

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

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): December 8, 2022 (December 7, 2022)

Ensysce Biosciences, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation or organization)

001-38306
(Commission
File Number)

82-2755287
(I.R.S. Employer
Identification Number)

7946 Ivanhoe Avenue, Suite 201
La Jolla, California
(Address of principal executive offices)

92037
(Zip Code)

(858) 263-4196
Registrant's telephone number, including area code

N/A
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation to the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock, par value \$0.0001 per share	ENSC	The Nasdaq Stock Market LLC
Warrants to purchase one share of Common Stock	ENSCW	OTC Pink Open Market

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 13(a) of the Exchange Act.

Item 1.01 Entry into a Material Definitive Agreement.

On December 7, 2022, Ensysce Biosciences, Inc. (the "Company") entered into an underwriting agreement (the "Underwriting Agreement") with Lake Street Capital Management, LLC (the "Underwriter"), pursuant to which the Company agreed to issue and sell (i) 2,280,000 shares (the "Firm Shares") of the Company's common stock, par value \$0.0001 per share (the "Common Stock"), (ii) pre-funded warrants (the "Pre-Funded Warrants") to purchase 620,000 shares of Common Stock and (iii) warrants to purchase 5,800,000 shares of Common Stock (the "Common Warrants" and, collectively with the Pre-Funded Warrants, the "Warrants") to the Underwriter in a public offering (the "Offering"). In addition, under the terms of the Underwriting Agreement, the Company granted the Underwriter the option, for 45 days from the closing of the Offering, to purchase up to 342,000 additional shares of Common Stock and Common Warrants to purchase up to an additional 870,000 shares of Common Stock (the "Option Shares" and, together with the Firm Shares, the "Shares").

In lieu of a purchase of Common Stock that would otherwise result in an investor's beneficial ownership exceeding 4.99% (or, at the election of the investor, 9.99%) of the outstanding Common Stock, a Pre-Funded Warrant was offered, each of which enables the investor to purchase one share of Common Stock at an exercise price of \$0.0001. Each Pre-Funded Warrant will be exercisable upon issuance and will expire when exercised in full. Each Pre-Funded Warrant is being sold with a Common Warrant to purchase two shares of Common Stock. The public purchase price of one share of Common Stock and accompanying Common Warrant to purchase two shares of Common Stock is \$1.40 and the combined purchase price of one Pre-Funded Warrant and accompanying Common Warrant to purchase two shares of Common Stock is \$1.40. The Underwriter agreed to purchase the Firm Shares from the Company pursuant to the Underwriting Agreement at a price of \$1.302 per share.

Each Common Warrant is exercisable immediately at an exercise price of \$1.40 per share and will expire five years following the date of issuance. The Company expects to receive aggregate gross proceeds of approximately \$4.1 million from the Offering. The Offering is expected to close on or about December 9, 2022, subject to satisfaction of customary closing conditions.

The Offering was made under a registration statement on Form S-1 filed with the Securities and Exchange Commission (Registration No. 333-268038).

Pursuant to the Underwriting Agreement, the Company agreed to indemnify the Underwriter against certain liabilities, including liabilities under the Securities Act of 1933, as amended, or to contribute to payments that the Underwriter may be required to make because of such liabilities. In addition, the Underwriting Agreement also contains customary representations, warranties and agreements by the Company and customary conditions to closing, obligations of the parties and termination provisions. The representations, warranties and covenants contained in the Underwriting Agreement were made only for purposes of such agreement and as of specific dates, were solely for the benefit of the parties to such agreement, and may be subject to limitations agreed upon by such parties.

In connection with the Offering, the Company's directors and executive officers signed lock-up agreements ("Lock-Up Agreements") by which they agreed not to sell or transfer any Common Stock without first obtaining the written consent of the Underwriter, subject to certain exceptions, for a period of 90 days after the date of the final prospectus relating to the Offering.

A copy of the Underwriting Agreement and form of Lock-Up Agreement is attached as Exhibit 1.1 hereto and is incorporated herein by reference. The foregoing descriptions of the Underwriting Agreement and Lock-Up Agreements do not purport to be complete and are qualified in their entirety by reference to such exhibit.

Item 8.01. Other Events.

On December 7, 2022, the Company issued a press release regarding the transactions described above under Item 1.01 of this Current Report on Form 8-K. A copy of the press release is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
1.1	Underwriting Agreement and form of lock-up agreement
99.1	Press Release dated December 7, 2022
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

2

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: December 8, 2022

Ensysce Biosciences, Inc.

By: /s/ Lynn Kirkpatrick
Name: Dr. Lynn Kirkpatrick
Title: President and Chief Executive Officer

3

ENSYSCE BIOSCIENCES, INC.

2,280,000 Shares of Common Stock
Pre-Funded Warrants to Purchase up to 620,000 Shares of Common Stock
Warrants to Purchase up to 5,800,000 Shares of Common Stock

UNDERWRITING AGREEMENT

December 7, 2022

Lake Street Capital Markets, LLC
 920 Second Avenue South, Suite 700
 Minneapolis, Minnesota 55402

Ladies and Gentlemen:

Ensysce Biosciences, Inc., a Delaware corporation (the “Company”), proposes, subject to the terms and conditions contained in this Underwriting Agreement (the “Agreement”), to sell to you (the “Underwriter”), an aggregate of (i) 2,280,000 shares (the “Firm Shares”) of the Company’s common stock, \$0.0001 par value per share (the “Common Stock”), (ii) pre-funded warrants (the “Pre-Funded Warrants”) to purchase up to an aggregate of 620,000 shares of Common Stock (the “Pre-Funded Warrant Shares”) and (iii) warrants (the “Firm Warrants”) to purchase up to an aggregate of 5,800,000 shares of Common Stock (the “Firm Warrant Shares”). The Firm Shares, the Pre-Funded Warrants, the Pre-Funded Warrant Shares, the Firm Warrants and the Firm Warrant Shares are collectively referred to as the “Firm Securities.” The Company also proposes to issue and sell to the Underwriter, upon the terms and conditions set forth herein, up to an additional (i) 342,000 shares of Common Stock (the “Option Shares”, and together with the Firm Shares, the “Shares”), and/or (ii) warrants (the “Option Warrants” and together with the Firm Warrants, the “Warrants”) to purchase up to an aggregate of 870,000 shares of Common Stock (the “Option Warrant Shares”). The Option Shares, the Option Warrants and the Option Warrant Shares are collectively referred to as the “Option Securities.” The Pre-Funded Warrant Shares, the Firm Warrant Shares and the Warrant Shares are collectively referred to as the “Warrant Shares.” The Firm Securities and the Option Securities are collectively referred to as the “Securities.”

The Firm Shares and/or Pre-Funded Warrants and the Firm Warrants will be issued in a fixed combination of one Firm Share or Pre-Funded Warrant and one Firm Warrant to purchase two shares of Common Stock. The Firm Shares and/or Pre-Funded Warrants and the Firm Warrants will be sold together but will be immediately separable and transferable upon issuance. The Option Shares and/or the Option Warrants may be sold from time to time either together or separately in any combination to be determined by the Underwriter.

The terms of the Pre-Funded Warrants are set forth in the form of Pre-Funded Warrant attached hereto as **Exhibit B**. The terms of the Warrants are set forth in the form of Warrant attached hereto as **Exhibit C**.

The Company has prepared and filed in conformity with the requirements of the Securities Act of 1933, as amended (the “Securities Act”), and the published rules and regulations thereunder (the “Rules”) adopted by the Securities and Exchange Commission (the “Commission”) a Registration Statement (as hereinafter defined), including a Preliminary Prospectus (as hereinafter defined) relating to the Securities, and such amendments thereof as may have been required to the date of this Agreement. Copies of such Registration Statement (including all amendments thereof) and of the related Preliminary Prospectus have heretofore been delivered by the Company to the Underwriter. The term “Preliminary Prospectus” means any preliminary prospectus included at any time as a part of the Registration Statement or filed with the Commission by the Company pursuant to Rule 424(a) of the Rules. The term “Registration Statement” as used in this Agreement means the initial registration statement on Form S-1 (No. 333-268038) (including all exhibits, financial schedules and all documents and information deemed to be a part of the Registration Statement through incorporation by reference or otherwise), as amended at the time and on the date it becomes effective (the “Effective Date”), including the information (if any) contained in the final prospectus filed with the Commission pursuant to Rule 424(b) of the Rules and deemed to be part thereof at the time of effectiveness pursuant to Rule 430A of the Rules. If the Company has filed an abbreviated registration statement to register additional Securities pursuant to Rule 462(b) under the Rules (the “462(b) Registration Statement”), then any reference herein to the Registration Statement shall also be deemed to include such 462(b) Registration Statement. The term “Prospectus” as used in this Agreement means the final prospectus filed with the Commission pursuant to and within the time limits described in Rule 430A and 424(b) of the Rules.

The Company understands that the Underwriter proposes to make a public offering of the Underwritten Securities (as defined below), as set forth in and pursuant to the Statutory Prospectus (as defined below) and the Prospectus, as soon after the Effective Date and the date of this Agreement as the Underwriter deems advisable. The Company hereby confirms that the Underwriter and dealers have been authorized to distribute or cause to be distributed each Preliminary Prospectus and are authorized to distribute the Prospectus (as from time to time amended or supplemented if the Company furnishes amendments or supplements thereto to the Underwriter).

1. Sale, Purchase, Delivery and Payment for the Underwritten Securities On the basis of the representations, warranties and agreements contained in, and subject to the terms and conditions of, this Agreement:

(a) The Company agrees to issue and sell to the Underwriter, and the Underwriter agrees to purchase from the Company, at a combined purchase price of \$1.302000 per Firm Share and accompanying Firm Warrant and \$1.301907 per Pre-Funded Warrant and accompanying Firm Warrant, (i) the Firm Shares, (ii) the Pre-Funded Warrants and (iii) the Firm Warrants (such Securities, collectively, the “Underwritten Firm Securities”).

-2-

(b) The Company hereby grants to the Underwriter an option to purchase, all or any part of the Option Shares at a price per share equal to \$1.292700, and/or all or any part of the Option Warrants at \$0.009300 per Option Warrant (such Securities, collectively the “Underwritten Option Securities”). The Underwritten Firm Securities and the Underwritten Option Securities are collectively referred to herein as the “Underwritten Securities”). Such option may be exercised only to cover over-allotments in the sales of the Underwritten Firm Securities by the Underwriter and may be exercised in whole or in part at any time on or before 12:00 noon, New York City time, on the business day before the Firm Securities Closing Date (as defined below), and from time to time thereafter within 45 days after the Firm Securities Closing Date, in each case upon written or electronic notice, or verbal or telephonic notice confirmed by written or electronic notice, by the Underwriter to the Company no later than 12:00 noon New York City time on the business day before the Firm Securities Closing Date (as defined below) or at least one business day before the Option Securities Closing Date (as defined below), as the case may be, setting forth the number of Option Shares and/or Option Warrants to be purchased and the time and date (if other than the Firm Securities Closing Date) of such purchase.

(c) Payment of the purchase price for, and delivery of, the Firm Underwritten Securities shall be made at the offices of Lake Street

Capital Markets, LLC, 920 Second Avenue South, Suite 700, Minneapolis, Minnesota 55402, at 10:00 a.m., New York City time, on December 9, 2022, or at such time on such other date, not later than five (5) business days after the date of this Agreement, as shall be agreed upon by the Company and the Underwriter (such time and date of delivery and payment are called the “Firm Securities Closing Date”). In the event that a purchaser delivers a Notice of Exercise (as defined in the Pre-Funded Warrants) on or prior to 4:00 p.m., New York City time on the business day prior to the Firm Securities Closing Date, to exercise any Pre-Funded Warrants between the date hereof and the Firm Securities Closing Date, the Company shall deliver Pre-Funded Warrant Shares with respect to such Pre-Funded Warrants to such purchaser on the Firm Securities Closing Date in connection with such Notice of Exercise. In addition, in the event that any or all of the Underwritten Option Securities are purchased by the Underwriter, payment of the purchase price for, and delivery of such Underwritten Option Securities, shall be made at the above-mentioned offices, or at such other place as shall be agreed upon by the Underwriter and the Company, on each date of delivery as specified in the notice from the Underwriter to the Company (such time and date of delivery and payment are called the “Option Securities Closing Date”). The Firm Securities Closing Date and any Option Securities Closing Date are called, individually, a “Closing Date” and, together, the “Closing Dates.”

(d) Payment shall be made to the Company by wire transfer of immediately available funds or by certified or official bank check or checks payable in New York Clearing House (same day) funds drawn to the order of the Company against delivery of the Underwritten Firm Securities or Underwritten Option Securities, as applicable, to the account of the Underwriter.

-3-

(e) The Underwritten Securities shall be registered in such names and shall be in such denominations as the Underwriter shall request at least one (1) full business day before the Closing Date (or the Option Securities Closing Date in the case of the Underwritten Option Securities). The Shares shall be delivered by or on behalf of the Company to the Underwriter through the facilities of the Depository Trust Company for the account of the Underwriter. Delivery of the Pre-Funded Warrants and Warrants shall be made by physical delivery to be received or directed by the Underwriter no later than one (1) business day following the Closing Date or Option Closing Date, as applicable.

2. Representations and Warranties of the Company. The Company represents and warrants to the Underwriter as of the date hereof and as of the Firm Securities Closing Date and as of each Option Securities Closing Date (if any) as follows:

(a) On the Effective Date, the Registration Statement complied, and on the date of the Prospectus, the date any post-effective amendment to the Registration Statement becomes effective, the date any supplement or amendment to the Prospectus is filed with the Commission and each Closing Date, the Registration Statement, the Prospectus (and any amendment thereof or supplement thereto) will comply, in all material respects, with the requirements of the Securities Act, the Rules, the Exchange Act and the rules and regulations of the Commission thereunder. The Registration Statement did not, as of the Effective Date, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading; and on the Effective Date and the other dates referred to above neither the Registration Statement nor the Prospectus, nor any amendment thereof or supplement thereto, will contain any untrue statement of a material fact or will omit to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading. When any Preliminary Prospectus was first filed with the Commission (whether filed as part of the Registration Statement or any amendment thereto or pursuant to Rule 424(a) of the Rules) and when any amendment thereof or supplement thereto was first filed with the Commission, such Preliminary Prospectus as amended or supplemented complied in all material respects with the applicable provisions of the Securities Act and the Rules and did not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. If applicable, each Preliminary Prospectus and the Prospectus delivered to the Underwriter for use in connection with this offering was identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T. Notwithstanding the foregoing, none of the representations and warranties in this paragraph 2(a) shall apply to statements in, or omissions from, the Registration Statement, any Preliminary Prospectus or the Prospectus made in reliance upon, and in conformity with, information herein or otherwise furnished in writing by the Underwriter specifically for use in the Registration Statement, any Preliminary Prospectus or the Prospectus, as the case may be. With respect to the preceding sentence, the Company acknowledges that the only information furnished in writing by the Underwriter for use in the Registration Statement, any Preliminary Prospectus or the Prospectus is the statements contained in the fifth and eleventh paragraphs under the caption “Underwriting” in the Prospectus (collectively, the “Underwriter Information”).

-4-

(b) As of the Applicable Time (as hereinafter defined), none of the price to the public and the number of Firm Shares, Pre-Funded Warrants and Firm Warrants offered and sold, as indicated on the cover page of the Prospectus and the Statutory Prospectus, all considered together (collectively, the “General Disclosure Package”) included, includes or will include any untrue statement of a material fact or omitted, omits or will omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that this representation and warranty shall not apply to statements in or omissions in the General Disclosure Package made in reliance upon and in conformity with the Underwriter Information.

As used in this Section and elsewhere in this Agreement:

“Applicable Time” means 7:30 a.m. (Eastern time) on the date of this Agreement.

“Statutory Prospectus” as of any time means the Preliminary Prospectus relating to the Securities that is included in the Registration Statement immediately prior to the Applicable Time.

(c) The Registration Statement is effective under the Securities Act and no stop order preventing or suspending the effectiveness of the Registration Statement or suspending or preventing the use of any Preliminary Prospectus or the Prospectus has been issued by the Commission and no proceedings for that purpose have been instituted, or, to the Company’s knowledge, are threatened under the Securities Act. Any required filing of any Preliminary Prospectus and/or the Prospectus and any supplement thereto pursuant to Rule 424(b) of the Rules has been or will be made in the manner and within the time period required by such Rule 424(b).

(d) The financial statements of the Company (including all notes and schedules thereto) included in the Registration Statement, the Statutory Prospectus and Prospectus present fairly, in all material respects, the financial position of the Company and its consolidated subsidiaries at the dates indicated and the statements of operations, stockholders’ equity (deficit) and statements of cash flows of the Company and its consolidated subsidiaries for the periods specified; and such financial statements and related schedules and notes thereto, and the unaudited financial information filed with the Commission as part of the Registration Statement, have been prepared in conformity with generally accepted accounting principles (“GAAP”), consistently applied throughout the periods involved. The summary and selected financial data included in the Statutory Prospectus and Prospectus present fairly, in all material respects, the information shown therein as at the respective dates and for the respective periods specified and have been presented on a basis consistent with the consolidated financial statements set forth in the Prospectus and other financial information.

-5-

(e) Mayer Hoffman McCann P.C. (the “Auditor”) whose reports are filed with the Commission as a part of the Registration Statement, are and, during the periods covered by their reports, were independent public accountants with respect to the Company as required by the Securities Act and the Rules.

(f) The Company and each of its subsidiaries, including each entity (corporation, partnership, joint venture, association or other business organization) controlled directly or indirectly by the Company (each, a “subsidiary”), are duly organized, validly existing and in good standing under the laws of their respective jurisdictions of incorporation or organization and each such entity has all requisite power and authority to carry on its business as is currently being conducted as described in the Statutory Prospectus and the Prospectus, and to own, lease and operate its properties. All of the issued shares of capital stock of, or other ownership interests in, each subsidiary have been duly and validly authorized and issued and are fully paid and non-assessable and are owned, directly or indirectly, by the Company, free and clear of any lien, charge, mortgage, pledge, security interest, claim, limitation on voting rights, equity, trust or other encumbrance, preferential arrangement, defect or restriction of any kind whatsoever, other than as disclosed in the Registration Statement, the Statutory Prospectus and the Prospectus. The Company and each of its subsidiaries is duly qualified to do business and is in good standing as a foreign corporation in each jurisdiction in which the nature of the business conducted by it or location of the assets or properties owned, leased or licensed by it requires such qualification, except for such jurisdictions where the failure to so qualify individually or in the aggregate would not have a material adverse effect on the assets, properties, condition, financial or otherwise, or in the results of operations, business affairs or business prospects of the Company and its subsidiaries considered as a whole (a “Material Adverse Effect”); and to the Company’s knowledge, no proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing, or seeking to revoke, limit or curtail, such power and authority or qualification.

-6-

(g) The Company and each of its subsidiaries has all requisite corporate power and authority, and all necessary authorizations, approvals, consents, orders, licenses, certificates and permits of and from all governmental or regulatory bodies or any other person or entity (collectively, the “Permits”), to own, lease and license its assets and properties and conduct its business, all of which are valid and in full force and effect, except where the lack of such Permits, individually or in the aggregate, would not have a Material Adverse Effect. The Company and each of its subsidiaries has fulfilled and performed, in all material respects, all of its obligations with respect to such Permits and no event has occurred that allows, or after notice or lapse of time would allow, revocation or termination thereof or results in any other material impairment of the rights of the Company thereunder. Except as may be required under the Securities Act and state and foreign Blue Sky laws, no other Permits are required to enter into, deliver and perform this Agreement and to issue and sell the Securities.

(h) (i) At the time of filing the Registration Statement, and (ii) as of the date hereof, the Company was an “ineligible issuer,” as defined in Rule 405 of the Rules, solely as a result of the provisions in Rule 405(1)(ii)(A).

(i) The Company and each of its subsidiaries owns or possesses legally enforceable rights to use all patents, patent applications, inventions, trademarks, trademark applications, trade names, service marks, copyrights, copyright applications, licenses, know-how and other similar intellectual property rights and proprietary knowledge (collectively, “Intangibles”) necessary for the conduct of its business as now conducted or as proposed to be conducted, as described in the Registration Statement, General Disclosure Package and Prospectus. Neither the Company nor any of its subsidiaries has received any written notice of, nor is it aware of, any infringement of or conflict with asserted rights of others with respect to any Intangibles.

(j) The Company and each of its subsidiaries has good and marketable title in fee simple to all real property, and good and marketable title to all other property owned by it (excluding Intangibles referenced in (i) above), in each case free and clear of all liens, encumbrances, claims, security interests and defects, except as described in the Registration Statement, the Statutory Prospectus and the Prospectus, and such as do not materially affect the value of such property and do not materially interfere with the use made or proposed to be made of such property by the Company and its subsidiaries. All property held under lease by the Company and its subsidiaries is held by them under valid, existing and enforceable leases, free and clear of all liens, encumbrances, claims, security interests and defects, except as described in the Registration Statement, the Statutory Prospectus and the Prospectus and such as are not material and do not materially interfere with the use made or proposed to be made of such property by the Company and its subsidiaries.

-7-

(k) Subsequent to the respective dates as of which information is given in the Registration Statement, the Statutory Prospectus and the Prospectus, (i) there has not been any event which could have a Material Adverse Effect; (ii) neither the Company nor any of its subsidiaries has sustained any loss or interference with its assets, businesses or properties (whether owned or leased) from fire, explosion, earthquake, flood or other calamity, whether or not covered by insurance, or from any labor dispute or any court or legislative or other governmental action, order or decree which would have a Material Adverse Effect; and (iii) since the date of the latest balance sheet included in the Registration Statement and the Prospectus, neither the Company nor its subsidiaries has (A) issued any securities (other than securities issued pursuant to employee benefit plans, qualified stock option plans or other employee compensation plans or pursuant to outstanding options, rights or warrants or pursuant to conversion of, or redemption of obligations under, notes issued by the Company in 2022) or incurred any liability or obligation, direct or contingent, for borrowed money, except such liabilities or obligations incurred in the ordinary course of business, (B) entered into any transaction not in the ordinary course of business or (C) except for regular dividends on the Common Stock in amounts per share that are consistent with past practice, declared or paid any dividend or made any distribution on any shares of its stock or redeemed, purchased or otherwise acquired or agreed to redeem, purchase or otherwise acquire any shares of its capital stock.

(l) There is no document, contract or other agreement required to be described in the Registration Statement, the Statutory Prospectus or the Prospectus or to be filed as an exhibit to the Registration Statement which is not described or filed as required by the Securities Act or Rules. Each description of a contract, document or other agreement in the Registration Statement, the Statutory Prospectus or the Prospectus accurately reflects, in all material respects, the terms of the underlying contract, document or other agreement. Each contract, document or other agreement described in the Registration Statement, the Statutory Prospectus or the Prospectus or listed in the Exhibits to the Registration Statement is in full force and effect and is valid and enforceable by and against the Company or its subsidiary, as the case may be, in accordance with its terms. Neither the Company nor any of its subsidiaries, if a subsidiary is a party, nor to the Company’s knowledge, any other party, is in default in the observance or performance of any term or obligation to be performed by it under any such agreement, and no event has occurred which with notice or lapse of time or both would constitute such a default, in any such case which default or event, individually or in the aggregate, would have a Material Adverse Effect. No default exists, and no event has occurred which with notice or lapse of time or both would constitute a default, in the due performance and observance of any term, covenant or condition, by the Company or its subsidiary, if a subsidiary is a party thereto, of any other agreement or instrument to which the Company or any of its subsidiaries is a party or by which Company or its properties or business or a subsidiary or its properties or business may be bound or affected which default or event, individually or in the aggregate, would have a Material Adverse Effect.

-8-

(m) The statistical and market related data included in the Registration Statement, the Statutory Prospectus or the Prospectus are based on or derived from sources that the Company believes to be reliable and accurate.

(n) Neither the Company nor any subsidiary (i) is in violation of its certificate of incorporation, bylaws or other organizational documents, (ii) is in default under, and no event has occurred which, with notice or lapse of time, or both, would constitute a default under, or result in the creation or imposition of any lien, charge, mortgage, pledge, security interest, claim, limitation on voting rights, equity, trust or other encumbrance, preferential arrangement, defect or restriction of any kind whatsoever, upon, any property or assets of the Company or any subsidiary pursuant to, any bond, debenture, note, indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which it is a party or by which it is bound or to which any of its properties or assets is subject or (iii) is in violation of any statute, law, rule, regulation, ordinance, directive, judgment, decree or order of any judicial, regulatory or other legal or governmental agency or body, foreign or domestic, except (in the case of clauses (ii) and (iii) above) for violations or defaults that could not (individually or in the aggregate) reasonably be expected to have a Material Adverse Effect.

(o) This Agreement has been duly authorized, executed and delivered by the Company.

(p) Neither the execution, delivery and performance of this Agreement, the Pre-Funded Warrants and the Warrants by the Company nor the consummation of any of the transactions contemplated hereby (including, without limitation, the issuance and sale by the Company of the Securities) will give rise to a right to terminate or accelerate the due date of any payment due under, or conflict with or result in the breach of any term or provision of, or constitute a default (or an event which with notice or lapse of time or both would constitute a default) under, or require any consent or waiver under, or result in the execution or imposition of any lien, charge or encumbrance upon any properties or assets of the Company or its subsidiaries pursuant to the terms of, any indenture, mortgage, deed of trust or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which either the Company or its subsidiaries or any of their properties or businesses is bound, or any franchise, license, permit, judgment, decree, order, statute, rule or regulation applicable to the Company or any of its subsidiaries or violate any provision of the charter or by-laws of the Company or any of its subsidiaries, except for such consents or waivers which have already been obtained and are in full force and effect.

-9-

(q) The Company has authorized and outstanding capital stock as set forth under the caption "Description of Capital Stock" in the Registration Statement, the Statutory Prospectus and the Prospectus. The Securities have been duly authorized for issuance by the Company. All of the issued and outstanding shares of Common Stock have been duly and validly issued and are fully paid and nonassessable and were issued in compliance in all material respects with applicable securities laws. There are no statutory preemptive or other similar rights to subscribe for or to purchase or acquire any shares of Common Stock of the Company or any of its subsidiaries or any such rights pursuant to its Certificate of Incorporation or by-laws or any agreement or instrument to or by which the Company or any of its subsidiaries is a party or bound. The Company has reserved and kept available for the exercise of the Pre-Funded Warrants and the Warrants such number of authorized but unissued shares of Common Stock as are sufficient to permit the exercise in full of the Pre-Funded Warrants and the Warrants in accordance with their terms. The Shares, when issued and sold pursuant to this Agreement, the Pre-Funded Warrant Shares, when issued and sold pursuant to the Pre-Funded Warrants, and the Warrant Shares, when issued and sold pursuant to the Warrants, will be duly and validly issued, fully paid and nonassessable and none of them will be issued in violation of any preemptive or other similar right. Except as disclosed in the Registration Statement, the Statutory Prospectus and the Prospectus, there is no outstanding option, warrant or other right calling for the issuance of, and there is no commitment, plan or arrangement to issue, any share of stock of the Company or any of its subsidiaries or any security convertible into, or exercisable or exchangeable for, such stock. The exercise price of each option to acquire Common Stock (each, a "Company Stock Option") is no less than the fair market value of a share of Common Stock as determined on the date of grant of such Company Stock Option. All grants of Company Stock Options were validly issued and properly approved by the Board of Directors of the Company in material compliance with all applicable laws and the terms of the plans under which such Company Stock Options were issued and were recorded on the Company Financial Statements, in accordance with GAAP, and no such grants involved any "back dating," "forward dating," "spring loading" or similar practices with respect to the effective date of grant. The Common Stock and the Securities conform in all material respects to all statements in relation thereto contained in the Registration Statement and the Statutory Prospectus and the Prospectus. All outstanding shares of capital stock of each of the Company's subsidiaries have been duly authorized and validly issued, and are fully paid and nonassessable and are owned directly by the Company or by another wholly-owned subsidiary of the Company free and clear of any security interests, liens, encumbrances, equities or claims, other than those described in the Registration Statement, the Statutory Prospectus and the Prospectus.

(r) No holder of any security of the Company has any right, which has not been waived, to have any security owned by such holder included in the Registration Statement or to demand registration of any security owned by such holder for a period of 90 days after the date of this Agreement. Each director and executive officer of the Company listed on Schedule II hereto has delivered to the Underwriter his or her enforceable written lock-up agreement in the form attached to this Agreement as **Exhibit A** hereto ("Lock-up Agreement").

-10-

(s) There are no legal or governmental proceedings pending to which the Company or any of its subsidiaries is a party or of which any property of the Company or any of its subsidiaries is the subject which, if determined adversely to the Company or any of its subsidiaries could individually or in the aggregate have a Material Adverse Effect; and, to the knowledge of the Company, no such proceedings are threatened or contemplated by governmental authorities or threatened by others.

(t) All necessary corporate action has been duly and validly taken by the Company to authorize the execution, delivery and performance of this Agreement, the Pre-Funded Warrants and the Warrants and the issuance and sale of the Securities by the Company. The Warrants and Pre-Funded Warrants on the Closing Date will be, duly and validly authorized, executed and delivered by the Company and will constitute legal, valid and binding obligations of the Company enforceable against the Company in accordance with their respective terms, except (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, and (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

(u) The Company nor any of its subsidiaries is involved in any labor dispute nor, to the knowledge of the Company, is any such dispute threatened, in each case, which dispute would have a Material Adverse Effect. The Company is not aware of any existing or imminent labor disturbance by the employees of any of its principal suppliers or contractors which would have a Material Adverse Effect. The Company is not aware of any threatened or pending litigation between the Company or its subsidiaries and any of its executive officers which, if adversely determined, could have a Material Adverse Effect, and the Company has no reason to believe that such executive officers will not remain in the employment of the Company.

(v) No transaction has occurred between or among the Company and any of its officers or directors, stockholders or any affiliate or affiliates of any such officer or director or stockholder that is required to be described in and is not described in the Registration Statement, the Statutory Prospectus and the Prospectus.

(w) The Company has not taken, nor will it take, directly or indirectly, any action designed to or which might reasonably be expected to cause or result in, or which has constituted or which might reasonably be expected to constitute, the stabilization or manipulation of the price of the Common Stock or any security of the Company to facilitate the sale or resale of any of the Underwritten Securities.

-11-

(x) The Company and each of its subsidiaries has filed all federal, state, local and foreign tax returns which are required to be filed through the date hereof, which returns are true and correct in all material respects or has received timely extensions thereof, and has paid all taxes shown on such returns and all assessments received by it to the extent that the same are material and have become due. There are no tax audits or investigations pending, which if adversely determined would have a Material Adverse Effect; nor are there any material proposed additional tax assessments against the Company or any of its subsidiaries.

(y) The Common Stock is registered pursuant to Section 12(b) of the Exchange Act and listed on The Nasdaq Capital Market. The Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or the quotation of the Common Stock on The Nasdaq Capital Market, nor, except as described in the Registration Statement, the Statutory Prospectus and the Prospectus, has the Company received any notification that the Commission or The Nasdaq Capital Market is contemplating terminating such registration or quotation.

(z) The books, records and accounts of the Company and its subsidiaries accurately and fairly reflect, in all material respects, the transactions in, and dispositions of, the assets of, and the results of operations of, the Company and its subsidiaries. The Company and each of its subsidiaries maintains a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(aa) The Company has established and maintains disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Exchange Act), which: (i) are designed to ensure that material information relating to the Company is made known to the Company's principal executive officer and its principal financial officer by others within the Company, particularly during the periods in which the periodic reports required under the Exchange Act are required to be prepared; (ii) provide for the periodic evaluation of the effectiveness of such disclosure controls and procedures at the end of the periods in which the periodic reports are required to be prepared; and (iii) are effective in all material respects to perform the functions for which they were established.

-12-

(bb) Based on the evaluation of its disclosure controls and procedures, the Company is not aware of (i) any material weakness or significant deficiency in the design or operation of internal controls, except as described in the Registration Statement, the Statutory Prospectus and the Prospectus, which could adversely affect the Company's ability to record, process, summarize and report financial data or any material weaknesses in internal controls; or (ii) any fraud, whether or not material, that involves management or other employees who have a role in the Company's internal controls.

(cc) Except as described in the Registration Statement, the Statutory Prospectus and the Prospectus and as preapproved in accordance with the requirements set forth in Section 10A of the Exchange Act, the Auditor has not been engaged by the Company to perform any "prohibited activities" (as defined in Section 10A of the Exchange Act).

(dd) Except as described in the Registration Statement, the Statutory Prospectus and the Prospectus, there are no material off-balance sheet arrangements (as defined in Item 303 of Regulation S-K) that have or are reasonably likely to have a material current or future effect on the Company's financial condition, revenues or expenses, changes in financial condition, results of operations, liquidity, capital expenditures or capital resources.

(ee) The Company's Board of Directors has validly appointed an audit committee whose composition satisfies the requirements of Rule 5605 of the Nasdaq Stock Market and the Board of Directors and/or the audit committee has adopted a charter that satisfies the requirements of Rule 5605 of The Nasdaq Stock Market. The audit committee has reviewed the adequacy of its charter within the past twelve (12) months.

(ff) There is and has been no failure on the part of the Company or any of its directors or officers, in their capacities as such, to comply with any provision of the Sarbanes-Oxley Act of 2002, as applicable, including, without limitation, Section 402 related to loans and Sections 302 and 906 related to certifications.

(gg) The Company and its subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are customary in the businesses in which they are engaged or propose to engage after giving effect to the transactions described in the Statutory Prospectus and the Prospectus; all policies of insurance and fidelity or surety bonds insuring the Company or any of its subsidiaries or the Company's or its subsidiaries' respective businesses, assets, employees, officers and directors are in full force and effect; the Company and each of its subsidiaries are in compliance with the terms of such policies and instruments in all material respects; and neither the Company nor any subsidiary of the Company has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that is not materially greater than the current cost. Neither the Company nor any of its subsidiaries has been denied any insurance coverage which it has sought or for which it has applied.

-13-

(hh) Each approval, consent, order, authorization, designation, declaration or filing of, by or with any regulatory, administrative or other governmental body necessary in connection with the execution and delivery by the Company of this Agreement and the consummation of the transactions herein contemplated required to be obtained or performed by the Company (except (i) such additional steps as may be required by the Financial Industry Regulatory Authority ("FINRA"); (ii) as may be necessary to qualify the Underwritten Securities for public offering by the Underwriter under the state securities or Blue Sky laws; (iii) the filing of a Notification Form: Listing of Additional Shares with The Nasdaq Capital Market; or (iv) any filings required under the Exchange Act, which have been or will be made when and how required) has been obtained or made and is in full force and effect.

(ii) None of the Company, nor any of its officers, directors or, to the best knowledge of the Company, any beneficial owner of five percent or greater of the Common Stock, is affiliated or associated with any broker-dealer that is a member of FINRA, except as otherwise disclosed to the Underwriter in writing.

(jj) (i) Each of the Company and each of its subsidiaries is in compliance in all material respects with all rules, laws and regulation relating to the use, treatment, storage and disposal of toxic substances and protection of health or the environment ("Environmental Laws") which are applicable to its business; (ii) neither the Company nor its subsidiaries has received any notice from any governmental authority or third party of an asserted claim under Environmental Laws; (iii) each of the Company and each of its subsidiaries has received all permits, licenses or other approvals required of it under applicable Environmental Laws to conduct its business, except where the lack of such permits, licenses or other approvals, individually

or in the aggregate, would not have a Material Adverse Effect, and is in compliance, in all material respects, with all terms and conditions of any such permit, license or approval; (iv) to the Company's knowledge, no facts currently exist that will require the Company or any of its subsidiaries to make future material capital expenditures to comply with Environmental Laws; and (v) no property which is or has been owned, leased or occupied by the Company or its subsidiaries has been designated as a Superfund site pursuant to the Comprehensive Environmental Response, Compensation of Liability Act of 1980, as amended (42 U.S.C. Section 9601, et. seq.) ("CERCLA 1980") or otherwise designated as a contaminated site under applicable state or local law. Neither the Company nor any of its subsidiaries has been named as a "potentially responsible party" under the CERCLA 1980.

-14-

(kk) In the ordinary course of its business, the Company periodically reviews the effect of Environmental Laws on the business, operations and properties of the Company and its subsidiaries, in the course of which the Company identifies and evaluates associated costs and liabilities (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws, or any permit, license or approval, any related constraints on operating activities and any potential liabilities to third parties). On the basis of such review, the Company has reasonably concluded that such associated costs and liabilities would not, singly or in the aggregate, have a Material Adverse Effect.

(ll) The Company is not and, after giving effect to the offering and sale of the Securities and the application of proceeds thereof as described in the Statutory Prospectus and the Prospectus, will not be an "investment company" within the meaning of the Investment Company Act of 1940, as amended (the "Investment Company Act").

(mm) The Company, any director, officer or employee of the Company or its subsidiaries, and, to the knowledge of the Company, any agent or other person acting on behalf of the Company or its subsidiaries, has not, directly or indirectly, while acting on behalf of the Company or its subsidiaries (i) used any corporate funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity; (ii) made any unlawful payment to foreign or domestic government officials or employees or to foreign or domestic political parties or campaigns from corporate funds; (iii) violated any applicable provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended; or (iv) made any other unlawful payment.

(nn) The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all applicable jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "Money Laundering Laws") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Money Laundering Laws is pending, or to the best knowledge of the Company, threatened.

(oo) Neither the Company nor any of its subsidiaries nor, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or any of its subsidiaries is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("OFAC"); and the Company will not directly or indirectly use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity, for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC.

-15-

(pp) Except as described in the Registration Statement, the Statutory Prospectus and the Prospectus, the Company has not sold or issued any shares of Common Stock during the six-month period preceding the date of the Prospectus, including any sales pursuant to Rule 144A under, or Regulations D or S of, the Securities Act, other than shares issued pursuant to employee benefit plans, qualified stock options plans or other employee compensation plans or pursuant to outstanding options, rights, warrants or debt securities.

(qq) The Company has fulfilled its obligations, if any, under the minimum funding standards of Section 302 of the U.S. Employee Retirement Income Security Act of 1974 ("ERISA") and the regulations and published interpretations thereunder with respect to each "plan" as defined in Section 3(3) of ERISA and such regulations and published interpretations in which its employees are eligible to participate and each such plan is in compliance, in all material respects, with the presently applicable provisions of ERISA and such regulations and published interpretations. No "Reportable Event" (as defined in 12 ERISA) has occurred with respect to any "Pension Plan" (as defined in ERISA) for which the Company could have any liability.

(rr) None of the Company, its directors or its officers has distributed nor will distribute prior to the later of (i) the Firm Securities Closing Date, or the Option Securities Closing Date, and (ii) completion of the distribution of the Securities, any offering material in connection with the offering and sale of the Securities other than any Preliminary Prospectus, the Prospectus and the Registration Statement.

(ss) Since the date of the preliminary prospectus included in the Registration Statement filed with the Commission on October 28, 2022 (or, if earlier, the first date on which the Company engaged directly or through any person authorized to act on its behalf in any Testing-the-Waters Communication (as defined herein)) through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the Securities Act (an "Emerging Growth Company"). "Testing-the-Waters Communication" means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Securities Act.

(tt) The Company (a) has not alone engaged in any Testing-the-Waters Underwriter other than Testing-the-Waters Communications with the consent of the Underwriter with entities that are qualified institutional buyers within the meaning of Rule 144A under the Securities Act or institutions that are accredited investors within the meaning of Rule 501 under the Securities Act and (b) has not authorized anyone other than the Underwriter to engage in Testing-the-Waters Communications. The Company reconfirms that the Underwriter has been authorized to act on its behalf in undertaking Testing-the-Waters Communications. The Company has not distributed any Written Testing-the-Waters Communications (as defined herein). "Written Testing-the-Waters Communication" means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Securities Act.

-16-

(uu) The Company and its subsidiaries: (A) are and at all times have been in compliance with all statutes, rules, and regulations applicable to Company and its subsidiaries related to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product manufactured or distributed by the Company ("Applicable Laws"), except as would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect; (B) have not received any U.S. Food and Drug Administration ("FDA") Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from any governmental authority alleging or asserting noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("Authorizations"); (C) possess all material Authorizations and such Authorizations are valid and in full force and effect and are not in material violation of any term of any such Authorizations; (D) have not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any governmental

authority or third party alleging that any product operation or activity is in violation of any Applicable Laws or Authorizations and have no knowledge that any such governmental authority or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (E) have not received notice that any governmental authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations and the Company has no knowledge that any such governmental authority is considering such action; (F) have not, either voluntarily or involuntarily, initiated, conducted, or issued or caused to be initiated, conducted or issued, any recall, market withdrawal or replacement, safety alert, post-sale warning, "dear doctor" letter, or other notice or action relating to the alleged lack of safety, efficacy or regulatory compliance of any product or any alleged product defect or violation and, to the Company's knowledge, no third party has initiated or conducted any such notice or action and there are no facts which are reasonably likely to cause, and the Company has not received any written notice from the FDA or any other regulatory agency regarding, a material recall, market withdrawal or replacement of any Company product sold or intended to be sold by the Company, a material change in the marketing classification or a material adverse change in the labeling of any such Company products, or a termination or suspension of the manufacturing, marketing, or distribution of such Company products; and (G) have filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and correct in all material respects on the date filed (or were corrected or supplemented by a subsequent submission).

-17-

(vv) The studies, tests and preclinical and clinical investigations conducted by or on behalf of the Company and its subsidiaries were and, if still pending, are, in all material respects, being conducted in accordance with established protocols, procedures and controls pursuant to accepted professional scientific standards and all Applicable Laws and Authorizations, including, without limitation, the Federal Food, Drug, and Cosmetic Act and implementing regulations including good laboratory practice ("GLP") regulations (21 C.F.R. Part 58) if any such studies, tests or preclinical and clinical investigations are being conducted pursuant to GLP, and good clinical practice and IND requirements (21 C.F.R. Parts 50, 54, 56, and 312) if any such studies, tests or preclinical and clinical investigations were or are subject to good clinical practice regulations or were or are being conducted under an IND; the descriptions of the results of such studies, tests and trials contained in the Registration Statement, the Statutory Prospectus and the Prospectus are accurate in all material respects and fairly present the data derived from such studies, tests and trials. The Company is not aware of any studies, tests or trials the results of which the Company believes reasonably call into question the study, test, or trial results described or referred to in the Registration Statement, the Statutory Prospectus and the Prospectus when viewed in the context in which such results are described and the clinical state of development; and neither the Company nor any of its subsidiaries have received any notices or correspondence from any governmental authority requiring the termination, suspension or material modification of any studies, tests or preclinical or clinical investigations conducted by or on behalf of the Company or any of its subsidiaries.

3. Conditions of the Underwriter's Obligations. The obligation of the Underwriter to purchase the Underwritten Firm Securities or any Underwritten Option Securities, as applicable, is subject to each of the following terms and conditions:

(a) Notification that the Registration Statement has become effective shall have been received by the Underwriter and the Prospectus shall have been timely filed with the Commission in accordance with Section 4(a) of this Agreement and any material required to be filed by the Company pursuant to Rule 433(d) of the Rules shall have been timely filed with the Commission in accordance with such rule.

-18-

(b) No order preventing or suspending the use of any Preliminary Prospectus or the Prospectus shall have been or shall be in effect and no order suspending the effectiveness of the Registration Statement shall be in effect and no proceedings for such purpose shall be pending before or threatened by the Commission, and any requests for additional information on the part of the Commission (to be included in the Registration Statement or the Prospectus or otherwise) shall have been complied with to the satisfaction of the Commission and the Underwriter. If the Company has elected to rely upon Rule 430A, Rule 430A information previously omitted from the effective Registration Statement pursuant to Rule 430A shall have been transmitted to the Commission for filing pursuant to Rule 424(b) within the prescribed time period and the Company shall have provided evidence satisfactory to the Underwriter of such timely filing, or a post-effective amendment providing such information shall have been promptly filed and declared effective in accordance with the requirements of Rule 430A.

(c) The representations and warranties of the Company contained in this Agreement and in any certificates delivered pursuant to Section 3(d) shall be true and correct when made and on and as of each Closing Date as if made on such date. The Company shall have performed all covenants and agreements and satisfied all the conditions contained in this Agreement required to be performed or satisfied by it at or before such Closing Date.

(d) The Underwriter shall have received on each Closing Date a certificate, addressed to the Underwriter and dated such Closing Date, of the chief executive officer and chief financial officer of the Company to the effect that: (i) the representations, warranties and agreements of the Company in this Agreement were true and correct when made and are true and correct as of such Closing Date; (ii) the Company has performed all covenants and agreements and satisfied all conditions contained herein; (iii) they have carefully examined the Registration Statement, the Prospectus and the General Disclosure Package, and, in their opinion (A) as of the Effective Date the Registration Statement and Prospectus did not include, and as of the Applicable Time, the General Disclosure Package did not include, any untrue statement of a material fact and did not omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and (B) since the Effective Date no event has occurred which should have been set forth in a supplement or otherwise required an amendment to the Registration Statement, the Statutory Prospectus or the Prospectus; (iv) no stop order suspending the effectiveness of the Registration Statement has been issued and, to their knowledge, no proceedings for that purpose have been instituted or are pending under the Securities Act and (v) there has not occurred any material adverse change in the assets, properties, condition, financial or otherwise, or in the results of operations, business affairs or business prospects of the Company and its subsidiaries considered as a whole.

-19-

(e) The Underwriter shall have received: (i) simultaneously with the execution of this Agreement a signed letter from the Auditor addressed to the Underwriter and dated the date of this Agreement, in form and substance reasonably satisfactory to the Underwriter, containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement and the General Disclosure Package, and (ii) on each the Closing Date, a signed letter from the Auditor addressed to the Underwriter and dated such Closing Date, in form and substance reasonably satisfactory to the Underwriter containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement and the Prospectus.

(f) The Underwriter shall have received on each Closing Date from Troutman Sanders LLP, corporate counsel for the Company, an opinion and negative assurance statement, addressed to the Underwriter and dated such Closing Date, in form and substance reasonably satisfactory to the Underwriter.

(g) The Underwriter shall have received on each Closing Date from DLA Piper LLP and Bozicevic, Field & Francis LLP, intellectual property counsel for the Company, their opinions, each addressed to the Underwriter and dated such Closing Date, in form and substance reasonably satisfactory to the Underwriter.

(h) The Underwriter shall have received on each Closing Date from Lowenstein Sandler LLP, counsel for the Underwriter, an opinion and negative assurance statement, addressed to the Underwriter and dated such Closing Date, in form and substance reasonably satisfactory to the Underwriter.

(i) All proceedings taken in connection with the sale of the Securities as herein contemplated shall be reasonably satisfactory in form and substance to the Underwriter, and counsel to the Underwriter.

(j) The Underwriter shall have received copies of the Lock-up Agreements executed by each director and executive officer of the Company listed on Schedule I hereto.

(k) The Underwriter shall have received on the Firm Securities Closing Date copies of the executed Pre-Funded Warrants in portable document ("PDF") format.

(l) The Underwriter shall have received on each Closing Date PDF copies of the executed Warrants being sold on such Closing Date

(m) The Company shall have submitted a Notification Form: Listing of Additional Shares with The Nasdaq Capital Market with respect to the Shares, Pre-Funded Warrant Shares and Warrant Shares.

-20-

(n) The Underwriter shall be reasonably satisfied that since the respective dates as of which information is given in the Registration Statement, the Statutory Prospectus, the General Disclosure Package and the Prospectus, (i) there shall not have been any material change in the capital stock of the Company or any material change in the indebtedness (other than in the ordinary course of business) of the Company, (ii) except as set forth or contemplated by the Registration Statement, the Statutory Prospectus, the General Disclosure Package or the Prospectus, no material oral or written agreement or other transaction shall have been entered into by the Company that is not in the ordinary course of business or that could reasonably be expected to result in a material reduction in the future earnings of the Company, (iii) no loss or damage (whether or not insured) to the property of the Company shall have been sustained that had or could reasonably be expected to have a Material Adverse Effect, (iv) no legal or governmental action, suit or proceeding affecting the Company or any of its properties that is material to the Company or that affects or could reasonably be expected to affect the transactions contemplated by this Agreement shall have been instituted or threatened and (v) there shall not have been any material change in the assets, properties, condition (financial or otherwise), or in the results of operations, business affairs or business prospects of the Company or its subsidiaries considered as a whole that makes it impractical or inadvisable in the Underwriter's judgment to proceed with the purchase or offering of the Securities as contemplated hereby.

(o) On or prior to the Closing Date, FINRA shall have confirmed that it has not raised any objection with respect to the fairness and reasonableness of the underwriting terms and agreements in connection with the offering of the Securities.

(p) The Company shall have furnished or caused to be furnished to the Underwriter such further certificates or documents as the Underwriter shall have reasonably requested.

4. Covenants and other Agreements of the Company and the Underwriter.

(a) The Company covenants and agrees as follows:

(i) The Company will use its reasonable best efforts to cause the Registration Statement, if not effective at the time of execution of this Agreement, and any amendments thereto, to become effective as promptly as possible. The Company shall prepare the Prospectus in a form approved by the Underwriter and file such Prospectus pursuant to Rule 424(b) under the Securities Act not later than the Commission's close of business on the second business day following the execution and delivery of this Agreement, or, if applicable, such earlier time as may be required by the Rules.

-21-

(ii) The Company shall promptly advise the Underwriter in writing (A) when any post-effective amendment to the Registration Statement shall have become effective or any supplement to the Prospectus shall have been filed, (B) of any request by the Commission for any amendment of the Registration Statement or the Prospectus or for any additional information, (C) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or of any order preventing or suspending the use of any preliminary prospectus or the institution or threatening of any proceeding for that purpose and (D) of the receipt by the Company of any notification with respect to the suspension of the qualification of the Underwritten Securities for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose. The Company shall not file any amendment of the Registration Statement or supplement to the Prospectus unless the Company has furnished the Underwriter a copy for its review prior to filing and shall not file any such proposed amendment or supplement to which the Underwriter reasonably object. The Company shall use its best efforts to prevent the issuance of any such stop order and, if issued, to obtain as soon as possible the withdrawal thereof.

(iii) If, at any time when a prospectus relating to the Securities (or, in lieu thereof, the notice referred to in Rule 173(a) of the Rules) is required to be delivered under the Securities Act, any event occurs as a result of which the Prospectus as then amended or supplemented would include any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein in the light of the circumstances under which they were made not misleading, or if it shall be necessary to amend or supplement the Prospectus to comply with the Securities Act or the Rules or the Exchange Act and the rules and regulations of the Commission thereunder, the Company promptly shall prepare and file with the Commission, subject to the second sentence of paragraph (ii) of this Section 4(a), an amendment or supplement which shall correct such statement or omission or an amendment which shall effect such compliance.

(iv) The Company shall make generally available to its security holders and to the Underwriter as soon as practicable, but not later than 45 days after the end of the 12-month period beginning at the end of the fiscal quarter of the Company during which the Effective Date occurs (or 90 days if such 12-month period coincides with the Company's fiscal year), an earning statement (which need not be audited) of the Company, covering such 12-month period, which shall satisfy the provisions of Section 11(a) of the Securities Act or Rule 158 of the Rules.

(v) The Company shall furnish to the Underwriter and counsel for the Underwriter, without charge, signed copies of the Registration Statement (including all exhibits thereto and amendments thereof) and to each other Underwriter a copy of the Registration Statement (without exhibits thereto) and all amendments thereof and, so long as delivery of a prospectus by the Underwriter or dealer may be required by the Securities Act or the Rules, as many copies of any Preliminary Prospectus and the Prospectus and any amendments thereof and supplements thereto as the Underwriter may reasonably request. If applicable, the copies of the Registration Statement, any Preliminary Prospectus, and Prospectus and each amendment and supplement thereto furnished to the Underwriter will be identical to the

(vi) The Company shall cooperate with the Underwriter and their counsel in endeavoring to qualify the Securities for offer and sale in connection with the offering under the laws of such jurisdictions as the Underwriter may designate and shall maintain such qualifications in effect so long as required for the distribution of the Securities; provided, however, that the Company shall not be required in connection therewith, as a condition thereof, to qualify as a foreign corporation or to execute a general consent to service of process in any jurisdiction or subject itself to taxation as doing business in any jurisdiction.

(vii) The Company, during the period when the Prospectus (or in lieu thereof, the notice referred to in Rule 173(a) of the Rules) is required to be delivered under the Securities Act and the Rules or the Exchange Act, will file all reports and other documents required to be filed with the Commission pursuant to Section 13, 14 or 15 of the Exchange Act within the time periods required by the Exchange Act and the regulations promulgated thereunder.

(viii) Without the prior written consent of the Underwriter, for a period of 90 days after the date of this Agreement, the Company shall not issue, sell or register with the Commission (other than on Form S-8 or on any successor form), or otherwise dispose of, directly or indirectly, any equity securities of the Company (or any securities convertible into, exercisable for or exchangeable for equity securities of the Company), except for the issuance of the Securities pursuant to the Registration Statement and the issuance of shares pursuant to the Company's existing stock option plan or bonus plan, or existing warrants or convertible securities as described in the Registration Statement, the Statutory Prospectus and the Prospectus, provided that such securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities or to extend the term of such securities. The Company represents and warrants that it shall enforce the Lock-Up Agreements and impose stop-transfer restrictions on any sale or other transfer or disposition of securities subject to a Lock-Up Agreement until the end of the applicable period.

(ix) On or before completion of this offering, the Company shall make all filings required under applicable securities laws and by The Nasdaq Capital Market.

(x) Prior to the Closing Date, the Company will issue no press release or other communications directly or indirectly and hold no press conference with respect to the Company, the condition, financial or otherwise, or the earnings, business affairs or business prospects of any of them, or the offering of the Shares without the prior written consent of the Underwriter unless in the judgment of the Company and its counsel, and after notification to the Underwriter, such press release or communication is required by law.

(xi) The Company will apply the net proceeds from the offering of the Underwritten Securities in the manner set forth under "Use of Proceeds" in the Prospectus.

(xii) The Company will promptly notify the Underwriter if the Company ceases to be an Emerging Growth Company at any time prior to the later of (a) completion of the distribution of the Underwritten Securities within the meaning of the Securities Act and (b) completion of the 90-day restricted period referred to in Section 4(a)(viii) hereof.

(xiii) If at any time following the distribution of any Written Testing-the-Waters Communication there occurred or occurs an event or development as a result of which such Written Testing-the-Waters Communication included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Underwriter and will promptly amend or supplement, at its own expense, such Written Testing-the-Waters Communication to eliminate or correct such untrue statement or omission.

(b) The Company agrees to pay, or reimburse if paid by the Underwriter, whether or not the transactions contemplated hereby are consummated or this Agreement is terminated, all costs and expenses incident to the public offering of the Securities and the performance of the obligations of the Company under this Agreement including those relating to: (i) the preparation, printing, reproduction, filing and distribution of the Registration Statement including all exhibits thereto, each Preliminary Prospectus, the Prospectus, all amendments and supplements thereto, and the printing, filing and distribution of this Agreement; (ii) the preparation and delivery of the Shares, Pre-Funded Warrants and Warrants to the Underwriter; (iii) the registration or qualification of the Securities for offer and sale under the securities or Blue Sky laws of the various jurisdictions referred to in Section 4(a)(vi), including the reasonable fees and disbursements of counsel for the Underwriter incurred in connection with such registration and qualification and the preparation, printing, distribution and shipment of preliminary and supplementary Blue Sky memoranda; (iv) the furnishing (including costs of shipping and mailing) to the Underwriter of copies of each Preliminary Prospectus, the Prospectus and all amendments or supplements to the Prospectus, and of the several documents required by this Section 4 to be so furnished, as may be reasonably requested for use in connection with the offering and sale of the Shares, Pre-Funded Warrants and Warrants by the Underwriter or by dealers to whom Shares, Pre-Funded Warrants and Warrants may be sold; (v) the filing fees of FINRA in connection with its review of the terms of the public offering and reasonable fees and disbursements of counsel for the Underwriter in connection with such review; (vi) inclusion of the Shares, Pre-Funded Warrant Shares for listing on The Nasdaq Capital Market; and (vii) all transfer taxes, if any, with respect to the sale and delivery of the Securities by the Company to the Underwriter. The Company will reimburse the Underwriter for its reasonable out-of-pocket costs and expenses incident to this offering and the performance of the obligations of the Underwriter under this Agreement, including its legal fees and disbursements, in connection with the purchase and sale of the Securities contemplated hereby in an amount not to exceed \$200,000 (including amounts payable pursuant to clauses (iii) and (v) above). Subject to the provisions of Section 7, the Underwriter agree to pay, whether or not the transactions contemplated hereby are consummated or this Agreement is terminated, all costs and expenses incident to the performance of the obligations of the Underwriter under this Agreement not payable by the Company pursuant to the preceding sentence, including, without limitation, the fees and disbursements of counsel for the Underwriter.

(c) The Company acknowledges and agrees that the Underwriter has acted and is acting solely in the capacity of a principal in an arm's length transaction between the Company, on the one hand, and the Underwriter, on the other hand, with respect to the offering of the Underwritten Securities contemplated hereby (including in connection with determining the terms of the offering) and not as a financial advisor, agent or fiduciary to the Company or any other person. Additionally, the Company acknowledges and agrees that the Underwriter has not and will not advise the Company or any other person as to any legal, tax, investment, accounting or regulatory matters in any jurisdiction. The Company has consulted with its own advisors concerning such matters and shall be responsible for making its own independent investigation and appraisal of the transactions contemplated hereby, and the Underwriter shall have no responsibility or liability to the Company or any other person with respect thereto, whether arising prior to or after the date hereof. Any review by the Underwriter of the Company, the transactions contemplated hereby or other matters relating to such transactions have been and will be performed solely for the benefit of the Underwriter and shall not be on behalf of the Company. The Company agrees that it will not claim that the Underwriter, or any of them, has rendered advisory services of any nature or respect, or owes a fiduciary duty to the company or any other person in connection with any such transaction or the process leading thereto.

(d) The Company represents and agrees that, it has not made and will not make any offer relating to the Underwritten Securities that would constitute an “issuer free writing prospectus,” as defined in Rule 433 of the Securities Act, or that would otherwise constitute a “free-writing prospectus,” as defined in Rule 405, required to be filed with the Commission.

5. Indemnification.

(a) The Company agrees to indemnify and hold harmless the Underwriter, its officers and employees and each person, if any, who controls the Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act against any and all losses, claims, damages and liabilities, joint or several (including any reasonable investigation, legal and other expenses incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted), to which they, or any of them, may become subject under the Securities Act, the Exchange Act or other Federal or state law or regulation, at common law or otherwise, insofar as such losses, claims, damages or liabilities arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus, the Registration Statement, the Statutory Prospectus, the Prospectus, any Written Testing-the-Waters Communication, or in any Blue Sky application or other information or other documents executed by the Company filed in any state or other jurisdiction to qualify any or all of the Securities under the securities laws thereof (any such application, document or information being hereinafter referred to as a “Blue Sky Application”) or arise out of or are based upon any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading; provided, however, that such indemnity shall not inure to the benefit of the Underwriter (or any person controlling such Underwriter) on account of any losses, claims, damages or liabilities arising from the sale of the Underwritten Securities to any person by such Underwriter if such untrue statement or omission or alleged untrue statement or omission was made in such preliminary prospectus, the Registration Statement, the Prospectus, the Statutory Prospectus, or such amendment or supplement thereto, any Written Testing-the-Waters Communication, or in any Blue Sky Application in reliance upon and in conformity with the Underwriter Information. This indemnity agreement will be in addition to any liability which the Company may otherwise have.

-25-

(b) The Underwriter agrees to indemnify and hold harmless the Company and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, each director of the Company, and each officer of the Company who signs the Registration Statement, against any losses, claims, damages or liabilities (including any reasonable investigation, legal and other expenses incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted) to which such party may become subject, under the Securities Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus, the Registration Statement, the Statutory Prospectus or the Prospectus, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in any Preliminary Prospectus, the Registration Statement, the Statutory Prospectus or the Prospectus or any such amendment or supplement in reliance upon and in conformity with the Underwriter Information; provided, however, that the obligation of the Underwriter to indemnify the Company (including any controlling person, director or officer thereof) shall be limited to the amount of the underwriting discount applicable to the Underwritten Securities purchased by the Underwriter hereunder.

(c) Any party that proposes to assert the right to be indemnified under this Section will, promptly after receipt of notice of commencement of any action, suit or proceeding against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section, notify each such indemnifying party of the commencement of such action, suit or proceeding, enclosing a copy of all papers served. No indemnification provided for in Section 5(a) or 5(b) shall be available to any party who shall fail to give notice as provided in this Section 5(c) if the party to whom notice was not given was unaware of the action, suit or proceeding to which such notice would have related and was prejudiced by the failure to give such notice but the omission so to notify such indemnifying party of any such action, suit or proceeding shall not relieve it from any liability that it may have to any indemnified party for contribution or otherwise than under this Section 5. In case any such action, suit or proceeding shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate in, and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof and the approval by the indemnified party of such counsel, the indemnifying party shall not be liable to such indemnified party for any legal or other expenses, except as provided below and except for the reasonable costs of investigation subsequently incurred by such indemnified party in connection with the defense thereof. The indemnified party shall have the right to employ its counsel in any such action, but the fees and expenses of such counsel shall be at the expense of such indemnified party unless (i) the employment of counsel by such indemnified party has been authorized in writing by the indemnifying parties, (ii) the indemnified party shall have been advised by counsel that there may be one or more legal defenses available to it which are different from or in addition to those available to the indemnifying party (in which case the indemnifying parties shall not have the right to direct the defense of such action on behalf of the indemnified party) or (iii) the indemnifying parties shall not have employed counsel to assume the defense of such action within a reasonable time after notice of the commencement thereof, in each of which cases the fees and expenses of counsel shall be at the expense of the indemnifying parties. An indemnifying party shall not be liable for any settlement of any action, suit, and proceeding or claim effected without its written consent, which consent shall not be unreasonably withheld or delayed.

-26-

(d) No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement, compromise or consent to the entry of judgment in any pending or threatened action, suit or proceeding in respect of which any indemnified party is a party or could be named and indemnity was or would be sought hereunder by such indemnified party, unless such settlement, compromise or consent (a) includes an unconditional release of such indemnified party from all liability for claims that are the subject matter of such action, suit or proceeding and (b) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

6. Contribution. In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in Section 5(a) or 5(b) is due in accordance with its terms but for any reason is unavailable to or insufficient to hold harmless an indemnified party in respect to any losses, liabilities, claims, damages or expenses referred to therein, then each indemnifying party shall contribute to the aggregate losses, liabilities, claims, damages and expenses (including any investigation, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claims asserted, but after deducting any contribution received by any person entitled hereunder to contribution from any person who may be liable for contribution) incurred by such indemnified party, as incurred, in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriter on the other hand from the offering of the Underwritten Securities pursuant to this Agreement or, if such allocation is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to above but also the relative fault of the Company on the one hand and the Underwriter on the other hand in connection with the statements or omissions which resulted in such losses, liabilities, claims, damages or expenses, as well as any other relevant equitable considerations. The Company and the Underwriter agree that it would not be just and equitable if contribution pursuant to this Section 6 were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to above. The aggregate amount of losses, liabilities, claims, damages and expenses incurred by an indemnified party and referred to above shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue or alleged untrue statement or omission or alleged omission. Notwithstanding the provisions of this Section 6, the Underwriter shall not be required to contribute any amount in excess of the underwriting discount actually received by it in connection with the Underwritten Securities purchased by it. No person guilty of fraudulent misrepresentation (within the meaning of Section

11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 6, each person, if any, who controls the Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act shall have the same rights to contribution as such Underwriter, and each director of the Company, each officer of the Company who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of the Section 15 of the Securities Act or Section 20 of the Exchange Act, shall have the same rights to contribution as the Company, as the case may be. Any party entitled to contribution will, promptly after receipt of notice of commencement of any action, suit or proceeding against such party in respect of which a claim for contribution may be made against another party or parties under this Section 6, notify such party or parties from whom contribution may be sought, but the omission so to notify such party or parties from whom contribution may be sought shall not relieve the party or parties from whom contribution may be sought from any other obligation it or they may have hereunder or otherwise than under this Section 6. No party shall be liable for contribution with respect to any action, suit, proceeding or claim settled without its written consent.

-27-

7. Termination.

(a) This Agreement may be terminated with respect to the Underwritten Securities to be purchased on a Closing Date by the Underwriter by notifying the Company at any time at or before a Closing Date in the absolute discretion of the Underwriter if: (i) there has occurred any material adverse change in the securities markets or any event, act or occurrence that has materially disrupted, or in the opinion of the Underwriter, will in the future materially disrupt, the securities markets or there shall be such a material adverse change in general financial, political or economic conditions or the effect of international conditions on the financial markets in the United States is such as to make it, in the judgment of the Underwriter, inadvisable or impracticable to market the Underwritten Securities or enforce contracts for the sale of the Underwritten Securities; (ii) there has occurred any outbreak or material escalation of hostilities or acts of terrorism or other calamity or crisis the effect of which on the financial markets of the United States is such as to make it, in the judgment of the Underwriter, inadvisable or impracticable to market the Underwritten Securities or enforce contracts for the sale of the Underwritten Securities; (iii) trading in the Common Stock or any securities of the Company has been suspended or materially limited by the Commission or The Nasdaq Capital Market or trading generally on the New York Stock Exchange, Inc., the NYSE American or The Nasdaq Stock Market has been suspended or materially limited, or minimum or maximum ranges for prices for securities shall have been fixed, or maximum ranges for prices for securities have been required, by any of said exchanges or by such system or by order of the Commission, FINRA, or any other governmental or regulatory authority; or (iv) a banking moratorium has been declared by any state or Federal authority; or (v) in the judgment of the Underwriter, there has been, since the time of execution of this Agreement or since the respective dates as of which information is given in the Prospectus, any material adverse change in the assets, properties, condition, financial or otherwise, or in the results of operations, business affairs or business prospects of the Company and its subsidiaries considered as a whole, whether or not arising in the ordinary course of business.

(b) If this Agreement is terminated pursuant to any of its provisions, the Company shall not be under any liability to the Underwriter, and the Underwriter shall not be under any liability to the Company, except that if this Agreement is terminated by the Underwriter because of any failure, refusal or inability on the part of the Company to comply with the terms or to fulfill any of the conditions of this Agreement, the Company will reimburse the Underwriter for all out-of-pocket expenses (including the reasonable fees and disbursements of their counsel) incurred by it in connection with the proposed purchase and sale of the Underwritten Securities or in contemplation of performing their obligations hereunder.

-28-

8. Miscellaneous. The respective agreements, representations, warranties, indemnities, rights of contribution and other statements of the Company, and the Underwriter, as set forth in this Agreement or made by or on behalf of them pursuant to this Agreement, shall remain in full force and effect, regardless of any investigation (or any statement as to the results thereof) made by or on behalf of the Underwriter or the Company or any of their respective officers, directors or controlling persons referred to in Sections 5 and 6 hereof, and shall survive delivery of and payment for the Securities. In addition, the provisions of Sections 4(b), 5, 6 and 7(b) shall survive the termination or cancellation of this Agreement.

This Agreement has been and is made for the benefit of the Underwriter, the Company and their respective successors and assigns, and, to the extent expressed herein, for the benefit of persons controlling any of the Underwriter, or the Company, and directors and officers of the Company, and their respective successors and assigns, and no other person shall acquire or have any right under or by virtue of this Agreement. The term "successors and assigns" shall not include any purchaser of Securities from any Underwriter merely because of such purchase. The invalidity or unenforceability of any Section, paragraph or provision of this Agreement shall not affect the validity or enforceability of any other Section, paragraph or provision hereof. If any Section, paragraph or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

No amendment or waiver of any provision of this Agreement, nor any consent or approval to any departure therefrom, shall in any event be effective unless and until the same shall be in writing and signed by the Company and the Underwriter.

All notices and communications hereunder shall be in writing and mailed or delivered or by telephone or telegraph if subsequently confirmed in writing, (a) if to the Underwriter, 920 Second Avenue South, Suite 700, Minneapolis, Minnesota 55402, Attention: Michael Townley, Head of Investment Banking, and to Lowenstein Sandler LLP, 1251 Avenue of the Americas, New York, New York 10020 Attention: John D. Hogoboom and (b) if to the Company, to its agent for service as such agent's address appears on the cover page of the Registration Statement with a copy to Troutman Pepper Hamilton Sanders LLP, Union Trust Building, 501 Grant Street, Suite 300, Pittsburgh, Pennsylvania 15219, Attention: Eric D. Kline.

This Agreement and any claim, controversy or dispute arising under or related to this Agreement shall be governed by and construed in accordance with the laws of the State of New York applicable to agreements made and to be performed in such state.

This Agreement may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. The headings herein are included for convenience of reference only and are not intended to be part of, or to affect the meaning or interpretation of, this Agreement. This Agreement constitutes the entire agreement of the parties to this Agreement. Notwithstanding anything herein to the contrary, the engagement agreement dated October 3, 2022, as amended, between the Company and the Underwriter, shall continue to be effective and continue to survive and be enforceable by the parties in accordance with its terms, including, but not limited to, Section E thereto.

-29-

Please confirm that the foregoing correctly sets forth the agreement among us.

Very truly yours,

ENSYSCE BIOSCIENCES, INC.

By /s/ Dr. Lynn Kirkpatrick

Name: Dr. Lynn Kirkpatrick
Title: President and Chief Executive Officer

Confirmed:

LAKE STREET CAPITAL MARKETS, LLC

By /s/ Michael Townley
Name: Michael Townley
Title: Head of Investment Banking

[Signature Page to ENSC Underwriting Agreement]

SCHEDULE I

Lock-Up Signatories

Dr. Lynn Kirkpatrick
David Humphrey, CPA
Richard Wright, MBA
Geoffrey Birkett
Linda Pestano, Ph.D.
William Schmidt, Ph.D.
Jeffrey Millard, Ph.D.
Andrew Benton, J.D.
William Chang
Bob Gower, Ph.D.
Adam S. Levin, M.D.
Steve R. Martin
Curtis Rosebraugh, M.D., MPH
Lee Rauch

Schedule I-1

Exhibit A

FORM OF LOCK-UP AGREEMENT

_____, 2022

Lake Street Capital Markets, LLC
920 Second Avenue South, Suite 700
Minneapolis, Minnesota 55402

Re: Public Offering of Ensysce Biosciences, Inc.

Ladies and Gentlemen:

The undersigned executive officer and/or director of Ensysce Biosciences, Inc. (the "Company"), who may be a holder of common stock, par value \$0.0001 per share of the Company ("Common Stock"), or rights to acquire Common Stock, understands that you, as underwriter, propose to enter into an Underwriting Agreement (the "Underwriting Agreement") with the Company, providing for the public offering (the "Public Offering") of shares of Common Stock and warrants of the Company (the "Securities"). Capitalized terms used herein and not otherwise defined shall have the meanings set forth in the Underwriting Agreement.

In consideration of the Underwriter's agreement to enter into the Underwriting Agreement and to proceed with the Public Offering of the Securities, and for other good and valuable consideration receipt of which is hereby acknowledged, the undersigned hereby agrees, by executing this lock-up agreement (this "Letter Agreement"), for the benefit of the Company and you that, without your prior written consent, the undersigned will not, during the period commencing as of the date hereof and ending 90 days after the date of the final prospectus (the "Prospectus") relating to the Public Offering (the "Lock-up Period"), directly or indirectly (1) offer, pledge, assign, encumber, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, any shares of Common Stock, or any securities convertible into or exercisable or exchangeable for Common Stock (together with the Common Stock, the "Common Securities") owned either of record or beneficially (as defined in the Securities Exchange Act of 1934, as amended (the "Exchange Act"), by the undersigned on the date hereof or hereafter acquired or (2) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise, or publicly announce an intention to do any of the foregoing. In addition, the undersigned agrees that, without your prior written consent, it will not, during the Lock-up Period, make any demand for or exercise any right with respect to, the registration of any Common Securities.

Exhibit A-1

The foregoing restrictions shall not apply to:

1. transfers of Common Securities as a gift or gifts;
2. transfers of Common Securities to any trust for the direct or indirect benefit of the undersigned or the immediate family (as defined below) of the undersigned;
3. if the undersigned is, or otherwise holds any Common Securities through, a corporation, partnership, limited liability company, trust or other business entity (1) transfers without consideration to another corporation, partnership, limited liability company, trust or other business entity that is a direct or indirect affiliate (as defined in Rule 405 promulgated under the Securities Act of 1933, as amended) of the undersigned or (2) distributions of Common Securities to limited partners, limited liability company members or stockholders of the undersigned;

4. transfers of Common Securities by testate or intestate succession;
5. transfers of Common Securities by operation of law;
6. the transfer of Common Securities pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction that is approved by the Board of Directors of the Company and made to all securityholders of the Company involving a Change of Control;
7. the sale of the Securities purchased by the undersigned in the Public Offering;

provided however, in the case of clauses (1)-(5), that the transferee agrees in writing with the Underwriter to be bound by the terms of this Letter Agreement, and in the case of clauses (1)-(5), no filing by any party under Section 16(a) of the Exchange Act shall be required or shall be made voluntarily in connection with such transfer or sale.

For purposes of this Letter Agreement, "immediate family" shall mean any relationship by blood, marriage, domestic partnership or adoption, not more remote than first cousin and "Change of Control" shall mean the transfer (whether by tender offer, merger, consolidation or other similar transaction), in one transaction or a series of related transactions, to a person or group of affiliated persons (other than the Underwriter pursuant to the Public Offering), of the Company's voting securities if, after such transfer, such person or group of affiliated persons would hold more than 50% of the outstanding voting securities of the Company (or the surviving entity).

In addition, the foregoing restrictions shall not apply to (i) the exercise of stock options granted pursuant to the Company's equity incentive plans in place as of the date of the Prospectus (including by way of "net" or "cashless" exercise and/or the sale of the Common Stock received upon such exercise to the Company to cover withholding tax obligations in connection with such exercise), (ii) the vesting or settlement of restricted stock units granted pursuant to the Company's equity incentive plans in place as of the date of the Prospectus (including the sale of the Common Stock received upon such vesting or settlement to cover withholding tax obligations in connection with such vesting or settlement); provided, that, in the cases of clauses (i) and (ii) such restrictions shall apply to any of the undersigned's Common Securities issued upon such exercise or vesting or settlement, or (iii) sales under, any contract, instruction or plan that the undersigned established prior to the date hereof and that satisfies all of the requirements of Rule 10b5-1(c)(1)(i)(B) under the Exchange Act.

Exhibit A-2

In furtherance of the foregoing, the Company and its duly appointed transfer agent and registrar are hereby authorized to decline to make any transfer of Common Securities if such transfer would constitute a violation or breach of this Letter Agreement.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Letter Agreement. All authority herein conferred or agreed to be conferred and any obligations of the undersigned shall be binding upon the successors, assigns, heirs or personal representatives of the undersigned.

The undersigned understands that this Letter Agreement will terminate and the undersigned shall be released from all obligations hereunder if (i) the Underwriting Agreement does not become effective by December 31, 2022, (ii) the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Common Stock to be sold thereunder and (iii) the Company notifies the Underwriter that it does not intend to proceed with the Public Offering.

The undersigned, whether or not participating in the Public Offering, understands that the Underwriter is entering into the Underwriting Agreement and proceeding with the Public Offering in reliance upon this Letter Agreement.

[Signature page follows]

Exhibit A-3

This Letter Agreement shall be governed by and construed in accordance with the laws of the State of New York.

Very truly yours,

Printed Name of Stockholder

By: _____

Signature Page to Exhibit A – Form of Lock-Up Agreement

Exhibit B

FORM OF PRE-FUNDED WARRANT

Exhibit C

FORM OF WARRANT

Ensysce Biosciences Announces Pricing of \$4.1 Million Public Offering

SAN DIEGO, CA / ACCESSWIRE / December 7, 2022 / Ensysce Biosciences, Inc. (“Ensysce” or the “Company”) (NASDAQ: ENSC),(OTC PINK: ENSCW), a clinical-stage biotech company applying transformative chemistry to improve prescription drug safety to reduce abuse and overdose, today announced the pricing of an underwritten public offering of 2,900,000 shares of its common stock (or common stock equivalents in lieu thereof) and warrants to purchase up to an aggregate of 5,800,000 shares of common stock at a combined effective public offering price of \$1.40 per share of common stock (or pre-funded warrant) and accompanying warrants. Each warrant is exercisable immediately at an exercise price of \$1.40 per share and will expire five years following the date of issuance. The Company expects to receive aggregate gross proceeds of approximately \$4.1 million from the offering. The offering is expected to close on or about December 9, 2022, subject to satisfaction of customary closing conditions.

Lake Street Capital Markets, LLC is acting as the sole underwriter for the offering.

The Company has also granted the underwriter a 45-day option to purchase up to an additional 342,000 shares of common stock and/or warrants to purchase up to an additional 870,000 shares of common stock at the public offering price, less the underwriting discounts and commission, to cover over-allotments, if any.

20% of the gross proceeds of the offering will be used to repay a portion of the Company’s outstanding convertible notes. The Company intends to use the remaining net proceeds from the offering for the further clinical development of its product candidates and for working capital and other general corporate purposes.

A registration statement on Form S-1 (File No. 333-268038) relating to these securities was declared effective by the U.S. Securities and Exchange Commission (the “SEC”) on December 6, 2022. This offering is being made only by means of a prospectus forming part of the effective registration statement. A preliminary prospectus relating to and describing the terms of the offering has been filed with the SEC. Electronic copies of the preliminary prospectus and, when available, copies of the final prospectus relating to the offering may be obtained for free by visiting the SEC’s website at www.sec.gov or by contacting Lake Street Capital Markets, LLC, Attention: Syndicate Department, 920 Second Avenue South, Suite 700, Minneapolis, Minnesota 55402, or by calling (612) 326-1305, or by emailing syndicate@lakestreetcm.com.

This press release shall not constitute an offer to sell or a solicitation of an offer to buy these securities, nor shall there be any sale of these securities in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such state or other jurisdiction.

About Ensysce Biosciences

Ensysce is a clinical-stage biotech company using its proprietary technology platforms to develop safer prescription drugs. Leveraging TAATM and MPATM, the Company is in the process of developing a unique, tamper-proof treatment option for pain that minimizes the risk of both drug abuse and overdoses. Ensysce’s products are anticipated to provide safer options to treat patients suffering from severe pain and assist in preventing deaths caused by medication abuse. The platforms are covered by an extensive worldwide intellectual property portfolio for a wide array of prescription drug compositions. For more information, please visit www.ensysce.com.

Definitions

‘PF614 TAA’: trypsin activated abuse protection - designed to protect against prescription drug abuse.

‘PF614-MPA’: multi-pill abuse resistance - designed to protect against abuse and accidental overdose.

Forward Looking Statements

Statements contained in this press release that are not purely historical may be deemed to be forward-looking statements for the purposes of the safe harbor provisions under The Private Securities Litigation Reform Act of 1995 and other federal securities laws. Without limiting the foregoing, the use of words such as “may,” “intends,” “can,” “might,” “will,” “expect,” “plan,” “possible,” “believe” and other similar expressions are intended to identify forward-looking statements. All forward-looking statements are based on estimates and assumptions by Ensysce’s management that, although Ensysce believes to be reasonable, are inherently uncertain. All forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those that Ensysce expected, including, among other things, the satisfaction of customary closing conditions related to the public offering; the intended use of proceeds from the public offering; the initiation and conduct of preclinical studies and clinical trials; the timing and availability of data from preclinical studies and clinical trials; expectations for regulatory submissions and approvals; potential safety concerns related to, or efficacy of, Ensysce’s product candidates; the availability or commercial potential of product candidates; the ability of Ensysce to fund its continued operations, including its planned clinical trials; the dilutive effect of stock issuances from our fundraising; and Ensysce’s and its partners’ ability to perform under their license, collaboration and manufacturing arrangements. These statements are also subject to a number of material risks and uncertainties that are described in Ensysce’s most recent quarterly report on Form 10-Q and current reports on Form 8-K, which are available, free of charge, at the SEC’s website at www.sec.gov. Any forward-looking statement speaks only as of the date on which it was made. Ensysce undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise, except as required under applicable law.

Ensysce Biosciences Company Contact

Lynn Kirkpatrick, Ph.D.
Chief Executive Officer
(858) 263-4196

Ensysce Biosciences Investor Relations Contact:

MZ Group North America
Shannon Devine
203-741-8811
ENSC@mzgroup.us
