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

**POST - EFFECTIVE AMENDMENT NO. 2
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:

**Leslie Marlow, Esq.
Melissa Palat Murawsky, Esq.
Blank Rome LLP
1271 Avenue of the Americas
New York, New York 10020
Tel: (212) 885-5000**

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

This Post-Effective Amendment No. 2 to the Registration Statement on Form S-1 of bioAffinity Technologies, Inc. (the “Company”), as originally declared effective by the Securities and Exchange Commission (the “SEC”) on August 29, 2022, is being filed for the sole purpose of filing Exhibit 5.2 as part of the Registration Statement. This Post-Effective Amendment No. 2 does not modify any provision of Part I or Part II of the Registration Statement other than supplementing Item 16 of Part II as set forth below.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits

See the Exhibit Index immediately preceding the signature page hereto for a list of exhibits filed as part of this registration statement on Form S-1, which Exhibit Index is incorporated herein by reference.

(b) Financial Statement Schedules

Schedules not listed have been omitted because the information required to be set forth therein is not applicable, not material or is shown in the financial statements or notes thereto.

EXHIBIT INDEX

Exhibit Number	Description
1.1	Placement Agency Agreement, dated March 6, 2024, by and among the Company and WallachBeth Capital LLC (Incorporated by reference as Exhibit 1.1 to the Registrant’s Form 8-K filed with the SEC on March 8, 2024)
3.1	Certificate of Incorporation of the Registrant as filed with the Delaware Secretary of State on March 26, 2014 (Incorporated by reference as Exhibit 3.1 to the Registrant’s Annual Report on Form 10-K for the year ended December 31, 2023 (File No. 001-41463) filed with the SEC on April 1, 2024)
3.2	Amended and Restated Bylaws of Registrant (Incorporated by reference as Exhibit 3.6 to the Registrant’s Form S-1/A (File No. 333-264463) filed with the SEC on June 16, 2022)
3.3	Certificate of Amendment to the Certificate of Incorporation of Registrant, as filed with the Delaware Secretary of State on May 31, 2016 (Incorporated by reference as Exhibit 3.3 to the Registrant’s Annual Report on Form 10-K for the year ended December 31, 2023 (File No. 001-41463) filed with the SEC on April 1, 2024)
3.4	Certificate of Designation of Series A Convertible Preferred Stock of the Registrant filed with the Delaware Secretary of State on July 13, 2017 (Incorporated by reference as Exhibit 3.4 to the Registrant’s Form S-1/A (File No. 333-264463) filed with the SEC on May 25, 2022)
3.5	Certificate of Amendment to the Certificate of Incorporation of Registrant, as filed with the Delaware Secretary of State on November 29, 2021 (Incorporated by reference as Exhibit 3.5 to the Registrant’s Annual Report on Form 10-K for the year ended December 31, 2023 (File No. 001-41463) filed with the SEC on April 1, 2024)
3.6	Certificate of Amendment to the Certificate of Incorporation of Registrant, as filed with the Delaware Secretary of State on June 23, 2022 (Incorporated by reference as Exhibit 3.2 to the Registrant’s Form S-1/A (File No. 333-264463) filed with the SEC on May 25, 2022)
3.7	Certificate of Amendment to the Certificate of Incorporation of Registrant, as filed with the Delaware Secretary of State on June 6, 2023 (Incorporated by reference as Exhibit 3.1 to the Registrant’s Current Report on Form 8-K (File No. 001-41463) filed with the SEC on June 7, 2023)
4.1	Form of Registrant’s Common Stock Certificate (Incorporated by reference as Exhibit 4.1 to the Registrant’s Form S-1/A filed with the SEC on June 16, 2022)
4.2	Common Stock Purchase Warrant issued to San Antonio Economic Development Corporation dated March 17, 2017 (Incorporated by reference as Exhibit 4.2 to the Registrant’s Form S-1/A filed with the SEC on May 25, 2022).
4.3	Form of Common Stock Purchase Warrant issued to Holders of the Registrant’s Convertible Promissory Notes (Incorporated by reference as Exhibit 4.3 to the Registrant’s Form S-1/A filed with the SEC on May 25, 2022)
4.4	Form of Placement Agent’s Warrant issued to WallachBeth Capital, LLC (Incorporated by reference as Exhibit 4.4 to the Registrant’s Form S-1/A filed with the SEC on August 5, 2022)
4.5	Form of Representative’s Warrant issued to WallachBeth Capital, LLC, in connection with the Registrant’s Initial Public Offering (Incorporated by reference as Exhibit 4.5 to the Registrant’s Form S-1/A filed with the SEC on July 28, 2022).
4.6	Form of (Tradeable) Common Stock Purchase Warrant issued as part of the Units sold in the Registrant’s Initial Public Offering (Incorporated by reference as Exhibit 4.1 to the Registrant’s Form 8-K filed with the SEC on September 6, 2022)
4.7	Form of Warrant Agent Agreement for the Warrants issued as part of the Units sold in the Registrant’s Initial Public Offering (Incorporated by reference as Exhibit 4.3 to the Registrant’s Form 8-K filed with the SEC on September 6, 2022)
4.8	Form of (Non-tradeable) Common Stock Purchase Warrant issued as part of the Units sold in the Registrant’s Initial Public Offering (Incorporated by reference as Exhibit 4.2 to the Registrant’s Form 8-K filed with the SEC on September 6, 2022)
4.9	Form of Amendment to Common Share Purchase Warrants with schedule of warrant holders and warrants (Incorporated by reference as Exhibit 4.1 to the Registrant’s Current Report on Form 8-K (File No. 001-41463) filed with the SEC on September 20, 2023)

- 4.10 [Form of Amendment to Initial Public Offering Warrants with schedule of warrant holders and warrants \(Incorporated by reference as Exhibit 4.2 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on September 20, 2023\)](#)
- 4.11 [Form of Warrant to Purchase Common Stock \(Incorporated by reference as Exhibit 4.1 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on March 8, 2024\)](#)
- 4.12 [Form of Placement Agent Warrant \(Incorporated by reference as Exhibit 10.1 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on March 8, 2024\)](#)
- 5.1** [Opinion of Dykema Gossett PLLC](#)
- 5.2* [Opinion of Blank Rome](#)
- 10.1+ [2014 Equity Incentive Plan of Registrant, as amended. \(Incorporated by reference as Exhibit 10.1 to the Registrant's Form S-1 filed with the SEC on April 25, 2022\)](#)
- 10.2+ [Executive Chairman Employment Agreement dated January 1, 2020, by and between Registrant and Steven Girgenti, as amended. \(Incorporated by reference as Exhibit 10.2 to the Registrant's Form S-1 filed with the SEC on April 25, 2022\)](#)
- 10.3+ [Employment Agreement dated February 1, 2015, by and between Registrant and Maria Zannes. \(Incorporated by reference as Exhibit 10.3 to the Registrant's Form S-1 filed with the SEC on April 25, 2022\)](#)

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- 10.4+ [Employment Agreement dated April 4, 2016, by and between Registrant and Vivienne Rebel, as amended. \(Incorporated by reference as Exhibit 10.4 to the Registrant's Form S-1 filed with the SEC on April 25, 2022\)](#)
- 10.5+ [Employment Agreement dated February 1, 2015, by and between Registrant and Timothy Zannes. \(Incorporated by reference as Exhibit 10.5 to the Registrant's Form S-1 filed with the SEC on April 25, 2022\)](#)
- 10.6+ [Consulting Agreement dated May 25, 2017, by and between Registrant and Michael Edwards, as amended. \(Incorporated by reference as Exhibit 10.6 to the Registrant's Form S-1 filed with the SEC on May 25, 2022\)](#)
- 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. \(Incorporated by reference as Exhibit 10.9 to the Registrant's Form S-1 filed with the SEC on April 25, 2022\)](#)
- 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 \(Incorporated by reference as Exhibit 3.2 to the Registrant's Form S-1/A filed with the SEC on July 27, 2022\)](#)
- 10.9 [Agreement dated October 17, 2020, by and between Registrant and GO2 Partners \(Incorporated by reference as Exhibit 10.9 to the Registrant's Form S-1/A filed with the SEC on July 27, 2022\)](#)
- 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 \(Incorporated by reference as Exhibit 10.10 to the Registrant's Form S-1 filed with the SEC on May 25, 2022\)](#)
- 10.11+ [Offer Letter between bioAffinity Technologies, Inc. and Michael Dougherty dated April 11, 2023 \(Incorporated by reference as Exhibit 10.1 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on May 1, 2023\)](#)
- 10.12 [bioAffinity Technologies, Inc. Amended and Restated 2014 Equity Incentive Plan Incorporated by reference as Exhibit 10.1 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on June 7, 2023\)](#)
- 10.13 [Amendment, effective as of August 1, 2023, to Employment Agreement, dated February 1, 2015, by and between bioAffinity Technologies, Inc. and Maria Zannes \(Incorporated by reference as Exhibit 10.1 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on July 28, 2023\)](#)
- 10.14 [Asset Purchase Agreement, effective September 18, 2023, by and among, Precision Pathology Laboratory Services, LLC, Dr. Roby P. Joyce and Village Oaks Pathology Services, P.A. \(Incorporated by reference as Exhibit 10.1 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on September 20, 2023\)](#)
- 10.15 [Subscription Agreement, dated September 18, 2023, by and between The Joyce Living Trust, dated March 19, 2013, and bioAffinity Technologies, Inc. \(Incorporated by reference as Exhibit 10.2 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on September 20, 2023\)](#)
- 10.16 [Management Services Agreement, effective as of September 18, 2023, by and between Precision Pathology Laboratory Services, LLC and Village Oaks Pathology Services, P.A. \(Incorporated by reference as Exhibit 10.3 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on M September 20, 2023\)](#)
- 10.17 [Succession Agreement, effective September 18, 2023, by and among, Precision Pathology Laboratory Services, LLC, Dr. Roby P. Joyce and Village Oaks Pathology Services, P.A. \(Incorporated by reference as Exhibit 10.4 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on September 20, 2023\)](#)
- 10.18 [Professional Services Agreement, effective as of September 18, 2023, by and between Precision Pathology Laboratory Services, LLC and Village Oaks Pathology Services, P.A. \(Incorporated by reference as Exhibit 10.5 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on September 20, 2023\)](#)
- 10.19+ [Executive Employment Agreement, dated September 18, 2023, by and between the Registrant and Roby Joyce, M.D. \(Incorporated by reference as Exhibit 10.6 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on September 20, 2023\)](#)
- 10.20 [Assignment and Assumption of Lease Agreement, effective September 18, 2023, by and between Precision Pathology Laboratory Services, LLC and Village Oaks Pathology Services, P.A. \(Incorporated by reference as Exhibit 10.7 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on September 20, 2023\)](#)
- 10.21 [Office Lease, dated July 31, 2019, by and between Village Oaks Pathology Services, P.A. and 343 West Sunset, LLC \(Incorporated by reference as Exhibit 10.8 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on September 20, 2023\)](#)

10.22 [Assignment and Assumption Agreement, effective September 18, 2023, by and between Precision Pathology Laboratory Services, LLC and Village Oaks Pathology Services, P.A. \(Incorporated by reference as Exhibit 10.9 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on September 20, 2023\)](#)

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- 10.23 [Equipment Usage Attachment, dated effective as of August 9, 2019, by and between Gen-Probe Sales & Service, Inc., together with its subsidiaries and affiliates and Village Oaks Pathology Services, P.A. d/b/a Precision Pathology, as amended by that certain Amendment No. 1 to Equipment Usage Attachment dated November 2, 2020, as further amended by that certain Amendment No. 2 to Equipment Usage Attachment dated November 2, 2020, and as further amended by that certain Amendment No. 3 to Equipment Usage Attachment dated December 21, 2022 \(Incorporated by reference as Exhibit 10.10 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on September 20, 2023\)](#)
- 10.24 [Master Agreement, dated as of January 29, 2015, by and between Leica Microsystems, Inc. and Precision Pathology, as amended by Amendment No. 1 to the Master Agreement, dated on or about April 4, 2018, as further amended by that certain Amendment No. 2 to Master Agreement, dated March 23, 2021 \(Incorporated by reference as Exhibit 10.11 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on September 20, 2023\)](#)
- 10.25 [Strategic Relationship License Agreement, dated December 1, 2022, by and between Pathology Watch, Inc. and Precision Pathology Services \(Incorporated by reference as Exhibit 10.12 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on September 20, 2023\)](#)
- 10.26 [Bill of Sale signed by Village Oaks Pathology Services, P.A., effective as of September 18, 2023 \(Incorporated by reference as Exhibit 10.13 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on September 20, 2023\)](#)
- 10.27 [Jamie Platt Offer Letter \(Incorporated by reference as Exhibit 10.1 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on December 5, 2023\)](#)
- 10.28 [bioAffinity Technologies, Inc. Management Incentive Bonus Plan \(Incorporated by reference as Exhibit 10.1 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on January 31, 2024\)](#)
- 10.29 [Amendment to Michel Dougherty Offer Letter \(Incorporated by reference as Exhibit 10.1 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on January 31, 2024\)](#)
- 10.30 [Form of Securities Purchase Agreement, dated as of March 6, 2024, by and among the Company and the investors parties thereto \(Incorporated by reference as Exhibit 10.1 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on March 8, 2024\)](#)
- 10.31 [Form of Support Agreement with schedule of signatories \(Incorporated by reference as Exhibit 10.1 to the Registrant's Current Report on Form 8-K \(File No. 001-41463\) filed with the SEC on March 8, 2024\)](#)
- 21.1 [List of Subsidiaries of the Registrant \(Incorporated by reference as Exhibit 21.1 to the Registrant's Form 10-K filed with the SEC on March 31, 2023\)](#)
- 23.1** [Consent of Dykema Gossett PLLC \(included in Exhibit 5.1\).](#)
- 23.2** [Consent of WithumSmith+Brown, PC, independent registered public accounting firm for bioAffinity Technologies Inc.](#)
- 23.3* [Consent of Blank Rome \(included in Exhibit 5.2\)](#)
- 24.1 [Power of Attorney \(included on signature page of Post-Effective Amendment No. 1\)](#)
- 107** [Filing Fee Table.\(Registration No. 333-264463\)](#)

* Filed herewith.

** Previously filed

+ 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 Post Effective Amendment No. 2 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of San Antonio, Texas, on April 5, 2024.

bioAffinity Technologies, Inc.

By: /s/ Maria Zannes

Maria Zannes

Chief Executive Officer, President, Founder, and Director

<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)	April 5, 2024
<u>*</u> Michael Dougherty	Chief Financial Officer (Principal Financial and Accounting Officer)	April 5, 2024
<u>*</u> Steven Girgenti	Founder, Executive Chairman, and Director	April 5, 2024
<u>*</u> Robert Anderson	Director	April 5, 2024

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Stuart Diamond Director April 5, 2024

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Peter S. Knight Director April 5, 2024

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Gary Rubin Director April 5, 2024

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Roby Joyce Director April 5, 2024

*

Jamie Platt Director April 5, 2024

*By: */s/ Maria Zannes*

Maria Zannes, Attorney-In-Fact

BLANKROME

1271 Avenue of the Americas | New York, NY 10020
blankrome.com

April 5, 2024

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

Dear Ladies and Gentlemen:

We have acted as U.S. securities counsel to bioAffinity Technologies, Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission pursuant to the Securities Act of 1933, as amended (the "Securities Act") of Post-Effective Amendments No. 1 and No. 2 to Registration Statement on Form S-1 (File No. 333-264463) (as amended through the date hereof, the "Registration Statement") relating to the registration by the Company: of (i) an aggregate of 4,305,813 shares of the Company's common stock, par value \$0.007 per share (the "Common Stock") underlying the tradeable warrants ("Tradeable Warrants") and non-tradeable warrants ("Non-Tradeable Warrants") issued to investors in the Company's initial public offering; (ii) 29,464 shares of Common Stock underlying warrants issued to the placement agent (and its designees) for the Company's convertible bridge note offering in 2021 (the "Placement Agent Warrants") and (iii) 25,652 shares of Common Stock underlying warrants issued to the representative of the underwriters (and its designees) for the Company's initial public offering (the "Representative's Warrant"). The Tradeable Warrants, the Non-Tradeable Warrants, the Placement Agent Warrants and the Representative's Warrants are collectively referred to herein as the "Warrants" and the shares of Common Stock issuable upon exercise of the Warrants are collectively referred to herein as the "Warrant Shares." This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act.

In rendering the opinion set forth herein, we have examined originals or copies, certified or otherwise identified to our satisfaction, of (i) the Registration Statement, (ii) resolutions adopted by the Board of Directors of the Company, (iii) the certificate of incorporation of the Company, as amended, (iv) the amended and restated bylaws of the Company, (v) the form of Tradeable Warrant filed as an exhibit to the Registration Statement, (vi) the form of Non-Tradeable Warrant filed as an exhibit to the Registration Statement; (vii) the form of Placement Agent Warrant filed as an exhibit to the Registration Statement; (viii) the form of Representative's Warrant filed as an exhibit to the Registration Statement; and (ix) such other corporate records, agreements, certificates, including, but not limited to, certificates or comparable documents of public officials and of officers and representatives of the Company, statutes and other instruments and documents as we considered relevant and necessary as a basis for the opinions hereinafter expressed.

In rendering this opinion, we have assumed, without inquiry, (i) the authenticity of all documents submitted to us as originals; (ii) the conformity to the original documents of all documents submitted to us as facsimile, electronic, certified or photostatic copies, and the authenticity of the originals of such copies; (iii) the legal capacity of all natural persons and the genuineness of all signatures on the Registration Statement and all documents submitted to us; and (iv) that the books and records of the Company are maintained in accordance with proper corporate procedures. As to various questions of fact material to such opinions, we have relied upon statements or certificates of officials and representatives of the Company and others.

Based on the foregoing, and subject to the qualifications, exceptions and assumptions stated herein, we are of the opinion that the Warrant Shares have been duly authorized for issuance and, when issued and delivered against payment therefor upon the exercise of the Warrants in accordance with the terms therein, the Warrant Shares will be validly issued, fully paid and non-assessable.

We are opining solely on all applicable statutory provisions of Delaware corporate law, including the rules and regulations underlying those provisions, all applicable provisions of the Delaware Constitution and all applicable judicial and regulatory determinations. This opinion is limited to the laws of the State of Delaware as in effect on the date hereof and we express no opinion with respect to the laws of any other jurisdiction.

We hereby consent to the filing of this opinion as an Exhibit to the Registration Statement. We also hereby consent to the use of our name as your counsel under "Legal Matters" in the prospectus constituting part of the Registration Statement. In giving this consent, we do not thereby concede that we come within the categories of persons whose consent is required by the Securities Act or the General Rules and Regulations promulgated thereunder. This opinion is strictly limited to the matters stated herein and no other or more extensive opinion is intended, implied or to be inferred beyond the matters expressly stated herein. This opinion letter is not a guaranty nor may one be inferred or implied.

Very truly yours,

/s/ Blank Rome LLP

BLANK ROME LLP