have any questions, please contact the undersigned at (210) 554-5414 or wliebmann@dykema.com.

Sincerely,

/s/ Wilhelm E. Liebmann
Wilhelm E. Liebmann, Esq.

Maria Zannes Chief Executive Officer bioAffinity Technologies, Inc. cc:

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