

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

**Amendment No. 4
to
FORM S-1**
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

bioAffinity Technologies, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

8731

(Primary Standard Industrial
Classification Code Number)

46-5211056

(I.R.S. Employer
Identification Number)

**22211 W Interstate 10
Suite 1206
San Antonio, Texas 78257
210-698-5334**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Maria Zannes
Chief Executive Officer
22211 W Interstate 10
Suite 1206
San Antonio, Texas 78257
210-698-5334**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

**Wilhelm E. Liebmann, Esq.
Dykema Gossett PLLC
112 E. Pecan Street
Suite 1800
San Antonio, Texas 78205
(210) 554-5414**

**Ross David Carmel, Esq.
Carmel, Milazzo & Feil LLP
55 West 39th Street
18th Floor
New York, New York 10018
(212) 658-0458**

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

bioAffinity Technologies, Inc. is filing this amendment (this “*Amendment No. 4*”) to its registration statement on Form S-1 (File No. 333-264463) as an exhibits-only filing. Accordingly, this Amendment No. 4 consists only of the facing page, this explanatory note, Item 16(a) of Part II of the registration statement, the signature page to the registration statement, and the filed exhibits. The remainder of the registration statement is unchanged and has therefore been omitted.

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits

EXHIBIT INDEX

Exhibit Number	Description
1.1*	Form of Underwriting Agreement.
3.1*	Amended and Restated Certificate of Incorporation of Registrant, as currently in effect.
3.2*	Certificate of Amendment to the Certificate of Incorporation of Registrant, as filed with the Delaware Secretary of State on June 23, 2022 in order to effectuate the 1-for-7 reverse stock split prior to the completion of this Offering.
3.3*	Form of Amended and Restated Certificate of Incorporation of the Registrant, to be in effect immediately prior to the completion of this Offering.
3.4*	Certificate of Designation of Series A Convertible Preferred Stock of the Registrant dated July 13, 2017, as currently in effect.
3.5*	Bylaws of the Registrant, as currently in effect.
3.6*	Form of Amended and Restated Bylaws of Registrant, to be in effect immediately prior to completion of the Offering.
4.1*	Form of Registrant’s Common Stock Certificate.
4.2*	Common Stock Purchase Warrant issued to San Antonio Economic Development Corporation dated March 17, 2017.
4.3*	Form of Common Stock Purchase Warrant issued to Holders of the Registrant’s Convertible Promissory Notes.
4.4*	Form of Placement Agent’s Warrant to be issued to WallachBeth Capital, LLC.
4.5*	Form of Representative’s Warrant to be issued to WallachBeth Capital, LLC pursuant to the Underwriting Agreement.
4.6*	Form of (Tradeable) Common Stock Purchase Warrant to be issued as part of the Units to be sold in the Offering pursuant to the Underwriting Agreement.
4.7*	Form of Warrant Agent Agreement for the Warrants to be issued as part of the Units to be sold in the Offering.
4.8*	Secured Convertible Note Purchase Agreement dated December 21, 2018, as amended to date.
4.9*	Form of Secured Convertible Promissory Note of Registrant used in private offerings from December 2018 to July 2020.
4.10*	Form of Unsecured Convertible Promissory Note of the Registrant used in private offerings from October 2020 to August 2021.
4.11*	Form of Convertible Promissory Note of the Registrant used in private offerings from October 2021 to January 2022.
4.12*	Form of Amendment to Unsecured Convertible Promissory Note of the Registrant to extend the maturity date to October 31, 2022.
4.13*	Form of Amendment to Convertible Promissory Note of the Registrant to extend the maturity date to October 31, 2022.
4.14*	Form of Note Extension Common Stock Purchase Warrant issued to holders of the Registrant’s Convertible Promissory Notes as consideration to extend the maturity date to October 31, 2022.
4.15*	Form of (Non-tradeable) Common Stock Purchase Warrant to be issued as part of the Units to be sold in the Offering pursuant to the Underwriting Agreement.
5.1**	Opinion of Dykema Gossett, PLLC.
10.1*	2014 Equity Incentive Plan of Registrant, as amended.
10.2+*	Executive Chairman Employment Agreement dated January 1, 2020, by and between Registrant and Steven Girgenti, as amended.
10.3+*	Employment Agreement dated February 1, 2015, by and between Registrant and Maria Zannes.
10.4+*	Employment Agreement dated April 4, 2016, by and between Registrant and Vivienne Rebel, as amended.
10.5+*	Employment Agreement dated February 1, 2015, by and between Registrant and Timothy Zannes.
10.6+*	Consulting Agreement dated May 25, 2017, by and between Registrant and Michael Edwards, as amended.

- 10.7* [License Agreement to Participate in the UTSA New Venture Incubator Program dated June 15, 2015, by and between Registrant and the University of Texas at San Antonio.](#)
- 10.8* [Joint Development Agreement dated October 1, 2018, by and between the Registrant and Village Oaks Pathology Services, P.A. d/b/a Precision Pathology Services.](#)
- 10.9* [Agreement dated October 17, 2020, by and between Registrant and GO2 Partners.](#)
- 10.10* [Form of Note Purchase Agreement used by the Registrant in its private offering of Convertible Promissory Notes issued between October 2021 and January 2022.](#)
- 14.1* [Code of Business Conduct of the Registrant.](#)
- 16.1* [Letter re Change in Certifying Accountant from Ernst & Young dated July 27, 2022.](#)
- 21.1* [List of Subsidiaries of the Registrant.](#)
- 23.1** [Consent of Dykema Gossett, PLLC \(included in Exhibit 5.1\).](#)
- 23.2* [Consent of Ernst & Young, independent registered public accounting firm.](#)
- 23.3* [Consent of WithumSmith+Brown, PC, independent registered public accounting firm.](#)
- 24.1* [Power of Attorney \(filed as an exhibit to the Company's Registration Statement on Form S-1 filed on April 25, 2022, and incorporated by reference herein\).](#)
- 107** [Amended and Restated Filing Fee Table.](#)

* Previously filed.

** Filed herewith.

+ Indicates management contract or compensatory plan.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of San Antonio, Texas, on August 2, 2022.

bioAffinity Technologies, Inc.

By: /s/ Maria Zannes

Maria Zannes

Chief Executive Officer, President, Founder, and Director

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Maria Zannes</u> Maria Zannes	Founder, President, Chief Executive Officer, and Director (Principal Executive Officer)	August 2, 2022
<u>/s/ Michael Edwards</u> Michael Edwards	Chief Financial Officer	August 2, 2022
<u>/s/ Steven Girgenti*</u> Steven Girgenti	Founder, Executive Chairman, and Director	August 2, 2022
<u>/s/ Robert Anderson*</u> Robert Anderson	Director	August 2, 2022
<u>/s/ Stuart Diamond*</u> Stuart Diamond	Director	August 2, 2022
<u>/s/ Peter S. Knight*</u> Peter S. Knight	Director	August 2, 2022
<u>/s/ Mohsin Meghji*</u> Mohsin Meghji	Director	August 2, 2022
<u>/s/ Gary Rubin*</u> Gary Rubin	Director	August 2, 2022

*By: /s/ Maria Zannes
Attorney-in-Fact

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Dykema Gossett PLLC
 Weston Centre
 112 E. Pecan Street, Suite 1800
 San Antonio, TX 78205
 www.dykema.com
 Tel: (210) 554-5500
 Fax: (210) 226-8395

August 2, 2022

bioAffinity Technologies, Inc.
 22211 W Interstate 10, Suite 1206
 San Antonio, Texas 78257

Gentlepersons:

We have acted as legal counsel to bioAffinity Technologies, Inc., a Delaware corporation (the "Company"), in connection with the filing by the Company of a Registration Statement (File No. 333-264463) on Form S-1, as amended by Amendments Nos. 1, 2, 3, and 4 thereto (the "Registration Statement") with the Securities and Exchange Commission (the "Commission"), including a related prospectus included in the Registration Statement (the "Prospectus"), covering an underwritten public offering of (i) up to 1,180,000 Units (the "Units"), each Unit consisting of (a) one share of common stock of the Company, par value \$0.007 per share ("Common Stock"), (b) one tradeable warrant (a "Tradeable Warrant") exercisable for the purchase of one share of Common Stock, and (c) one non-tradeable warrant (a "Non-tradeable Warrant"; together with each Tradeable Warrant, the "Warrants") exercisable for the purchase of one share of Common Stock; (ii) a warrant to purchase up to 23,600 shares of Common Stock (the "Representative's Warrant"); (iii) a warrant to purchase up to 29,464 shares of Common Stock (the "Placement Agent's Warrant"); and (iv) up to an additional 177,000 shares of Common Stock (the "Option Shares"), up to 177,000 Tradeable Warrants (the "Option Tradeable Warrants"), and up to 177,000 Non-tradeable Warrants (the "Option Non-tradeable Warrants," and together with the Option Tradeable Warrants, the "Option Warrants"), any or all of which may be sold pursuant to the exercise of an over-allotment option granted to the underwriters.

In connection with this opinion, we have: (i) examined and relied upon (a) the Registration Statement and the Prospectus, (b) the Company's Certificate of Incorporation, as amended, and Amended and Restated Bylaws, each as currently in effect, (c) the forms of the Company's Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, filed as Exhibits 3.3 and 3.6 to the Registration Statement, respectively, each of which is to be in effect prior to the closing of the offering contemplated by the Registration Statement, and (d) originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below, including without limitation, the forms of Tradeable Warrant, Non-tradeable Warrant, Representative's Warrant, Placement Agent's Warrant and underwriting agreement most recently filed as exhibits to the Registration Statement; and (ii) assumed that (a) the Common Stock will be sold at a price established by the Board of Directors of the Company or a duly authorized committee thereof, and (b) the Amended and Restated Certificate of Incorporation referred to in clause (i)(c) is filed with the Secretary of State of the State of Delaware before issuance of the Common Stock.

We have assumed the genuineness of all signatures, and the legal capacity of all signatories, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies, the accuracy, completeness and authenticity of certificates of public officials; and the due authorization, execution and delivery of all documents by all persons other than by the Company where authorization, execution and delivery are prerequisites to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

California | Illinois | Michigan | Minnesota | Texas | Washington, D.C. | Wisconsin

WallachBeth Capital, LLC
 August 2, 2022
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Based upon the foregoing and subject to the qualifications and assumptions stated herein, we are of the opinion that:

- Units.** When the Registration Statement becomes effective and when the offering is completed as contemplated by the Registration Statement and Prospectus and according to the form of underwriting agreement most recently filed as an exhibit to the Registration Statement, the Units will be valid and legally binding obligations of the Company enforceable in accordance with their terms except: (a) as such enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium, or similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is considered in a proceeding in equity or at law); (b) as enforceability of any indemnification or contribution provision may be limited under the federal and state securities laws; and (c) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefor may be brought.
- Common Stock and Option Shares.** When the Registration Statement becomes effective and when the Common Stock, included as part of the Units, and/or the Option Shares are issued and delivered against payment therefor as contemplated by the Registration Statement and according to the form of underwriting agreement most recently filed as an exhibit to the Registration Statement, the issue and sale of the Common Stock and the Option Shares will have been duly authorized by all necessary corporate action of the Company, and the shares of Common Stock and Option Shares will be duly authorized and validly issued and will be fully paid and nonassessable.
- Warrants and Option Warrants.** When the Registration Statement becomes effective, and when the Warrant Agent Agreement between the Company and VStock Transfer, LLC has been duly executed and delivered and the Warrants underlying the Units and/or the Option Warrants are duly executed, issued, delivered and paid for as part of the Units or exercise of the over-allotment option, as applicable, as contemplated by the Warrant Agent Agreement, the Registration Statement and the Prospectus and according to the form of underwriting agreement most recently filed as an exhibit to the Registration Statement, such Warrants and Option Warrants will be valid and legally binding obligations of the Company enforceable in accordance with their terms except: (a) as such enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium, or similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is considered in a proceeding in equity or at law); (b) as enforceability of any indemnification or contribution provision may be limited under the federal and state securities laws; (c) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefor may be brought; (d) we express no opinion as to whether a state court outside of the State of New York or a federal court of the United States would give effect to the choice of New York law provided for in the Warrant Agent Agreement; (e) with respect to the Common Stock underlying the Warrants and/or the Option Warrants, we express no opinion to the extent that, notwithstanding its current reservation of shares of Common Stock, future issuances of securities, including the Common Stock, of the Company and/or adjustments to outstanding securities, including the Warrants and Option Warrants, of the Company may cause the Warrants or Option Warrants to be exercisable for more shares of Common Stock than the number that remain authorized but unissued; and (f) we have assumed the Exercise Price (as defined in the Warrant Agent Agreement) will not be adjusted to an amount below the par value per share of the Common Stock.

4. **Representative's Warrant and Placement Agent's Warrant.** When the Registration Statement becomes effective, and when the Representative's Warrant and the Placement Agent's Warrant are duly executed, issued, and delivered as contemplated by the Registration Statement and the Prospectus, such Representative's Warrant and Placement Agent's Warrant will be a valid and legally binding obligation of the Company enforceable in accordance with its terms except: (a) as such enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium, or similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is considered in a proceeding in equity or at law); (b) as enforceability of any indemnification or contribution provision may be limited under the federal and state securities laws; (c) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefor may be brought; (d) we express no opinion as to whether a state court outside of the State of New York or a federal court of the United States would give effect to the choice of New York law provided for in the Warrant Agent Agreement; (e) with respect to the Common Stock underlying the Representative's Warrant and Placement Agent's Warrant, we express no opinion to the extent that, notwithstanding its current reservation of shares of Common Stock, future issuances of securities, including the Common Stock, of the Company and/or adjustments to outstanding securities, including the Representative's Warrant and Placement Agent's Warrant, of the Company may cause the Representative's Warrant and Placement Agent's Warrant to be exercisable for more shares of Common Stock than the number that remain authorized but unissued; and (f) we have assumed the Exercise Price (as defined in the Representative's Warrant and Placement Agent's Warrant) will not be adjusted to an amount below the par value per share of the Common Stock.
5. **Warrant Shares.** The shares of Common Stock underlying the Warrants, the Option Warrants, the Representative's Warrant, and the Placement Agent's Warrant (the "Warrant Shares") have been duly authorized and reserved for issuance, and upon proper exercise and payment therefor as contemplated by the terms of the Warrants, Option Warrants, the Warrant Agent Agreement, the Representative's Warrant, or the Placement Agent's Warrant, as applicable, and assuming that there is a sufficient number of authorized and unissued shares of Common Stock at the time of the Warrant, Option Warrant, Representative's Warrant, or Placement Agent's Warrant exercise, when and if issued, the Warrant Shares will be validly issued, fully paid and nonassessable.

The foregoing opinions are expressed solely with respect to the Delaware General Corporation Law and, as to the Units and the Warrants constituting valid and legally binding obligations of the Company, solely with respect to the Laws of the State of New York. We do not express any opinion as to any other laws. No opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or the Prospectus, other than as expressly stated herein with respect to the issuance of the Common Stock, the Option Shares, the Warrants, the Option Warrants, the Representative's Warrant, the Placement Agent's Warrant, and the Warrant Shares.

We consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement and further consent to the reference to our firm under the caption "Legal Matters" in the Prospectus included in the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules and regulations of the Commission thereunder.

Respectfully Submitted,

/s/ Dykema Gossett PLLC

Dykema Gossett PLLC

Calculation of Filing Fee Tables

Form S-1
(Form Type)

bioAffinity Technologies, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Fees Previously Paid		Units consisting of shares of Common Stock, par value \$0.007 per share ("Common Shares"), Tradeable Warrants to purchase Common Shares, and Non-tradeable Warrants to purchase						
	Equity	Common Shares ⁽¹⁾	457(o)	1,180,000		\$ 7,080,000 ⁽²⁾	0.0000927	\$ 656.32 ⁽⁷⁾
	Equity	Common Stock, par value \$0.007 per share, included as part of the Units	457(o)	—	—	Included with above Units.	—	—
	Other	Tradeable Warrants to purchase Common Shares, included as part of the Units	457(o) and 457(g)	—	—	Included with above Units.	—	—
	Other	Non-tradeable Warrants to purchase Common Shares, included as part of the Units	457(o) and 457(g)	—	—	Included with above Units.	—	—
	Equity	Common Shares issuable upon exercise of the Tradeable Warrants included as part of the Units	457(o)	1,180,000	—	\$ 8,496,000 ⁽²⁾	0.0000927	\$ 787.58 ⁽⁷⁾
	Equity	Common Shares issuable upon exercise of the Non-tradeable Warrants included as part of the Units	457(o)	1,180,000	—	\$ 8,850,000 ⁽²⁾	0.0000927	\$ 820.40 ⁽⁷⁾
	Other	Over-Allotment Option	457(o)	177,000		\$ 1,062,000 ⁽²⁾⁽³⁾	0.0000927	98.45 ⁽⁷⁾
	Other	Common Stock, par value \$0.007 per share, included as part of the Over-Allotment Option	457(o)	—	—	Included with above Over-Allotment Option.	—	—
	Other	Tradeable Warrants to purchase Common Shares, included as part of the Over-Allotment Option	457(o) and 457(g)	—	—	Included with above Over-Allotment Option.	—	—
	Other	Non-tradeable Warrants to purchase Common Shares, included as part of the Over-Allotment Option	457(o) and 457(g)	—	—	Included with above Over-Allotment Option.	—	—
	Other	Common Shares issuable upon exercise of the Tradeable Warrants included as part of the Over-Allotment Option	457(o)	177,000		\$ 1,274,400 ⁽²⁾	0.0000927	118.14 ⁽⁷⁾

Other	Common Shares issuable upon exercise of the Non-tradable Warrants, included as part of the Over- Allotment Option Representative's	457(o)	177,000		\$ 1,327,500(2)	0.0000927	123.06(7)
Other	Warrant(4)	457(g)	—	—	—	—	—
Equity	Common Stock issuable upon exercise of the Representative's Warrant(5)	457(o)	23,600	—	\$ 162,840(2)	0.0000927	\$ 15.10(7)
Other	Placement Agent's Warrant(4)	457(g)	—	—	—	—	—
Equity	Common Stock issuable upon exercise of the Placement Agent's Warrant(6)	457(a)	29,464		\$ 212,141	—	19.67
Total Offering Amount					\$ 28,464,881		\$ 2,638.69
Total Fees Previously Paid							\$ 3,008.26
Net Fee Due							\$ 0.00

- (1) This registration statement also includes an indeterminate number of securities that may become offered, issuable or sold to prevent dilution resulting from stock splits, stock dividends and similar transactions, which are included pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act").
- (2) Estimated solely for the purpose of computing the registration fee in accordance with Rule 457(o) under the Securities Act.
- (3) Includes the offering price of additional shares of Common Stock and Warrants that are part of the Units that the underwriters have the option to purchase to cover over-allotments, if any.
- (4) No fee required pursuant to Rule 457(g) under the Securities Act.
- (5) Represents a warrant to purchase a number of securities equal to 2% of the shares of Common Stock sold in this Offering at an exercise price equal to 115% of the assumed public offering price per Unit. These are not warrants that were issued in connection with the Company's Bridge Note financing described in Note 12 to the Company's financial statements on page F-17. These warrants will be issued to pursuant to the underwriting agreement.
- (6) Represents a warrant to purchase 29,464 shares of Common Stock issued to our Placement Agent at an exercise price equal to 120% of the per Unit offering price in this Offering, or \$7.20 per share based on the assumed offering price of \$6.00 per Unit.
- (7) Calculated pursuant to Rule 457(o) under the Securities Act based on an estimate of the proposed maximum aggregate offering price.