

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): September 24, 2020

GEOVAX LABS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

001-39563
(Commission File No.)

87-0455038
(IRS Employee Identification No.)

1900 Lake Park Drive, Suite 380
Smyrna, Georgia 30080
(Address of principal executive offices) (Zip code)

(678) 384-7220
(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of 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 240.13(e)-4(c))

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.001 per share	GOVX	The Nasdaq Capital Market
Warrants to Purchase Common Stock	GOVXW	The Nasdaq Capital Market

Indicate by check mark whether the Registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (Section 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (Section 240.12b-2 of this chapter).

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 reporting standards provided pursuant to Section 13(a) of the Exchange Act.

This Form 8-K and other reports filed by GeoVax Labs, Inc. (the “Registrant” or the “Company”) from time to time with the Securities and Exchange Commission (collectively the “Filings”) contain forward looking statements and information that are based upon beliefs of, and information currently available to, the Registrant's management as well as estimates and assumptions made by the Registrant's management. When used in the Filings the words “anticipate”, “believe”, “estimate”, “expect”, “future”, “intend”, “plan” or the negative of these terms and similar expressions as they relate to the Registrant or the Registrant's management identify forward looking statements. Such statements reflect the current view of the Registrant with respect to future events and are subject to risks, uncertainties, assumptions and other factors relating to the Registrant's industry, operations and results of operations and any businesses that may be acquired by the Registrant. Should one or more of these risks or uncertainties materialize, or should the underlying assumptions prove incorrect, actual results may differ significantly from those anticipated, believed, estimated, expected, intended or planned. Except as required by law, the Registrant does not undertake to update its forward-looking statements.

Item 1.01 Entry into a Material Definitive Agreement.

Underwriting Agreement

On September 24, 2020, the Company entered into an Underwriting Agreement (the “Underwriting Agreement”) with Maxim Group LLC, as representative of the underwriters (the “Representative”), for an underwritten public offering (the “Offering”) of an aggregate of 2,560,000 units (the “Units”). Of the 2,560,000 Units: (a) 2,310,000 Units consist of one share (each a “Share” and collectively, the “Shares”) of the Company's common stock, par value \$0.001 per share (the “Common Stock”), and a warrant to purchase one share of Common Stock (each a “Warrant” and collectively, the “Warrants”) at an exercise price equal to \$5.00 per share of Common Stock; and (b) 250,000 Units consist of one pre-funded warrant to purchase one share of Common Stock and a Warrant. The public offering price was \$5.00 per Unit and the underwriters agreed to purchase 2,560,000 Units at an 8.0% discount to the public offering price. The Company granted the Representative a 45-day option to purchase up to 384,000 Shares or pre-funded warrants and up to 384,000 Warrants for shares of Common Stock to cover over-allotments, if any.

As part of the Offering, the Company offered, with respect to the purchase of Units that would otherwise result in the purchaser's beneficial ownership exceeding 4.99% of our outstanding shares of Common Stock immediately following the consummation of this Offering, the opportunity to purchase Units including one pre-funded warrant in lieu of one share of common stock in the Unit. Subject to limited exceptions, a holder of pre-funded warrants will not have the right to exercise any portion of its pre-funded warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% (or, at the election of the holder, such limit may be increased to up to 9.99%) of the number of shares outstanding immediately after giving effect to such exercise. Each pre-funded warrant will be exercisable for one share of common stock. The purchase price of each Unit including a pre-funded warrant will be equal to \$4.99, the price per Unit including one Share, minus \$0.01, and the remaining exercise price of each pre-funded warrant will equal \$0.01 per share. The pre-funded warrants will be immediately exercisable and may be exercised at any time until all of the pre-funded warrants are exercised in full. For each Unit including a pre-funded warrant we sell (without regard to any limitation on exercise set forth therein), the number of Units including a Share we are offering will be decreased on a one-for-one basis.

The gross proceeds from the Offering are expected to be approximately \$12.8 million, or approximately \$14.72 million if the Representative exercises in full its over-allotment option, before deducting underwriting discounts and commissions and other offering expenses.

Pursuant to the Underwriting Agreement, the Company agreed to issue to the Representative, as a portion of the underwriting compensation payable to the Representative, warrants to purchase up to a total of 128,000 shares of Common Stock (the “Representative's Warrants”). The Representative's Warrants are exercisable at \$5.50 per share, are initially exercisable 180 days after the effective date of the Offering and have a term of three years from their initial exercise date. Pursuant to the customary FINRA rules, the Representative's Warrants are subject to a lock-up agreement pursuant to which the Representative will not sell, transfer, assign, pledge, or hypothecate these warrants or the securities underlying these warrants, nor will it engage in any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of the warrants or the underlying securities for a period of 180 days from the effective date of the registration statement.

Pursuant to the Underwriting Agreement, the Company also granted the underwriters a right of first refusal, for a period of 18 months from the commencement of the Offering, to act as lead managing underwriter and book-runner or minimally as co-lead manager and co-book runner and/or co-lead placement agent at each of the underwriter's discretion, for each and every future public and private equity, equity-linked or debt (excluding commercial bank debt) offering, including all equity linked financings undertaken during such period by the Company, or any of the Company's successors or subsidiaries, but excluding the private placement fund-raising efforts of Immutak Oncology, Inc. In the event that both underwriters exercise their respective right of first refusal as to the same public equity offering, the economic participation between the Representative and Joseph Gunnar & Co., LLC ("Joseph Gunnar") for this right of first refusal shall be 75% to the Representative and 25% to Joseph Gunnar. In addition, the Company also agreed to pay the underwriters an aggregate cash fee of 8% in the event investors previously directly introduced to the Company by such parties provide capital, including, but not limited to, via any exercise of the warrants or over-allotment warrants (if any) issued in this Offering to the Company during the period commencing 91 days following the closing of the Offering and continuing for a period of 15 months thereafter.

The Shares, pre-funded warrants, and Warrants will be issued pursuant to the Company's registration statement on Form S-1 (File No. 333-239958), filed by the Company with the Securities and Exchange Commission (the "Commission") on July 20, 2020, as amended, which was declared effective on September 24, 2020. The Offering is expected to close on September 29, 2020, subject to the satisfaction of customary closing conditions.

The Underwriting Agreement contains customary representations, warranties, and covenants by the Company and customary conditions to closing, obligations of the parties and termination provisions. Additionally, under the terms of the Underwriting Agreement, the Company has agreed to indemnify the underwriters for losses, expenses and damages arising out of or in connection with the Offering, including for liabilities under the Securities Act of 1933, as amended (the "Securities Act"), or contribute to payments the underwriters may be required to make with respect to these liabilities.

Pursuant to the Underwriting Agreement, subject to certain exceptions, the Company and each director and executive officer of the Company have agreed, for a period of 180 days after the closing of the Offering, not to offer, issue, sell, contract to sell, encumber, grant any option for the sale of or otherwise dispose of any shares of the Company's Common Stock or securities convertible into Common Stock, without first obtaining the consent of the Representative.

The Warrants will be issued pursuant to a warrant agent agreement to be entered into by and between the Company and American Stock Transfer & Trust Company, LLC, as warrant agent.

The foregoing summaries of the Underwriting Agreement and the pre-funded warrants do not purport to be complete and are qualified in their entirety by such documents attached hereto as Exhibit 1.1 and Exhibit 4.4.1 and are incorporated herein by reference.

Item 3.03 Material Modification to Rights of Security Holders.

On September 24, 2020, the Company filed a Certificate of Amendment to its Certificate of Incorporation effecting a 1-for-20 reverse stock split pursuant to which, as of 12:01 a.m. on September 25, 2020, each twenty (20) shares of the Company's Common Stock, par value \$0.001 per share, then issued and outstanding automatically and without any action on the part of the respective holders thereof, was combined and reclassified into one (1) share of Common Stock, par value \$0.001 per share. For further details, please refer to Item 5.03 below.

Item 5.03 Amendment to Articles of Incorporation or Bylaws; Changes in Fiscal Year.

On September 24, 2020, the Company filed a Certificate of Amendment to its Certificate of Incorporation effecting a 1-for-20 reverse stock split pursuant to which, as of 12:01 a.m. on September 25, 2020, each twenty (20) shares of the Company's Common Stock, par value \$0.001 per share ("Old Common Stock"), then issued and automatically and without any action on the part of the respective holders thereof, was combined and reclassified into one (1) share of Common Stock, par value \$0.001 per share ("New Common Stock") (and such combination and

conversion, the “Reverse Stock Split”). The Reverse Stock Split does not affect the total number of shares of Common Stock that the Company is authorized to issue. No fractional shares of New Common Stock will be issued in connection with the Reverse Stock Split. Stockholders of record who otherwise would have been entitled to receive fractional shares will be entitled, upon surrender to our transfer agent of certificates representing such shares, to a cash payment in lieu thereof equal to the fraction to which the stockholder otherwise would have been entitled multiplied by the closing price (calculated on a post-split basis) of our Common Stock as reported by The OTC Market on September 24, 2020.

Each stock certificate that, immediately prior to the filing, represented shares of Old Common Stock, automatically and without the necessity of presenting the same for exchange, now represents that number of whole shares of New Common Stock into which the shares of Old Common Stock represented by such certificate have been reclassified. Each holder of record of a certificate that represented shares of Old Common Stock shall receive, upon surrender of such certificate, a new certificate representing the number of whole shares of New Common Stock into which the shares of Old Common Stock represented by such certificate shall have been reclassified. The Company’s transfer agent will be sending letters of transmittal for stockholders of record to use in obtaining new share certificates.

The foregoing summary of the Certificate of Amendment does not purport to be complete and is qualified in its entirety by reference to the full text of the Certificate of Amendment, a copy of which is attached hereto as Exhibit 3.1 and is incorporated herein by reference.

Item 8.01 Other Events.

On September 25, 2020, in connection with the Offering described in Item 1.01, the Company’s Common Stock and the Warrants began trading on The Nasdaq Capital Market (“Nasdaq”) under the trading symbols “GOVX” and “GOVXW,” respectively.

The Company issued a press release on September 24, 2020 announcing the pricing of the Offering, the Reverse Stock Split and the Nasdaq listing. 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 dated September 24, 2020 between the Company and Maxim Group LLC, as representative of the underwriters
3.1	Certificate of Amendment to the Certificate of Incorporation
4.4.1	Form of Pre-Funded Warrant
99.1	Pricing press release dated September 24, 2020

SIGNATURE

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.

Date: September 25, 2020

GEOVAX LABS, INC.

By: /s/ Mark W. Reynolds
Mark W. Reynolds
Chief Financial Officer

**2,560,000 UNITS
EACH UNIT CONSISTING OF
ONE SHARE OF COMMON STOCK OR ONE PRE-FUNDED WARRANT
AND
ONE WARRANT TO PURCHASE ONE SHARE OF COMMON STOCK**

GEOVAX LABS, INC.

UNDERWRITING AGREEMENT

September 24, 2020

Maxim Group LLC
Investment Banking
405 Lexington Avenue, 2nd Fl.
New York, New York 10174

As Representative of the Several Underwriters, if any, named in Schedule I hereto

Ladies and Gentlemen:

The undersigned, GEOVAX LABS, INC., a company incorporated under the laws of Delaware (the “Company”), hereby confirms its agreement (this “Agreement”) with the several underwriters (such underwriters, including the Representative (as defined below), the “Underwriters” and each an “Underwriter”) named in Schedule I hereto for which MAXIM GROUP LLC (“Maxim”) is acting as representative to the several Underwriters (in such capacity, the “Representative” and if there are no Underwriters other than the Representative, references to multiple Underwriters shall be disregarded and the term Representative as used herein shall have the same meaning as Underwriter) on the terms and conditions set forth herein.

It is understood that the several Underwriters are to make a public offering of the Public Securities (as defined below) as soon as the Representative deems it advisable to do so. The Public Securities are to be initially offered to the public at the public offering price set forth in the Prospectus. The Representative may from time to time thereafter change the public offering price and other selling terms.

It is further understood that Maxim will act as the Representative for the Underwriters in the offering and sale of the Closing Securities (as defined below) and, if any, the Option Securities (as defined below) in accordance with this Agreement.

**ARTICLE I.
DEFINITIONS**

1.1 Definitions. In addition to the terms defined elsewhere in this Agreement, for all purposes of this Agreement, the following terms have the meanings set forth in this Section 1.1:

“Action” shall have the meaning ascribed to such term in Section 3.1(k).

“Affiliate” means with respect to any Person, any other Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with such Person as such terms are used in and construed under Rule 405 under the Securities Act.

“Authorizations” shall have the meaning ascribed to such term in Section 3.1(o).

“Board of Directors” means the board of directors of the Company.

“Business Day” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided that banks shall not be deemed to be authorized or obligated to be closed due to a “shelter in place,” “non-essential employee” or similar closure of physical branch locations at the direction of any governmental authority if such banks’ electronic funds transfer systems (including for wire transfers) are open for use by customers on such day.

“Closing” means the closing of the purchase and sale of the Closing Securities pursuant to Section 2.1.

“Closing Date” means the hour and the date on the Trading Day on which all conditions precedent to (i) the Underwriters’ obligations to pay the Closing Purchase Price and (ii) the Company’s obligations to deliver the Closing Securities, in each case, have been satisfied or waived, but in no event later than 10:00 a.m. (New York City time) on the second (2nd) Trading Day following the date hereof or at such earlier time as shall be agreed upon by the Representative and the Company.

“Closing Pre-Funded Warrants” shall have the meaning ascribed to such term in Section 2.1(a)(ii).

“Closing Purchase Price” shall have the meaning ascribed to such term in Section 2.1(b), which aggregate purchase price shall be net of underwriting discounts and commissions.

“Closing Securities” shall have the meaning ascribed to such term in Section 2.1(a)(iii).

“Closing Shares” shall have the meaning ascribed to such term in Section 2.1(a)(ii).

“Closing Units” shall have the meaning ascribed to such term in Section 2.1(a)(i).

“Closing Warrants” shall have the meaning ascribed to such term in Section 2.1(a)(iii).

“Commission” means the United States Securities and Exchange Commission.

“Common Stock” means the common stock of the Company, par value \$0.001 per share, and any other class of securities into which such securities may hereafter be reclassified or changed.

“Common Stock Equivalents” means any securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“Company Auditor” means Wipfli LLP, with offices located at 235 Peachtree St. NE, Suite 1800, Atlanta Georgia, 30303.

“Company Counsel” means Womble Bond Dickinson (US) LLP, with offices located at 271 17th Street NW, Suite 2400, Atlanta, Georgia 30363.

“Company IT Systems” shall have the meaning ascribed to such term in Section 3.1(tt).

“Disclosure Schedules” means the Disclosure Schedules of the Company delivered concurrently herewith.

“EDGAR” shall have the meaning ascribed to such term in Section 3.1(f).

“Environmental Laws” shall have the meaning ascribed to such term in Section 3.1(n).

“Effective Date” means the date and time as of which the Registration Statement became effective in accordance with the rules and regulations under the Securities Act.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Execution Date” shall mean the date on which the parties execute and enter into this Agreement.

“Exempt Issuance” means the issuance of (a) shares of Common Stock, restricted stock, restricted stock units or options to employees, officers, consultants, other service providers or directors of the Company pursuant to any stock or option plan duly adopted for such purpose, by a majority of the non-employee members of the Board of Directors or a majority of the members of a committee of non-employee directors established for such purpose, for services rendered to the Company, (b) securities upon the exercise or exchange of or conversion of any Securities issued hereunder and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock issued and outstanding on the date of this Agreement, 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 (other than in connection with automatic price resets, stock splits, adjustments or combinations as set forth in such securities) or to extend the term of such securities and (c) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, and securities issued by the Company’s majority owned subsidiary, Immutak Oncology, Inc. (“Immutak”), pursuant to a private placement transaction and solely representing ownership rights or prospective ownership rights in Immutak, provided that in any such cases such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the prohibition period in Section 4.21(a) herein, and provided that any such issuance shall only be to a Person (or to the equity holders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

“FCPA” means the Foreign Corrupt Practices Act of 1977, as amended.

“FDA” shall have the meaning ascribed to such term in Section 3.1(o).

“FINRA” means the Financial Industry Regulatory Authority.

“GAAP” shall have the meaning ascribed to such term in Section 3.1(i).

“General Disclosure Package” shall have the meaning ascribed to such term in Section 3.1(f).

“Hazardous Materials” shall have the meaning ascribed to such term in Section 3.1(n).

“Indebtedness” means (a) any liabilities for borrowed money or amounts owed in excess of \$25,000 (other than trade accounts payable incurred in the ordinary course of business), (b) all guaranties, endorsements and other contingent obligations in respect of indebtedness of others, whether or not the same are or should be reflected in the Company’s consolidated balance sheet (or the notes thereto), except guaranties by endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business; and (c) the present value of any lease payments in excess of \$25,000 due under leases required to be capitalized in accordance with GAAP.

“Intellectual Property Rights” shall have the meaning ascribed to such term in Section 3.1(s).

“Liens” means a lien, charge, pledge, security interest, encumbrance, right of first refusal, preemptive right or other restriction.

“Lock-Up Agreements” means the lock-up agreements that are delivered on the date hereof by each of the Company’s officers and directors in the form of Exhibit A attached hereto.

“Lucosky Brookman LLP” means Lucosky Brookman LLP, counsel to the Underwriters, with offices located at 101 Wood Avenue, 5th Floor, Woodbridge, New Jersey 08830.

“Material Adverse Effect” shall have the meaning assigned to such term in Section 3.1(b).

“Material Permit” shall have the meaning ascribed to such term in Section 3.1(ii).

“Offering” shall have the meaning ascribed to such term in Section 2.1(c).

“Option Closing Date” shall have the meaning ascribed to such term in Section 2.2(c).

“Option Closing Purchase Price” shall have the meaning ascribed to such term in Section 2.2(b), which aggregate purchase price shall be net of the underwriting discounts and commissions.

“Option Pre-Funded Warrants” shall have the meaning ascribed to such term in Section 2.2(a).

“Option Securities” shall have the meaning ascribed to such term in Section 2.2(a).

“Option Shares” shall have the meaning ascribed to such term in Section 2.2(a).

“Option Warrants” shall have the meaning ascribed to such term in Section 2.2(a).

“Over-Allotment Option” shall have the meaning ascribed to such term in Section 2.2(a).

“Person” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“Pre-Funded Warrant Purchase Price” shall have the meaning ascribed to such term in Section 2.1(b).

“Pre-Funded Warrants” means, collectively, the Common Stock purchase warrants delivered to the Underwriters in accordance with Section 2.1(a)(ii), which Pre-Funded Warrants shall be exercisable immediately and have an unlimited term of exercise, in the form of Exhibit H attached hereto.

“Pre-Funded Warrant Shares” means the shares of Common Stock issuable upon exercise of the Pre-Funded Warrants.

“Preliminary Prospectus” shall have the meaning ascribed to such term in Section 3.1(f).

“Proceeding” means an action, claim, suit, investigation or proceeding (including, without limitation, an informal investigation or partial proceeding, such as a deposition), whether commenced or threatened.

“Prospectus” shall have the meaning ascribed to such term in Section 3.1(f).

“Public Securities” means, collectively, the Closing Securities and, if any, the Option Securities.

“Registration Statement” shall have the meaning ascribed to such term in Section 3.1(f).

“Regulatory Laws” shall have the meaning ascribed to such term in Section 3.1(o).

“Representative’s Securities” shall have the meaning ascribed to such term in Section 2.5.

“Representative’s Warrants” shall have the meaning ascribed to such term in Section 2.5.

“Representative’s Warrant Shares” shall have the meaning ascribed to such term in Section 2.5.

“Representative’s Warrant Agreement” shall have the meaning ascribed to such term in Section 2.5.

“Required Approvals” shall have the meaning ascribed to such term in Section 3.1(e).

“Rule 144” means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“Rule 424” means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“SEC Reports” shall have the meaning ascribed to such term in Section 3.1(i).

“Securities” means the Closing Securities, the Option Securities, the Warrant Shares and the Representative’s Securities.

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“Share Purchase Price” shall have the meaning ascribed to such term in Section 2.1(b).

“Shares” means, collectively, the shares of Common Stock delivered to the Underwriters in accordance with Section 2.1(a)(ii) and Section 2.2(a).

“Special Intellectual Property Counsel” means Knowles IP Strategies, with offices located at 400 Perimeter Center Terrace NE, Suite 200, Atlanta, Georgia, 30346.

“Subsidiary” means any subsidiary of the Company and shall, where applicable, also include any direct or indirect subsidiary of the Company formed or acquired after the date hereof.

“Trading Day” means a day on which the principal Trading Market is open for trading.

“Trading Market” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the OTCQB Venture Market, the NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market or the New York Stock Exchange (or any successors to any of the foregoing).

“Transaction Documents” means this Agreement and all exhibits and schedules hereto, the Pre-Funded Warrants, the Warrants, the Warrant Agent Agreement, the Representative’s Warrant Agreement, the Lock-Up Agreements, and any other documents or agreements executed in connection with the transactions contemplated hereunder.

“Transfer Agent” means American Stock Transfer & Trust Company, LLC, with a mailing address of 6201 15th Ave, Brooklyn, NY 11219 and a telephone number of (718) 921-8124, and any successor transfer agent of the Company.

“Underwriters’ Information” shall have the meaning ascribed to such term in Section 6.1.

“Units” shall have the meaning ascribed to such term in Section 2.1(a)(i).

“Warrant Agent” means the Transfer Agent.

“Warrant Agent Agreement” means the warrant agent agreement by and between the Company and Transfer Agent, as warrant agent, dated on or before the Closing Date, for the purpose of administering the Warrants, in the form of Exhibit G attached hereto.

“Warrant Purchase Price” shall have the meaning ascribed to such term in Section 2.1(b).

“Warrant Shares” means the shares of Common Stock issuable upon exercise of the Warrants.

“Warrants” means, collectively, the Common Stock purchase warrants delivered to the Underwriters in accordance with Section 2.1(a)(iii) and Section 2.2, which Warrants shall be exercisable immediately and have a term of exercise equal to five (5) years, in the form of Exhibit E attached hereto.

ARTICLE II. PURCHASE AND SALE

2.1 Closing.

(a) Upon the terms and subject to the conditions set forth herein, the Company agrees to sell in the aggregate 2,560,000 units (the “Units”), with each Unit consisting of (a) one share of Common Stock or one Pre-Funded Warrant to purchase one share of Common Stock, and (b) one Warrant to purchase one share of Common Stock, subject to the terms and conditions stated herein, and each Underwriter agrees to purchase, severally and not jointly, at the Closing, the following securities of the Company:

(i) the number of Units (the “Closing Units”) set forth opposite the name of such Underwriter on Schedule I hereof; and

(ii) the number of shares of Common Stock (the “Closing Shares”) and/or Pre-Funded Warrants (the “Closing Pre-Funded Warrants”) set forth opposite the name of such Underwriter on Schedule I hereof included in the Closing Units; and

(iii) the number of Warrants (“Closing Warrants”) to purchase shares of Common Stock set forth opposite the name of such Underwriter on Schedule I hereof included in the Closing Units, which shall have an exercise price of \$5.00 (subject to adjustment as provided therein) (collectively with the Closing Units, the Closing Shares, and the Closing Pre-Funded Warrants, the “Closing Securities”).

The Units have no stand-alone rights or obligations and will not be certificated or issued as stand-alone securities. The shares of Common Stock, the Pre-Funded Warrants and the Warrants comprising the Units are immediately separable and will be issued separately at the Closing.

(b) The Underwriters, severally and not jointly, agree to purchase from the Company the number of Closing Units set forth opposite their respective names on Schedule I attached hereto and made a part hereof at a purchase price of (1) \$4.60 per Closing Unit consisting of one Closing Share and one Closing Warrant (92% of the public offering price per Closing Unit) or (2) \$4.59 per Closing Unit consisting of one Closing Pre-Funded Warrant and one Closing Warrant (92% of the public offering price per Closing Unit less one penny) (the “Closing Purchase Price”), and the purchase price of each Closing Unit shall be allocated as follows: (i) \$4.59 per Closing Share (the “Share Purchase Price”) or \$4.58 per Closing Pre-Funded Warrant (the “Pre-Funded Warrant Purchase Price”) and (ii) \$0.01 per Closing Warrant (the “Warrant Purchase Price”). The Closing Units are to be offered initially to the public at the offering price set forth on the cover page of the Prospectus (as defined in Section 3.1(f) hereof).

(c) On the Closing Date, each Underwriter shall deliver or cause to be delivered to the Company, via wire transfer, immediately available funds equal to such Underwriter’s Closing Purchase Price and the Company shall deliver to, or as directed by, such Underwriter its respective Closing Securities and the Company shall deliver the other items required pursuant to Section 2.3 deliverable at the Closing. Upon satisfaction of the covenants and conditions set forth in Sections 2.3 and 2.4, the Closing shall occur at the offices of Lucosky Brookman LLP or such other location (including remotely by facsimile or other electronic transmission) as the Company and Representative shall mutually agree. The Public Securities are to be offered initially to the public at the offering price set forth on the cover page of the Prospectus (the “Offering”).

2.2 Over-Allotment Option.

(a) For the purposes of covering any over-allotments in connection with the distribution and sale of the Closing Securities, the Representative is hereby granted an option (the “Over-Allotment Option”) to purchase up to 384,000 shares of Common Stock, representing fifteen percent (15%) of the Closing Shares sold as part of the Closing Units sold in the Offering (the “Option Shares”) and/or Pre-Funded Warrants to purchase up to 384,000 shares of Common Stock, representing fifteen percent (15%) of the Closing Pre-Funded Warrants (“Option Pre-Funded Warrants”), and/or Warrants to purchase up to 384,000 shares of Common Stock, representing fifteen percent (15%) of the Closing Warrants sold as part of the Closing Units sold in the Offering (the “Option Warrants” and, collectively with the Option Shares, the “Option Securities”), which may be purchased in any combination of Option Shares, Option Pre-Funded Warrants and/or Option Warrants at the Share Purchase Price, Pre-Funded Warrant Purchase Price and/or Warrant Purchase Price, respectively. The Closing Warrants and the

Option Warrants, if any, shall be issued pursuant to, and shall have the rights and privileges set forth in, the Warrant Agent Agreement.

(b) In connection with an exercise of the Over-Allotment Option, (a) the purchase price to be paid for any Option Shares is equal to the product of the Share Purchase Price multiplied by the number of Option Shares to be purchased, (b) the purchase price to be paid for any Option Pre-Funded Warrants is equal to the product of the Pre-Funded Warrant Purchase Price multiplied by the number of Option Pre-Funded Warrants to be purchased, and (c) the purchase price to be paid for any Option Warrants is equal to the product of the Warrant Purchase Price multiplied by the number of Option Warrants to be purchased (the aggregate purchase price to be paid on an Option Closing Date, the “Option Closing Purchase Price”).

(c) The Over-Allotment Option granted pursuant to this Section 2.2 may be exercised by the Representative as to all (at any time) or any part (from time to time) of the Option Shares, Option Pre-Funded Warrants and/or Option Warrants in any combination thereof within 45 days after the Execution Date. An Underwriter will not be under any obligation to purchase any Option Securities prior to the exercise of the Over-Allotment Option by the Representative. The Over-Allotment Option granted hereby may be exercised by the giving of oral notice to the Company from the Representative, which must be confirmed in writing by overnight mail or facsimile or other electronic transmission setting forth the number of Option Shares, Option Pre-Funded Warrants and/or Option Warrants to be purchased and the date and time for delivery of and payment for the Option Securities (each, an “Option Closing Date”), which will not be later than the earlier of (i) 45 days after the Execution Date and (ii) two (2) full Business Days after the date of the notice or such other time as shall be agreed upon by the Company and the Representative, at the offices of Lucosky Brookman LLP or at such other place (including remotely by facsimile or other electronic transmission) as shall be agreed upon by the Company and the Representative. If such delivery and payment for the Option Securities does not occur on the Closing Date, each Option Closing Date will be as set forth in the notice. Upon exercise of the Over-Allotment Option, the Company will become obligated to convey to the Underwriters, and, subject to the terms and conditions set forth herein, the Underwriters will become obligated to purchase, the number of Option Shares, Option Pre-Funded Warrants and/or Option Warrants specified in such notice. The Representative may cancel the Over-Allotment Option at any time prior to the expiration of the Over-Allotment Option by written notice to the Company.

2.3 Deliveries. The Company shall deliver or cause to be delivered to each Underwriter (if applicable) the following:

(a) At the Closing Date, (i) the Closing Shares included in the Closing Units and, as to each Option Closing Date, if any, the applicable Option Shares, which shares shall be delivered via The Depository Trust Company Deposit or Withdrawal at Custodian system for the accounts of the several Underwriters and (ii) the Closing Pre-Funded Warrants included in the Closing Units and, as to each Option Closing Date, if any, the applicable Option Pre-Funded Warrants, which Pre-Funded Warrants shall be delivered by the Company to the several Underwriters;

(b) At the Closing Date, the Closing Warrants included in the Closing Units and, as to each Option Closing Date, if any, the applicable Option Warrants, which Warrants shall be delivered via The Depository Trust Company Deposit or Withdrawal at Custodian system for the accounts of the several Underwriters;

(c) At the Closing Date, the executed Representative’s Warrant Agreement(s) shall be issued in the name or names and in such authorized denominations as the Representative may request;

(d) At the Closing Date and at each Option Closing Date, if any, the duly executed and delivered legal opinion and negative assurance letter of Company Counsel addressed to the Underwriters, dated as of the Closing Date and each Option Closing Date, if any, in form and substance satisfactory to counsel to the Underwriters;

(e) At the Closing Date and at each Option Closing Date, if any, the duly executed and delivered opinion and negative assurance letter of Special Intellectual Property Counsel for the Company, with respect to certain intellectual property matters, addressed to the Underwriters, dated as of the Closing Date and each Option Closing Date, if any, in form and substance satisfactory to counsel to the Underwriters;

(f) Contemporaneously herewith, a cold comfort letter, addressed to the Underwriters and in form and substance satisfactory in all respects to the Representative from the Company Auditor dated, respectively, as of the date of this Agreement and a bring-down letter dated as of the Closing Date and each Option Closing Date, if any;

(g) On the Closing Date and on each Option Closing Date, if any, the duly executed and delivered Officers' Certificate, substantially in the form required by Exhibit B attached hereto;

(h) On the Closing Date and on each Option Closing Date, if any, the duly executed and delivered Secretary's Certificate, substantially in the form required by Exhibit C attached hereto;

(i) On the Closing Date and on each Option Closing Date, if any, a duly executed and delivered Chief Financial Officer's Certificate, substantially in the form required by Exhibit D attached hereto, addressed to the Underwriters; and

(j) Such other customary certificates or documents as the Underwriters and Underwriters' Counsel may have reasonably requested.

2.4 Closing Conditions. The respective obligations of each Underwriter hereunder in connection with the Closing and each Option Closing Date are subject to the following conditions being met:

(a) the accuracy in all material respects when made and on the date in question (other than representations and warranties of the Company already qualified by materiality, which shall be true and correct in all respects) of the representations and warranties of the Company contained herein (unless as of a specific date therein);

(b) all obligations, covenants and agreements of the Company required to be performed at or prior to the date in question shall have been performed or such performance shall have been waived by the Representative;

(c) the delivery by the Company of the items set forth in Section 2.3 of this Agreement;

(d) the Registration Statement shall be effective on the date of this Agreement and at each of the Closing Date and each Option Closing Date, if any, no stop order suspending the effectiveness of the Registration Statement shall have been issued and no proceedings for that purpose shall have been instituted or shall be pending or contemplated by the Commission and any request on the part of the Commission for additional information shall have been complied with to the reasonable satisfaction of the Representative;

(e) by the Execution Date, if required by FINRA, the Underwriters shall have received a notice of no objections from FINRA as to the amount of compensation allowable or payable to and the terms and arrangements for acting as the Underwriters as described in the Registration Statement;

(f) the (i) shares of Common Stock, including the Closing Shares, the Option Shares, the Warrant Shares, the Pre-Funded Warrant Shares, and the Representative's Warrant Shares, and (ii) Warrants have been approved for listing on the Nasdaq Capital Market;

(g) the Company has filed with the Commission a Form 8-A (Accession No. 0001437749-20-020182) providing for the registration pursuant to Section 12(b) under the Exchange Act of the shares of Common Stock and the Warrants; and such Form 8-A has become effective under the Exchange Act. The Company has taken no action designed to, or likely to have the effect of, terminating the registration of the shares of Common Stock or the Warrants under the Exchange Act, nor has the Company received any notification that the Commission is contemplating terminating such registration; and

(h) prior to and on each of the Closing Date and each Option Closing Date, if any: (i) there shall have been no material adverse change or development involving a prospective material adverse change in the condition or prospects or the business activities, financial or otherwise, of the Company from the latest dates as of which such condition is set forth in the Registration Statement, the General Disclosure Package and Prospectus; (ii) no action suit or proceeding, at law or in equity, shall have been pending or threatened against the Company or any Affiliate of the Company before or by any court or federal or state commission, board or other administrative agency wherein an unfavorable decision, ruling or finding may materially adversely affect the business, operations, prospects or financial condition or income of the Company, except as set forth in the Registration Statement, the

General Disclosure Package and Prospectus; (iii) no stop order applicable to the Company shall have been issued under the Securities Act and no proceedings therefor shall have been initiated or threatened by the Commission; (iv) since the date of the latest balance sheet included in the Registration Statement, the General Disclosure Package or the Prospectus, the Company has not incurred any material liabilities or obligations, direct or contingent, nor has it entered into any material transactions not in the ordinary course of business, other than pursuant to this Agreement and the transactions referred to herein or those liabilities, obligations and transactions which are disclosed in the Registration Statement, the General Disclosure Package and the Prospectus; (v) the Company has not paid or declared any dividends or other distributions of any kind on any class of its capital stock; (vi) the Company has not altered its method of accounting; and (vii) the Registration Statement, the General Disclosure Package and the Prospectus and any amendments or supplements thereto shall contain all material statements which are required to be stated therein in accordance with the Securities Act and the rules and regulations thereunder and shall conform in all material respects to the requirements of the Securities Act and the rules and regulations thereunder, and neither the Registration Statement, the General Disclosure Package nor the Prospectus nor any amendment or supplement thereto shall contain any untrue statement of a material fact or omit to state any 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.

If any of the conditions specified in this Section 2.4 shall not have been fulfilled when and as required by this Agreement, or if any of the certificates, opinions, written statements or letters furnished to the Representative or to Representative's counsel pursuant to this Section 2.4 shall not be reasonably satisfactory in form and substance to the Representative and to Representative's counsel, all obligations of the Underwriters hereunder may be cancelled by the Representative at, or at any time prior to, the consummation of the Closing. Notice of such cancellation shall be given to the Company in writing or orally. Any such oral notice shall be confirmed promptly thereafter in writing.

2.5 Representative's Warrants.

(i) Warrant Amount; Term. The Company hereby agrees to issue and sell to the Representative (and/or its designees) on the Closing Date for an aggregate purchase price of \$100.00, warrants (the "Representative's Warrants") for the purchase of an aggregate of 128,000 shares of Common Stock (which is equal to an aggregate of 5.0% of the Closing Shares and Closing Pre-Funded Warrants included in the Closing Units sold in the Offering, excluding Closing Warrants (and shares issuable upon exercise thereof) and any Option Shares and Option Warrants (and shares issuable upon exercise thereof) sold in the Over-Allotment Option, if any). The Representative's Warrants shall be issuable pursuant to the Representative's Warrant Agreement in the form attached hereto as Exhibit F (the "Representative's Warrant Agreement") and exercisable, in whole or in part, commencing on a date which is one hundred eighty (180) days after the Effective Date of the Registration Statement (the "Initial Exercise Date") and expiring on the three-year anniversary of the Initial Exercise Date at an initial exercise price per share of Common Stock of \$5.50, which is equal to 110% of the public offering price of each Unit. The Representative's Warrant Agreement and the shares of Common Stock issuable upon exercise of the Representative's Warrant Agreement (the "Representative's Warrant Shares") are sometimes hereinafter referred to together as the "Representative's Securities." The Representative understands and agrees that there are significant restrictions pursuant to FINRA Rule 5110 against transferring the Representative's Warrant and the Representative's Warrant Shares during the one hundred eighty (180) days after the Effective Date and by its acceptance thereof each shall agree that it will not sell, transfer, assign, pledge or hypothecate the Representative's Warrant Agreement, or any portion thereof, the Representative's Warrant Shares, or any portion thereof, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of such securities for a period of one hundred eighty (180) days following the Effective Date to anyone other than (i) an Underwriter or a selected dealer in connection with the Offering, or (ii) a bona fide officer or partner of the Representative or of any such Underwriter or selected dealer; and only if any such transferee agrees to the foregoing lock-up restrictions.

(ii) Delivery. Delivery of the Representative's Warrant Agreement shall be made on the Closing Date and shall be issued in the name or names and in such authorized denominations as the Representative may request.

ARTICLE III. REPRESENTATIONS AND WARRANTIES

3.1 Representations and Warranties of the Company. Except as set forth in the Disclosure Schedules, which Disclosure Schedules shall be deemed a part hereof and shall qualify any representation or otherwise made herein to the extent of the disclosure contained in the Disclosure Schedules, the Company represents and warrants to the Underwriters as of the Execution Date, as of the Closing Date and as of each Option Closing Date, if any, as follows:

(a) Subsidiaries. All of the Subsidiaries of the Company are set forth on Schedule 3.1(a). Except as indicated on Schedule 3.1(a), the Company owns, directly or indirectly, all of the capital stock or other equity interests of each Subsidiary free and clear of any Liens, and all of the issued and outstanding shares of capital stock of each Subsidiary are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities. If the Company has no subsidiaries, all other references to the Subsidiaries or any of them in the Transaction Documents shall be disregarded.

(b) Organization and Qualification. The Company and each of the Subsidiaries is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. Neither the Company nor any Subsidiary is in violation nor default of any of the provisions of its respective certificate or articles of incorporation, bylaws or other organizational or charter documents. Each of the Company and the Subsidiaries is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, could not have or reasonably be expected to result in: (i) a material adverse effect on the legality, validity or enforceability of any Transaction Document, (ii) a material adverse effect on the results of operations, assets, business, prospects or condition (financial or otherwise) of the Company and the Subsidiaries, taken as a whole, or (iii) a material adverse effect on the Company's ability to perform in any material respect on a timely basis its obligations under any Transaction Document (any of (i), (ii) or (iii), a "Material Adverse Effect") and 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.

(c) Authorization; Enforcement. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and each of the other Transaction Documents to which it is a party and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement and each of the other Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby have been duly authorized by all necessary action on the part of the Company and no further action is required by the Company, the Board of Directors or the Company's stockholders in connection herewith or therewith other than in connection with the Required Approvals. This Agreement and each other Transaction Document to which the Company is a party has been (or upon delivery will have been) duly executed by the Company and, when delivered in accordance with the terms hereof and thereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its 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, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law. When issued, the Pre-Funded Warrants, Warrants and Representative's Warrants will constitute valid and binding obligations of the Company to issue and sell, upon exercise thereof and payment of the exercise price therefor, the number and type of securities of the Company called for thereby in accordance with the terms thereof and the Pre-Funded Warrants, Warrants and Representative's Warrants are enforceable against the Company in accordance with their terms; provided, however, that the enforceability thereof may be limited by bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar laws relating to or affecting creditors' rights generally and by general principles of equity (regardless of whether such enforceability is considered a proceeding in equity or at law).

(d) No Conflicts. The execution, delivery and performance by the Company of this Agreement and the other Transaction Documents to which it is a party, the issuance and sale of the Securities and the consummation by it of the transactions contemplated hereby and thereby do not and will not (i) conflict with or violate any provision of the Company's or any Subsidiary's certificate or articles of incorporation, bylaws or other organizational or charter documents, (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company or any Subsidiary, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing a Company or Subsidiary debt or otherwise) or other understanding to which the Company or any Subsidiary is a party or by which any property or asset of the Company or any Subsidiary is bound or affected, or (iii) subject to the Required Approvals, conflict with or result in a violation of any law, rule, regulation, order,

judgment, injunction, decree or other restriction of any court or governmental authority to which the Company or a Subsidiary is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company or a Subsidiary is bound or affected; except in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a Material Adverse Effect.

(e) Filings, Consents and Approvals. The Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority or other Person in connection with the execution, delivery and performance by the Company of the Transaction Documents, other than: (i) the filing with the Commission of the Prospectus, (ii) such filings as are required to be made under applicable state securities laws and (iii) application(s) to each applicable Trading Market for the listing of the Shares and Warrants for trading thereon in the time and manner required thereby (collectively, the “Required Approvals”).

(f) Registration Statement. The Company has filed with the Commission the Registration Statement, including any related Preliminary Prospectus or Prospectuses, for the registration of the Securities under the Securities Act, which Registration Statement has been prepared by the Company in conformity with the requirements of the Securities Act and the rules and regulations of the Commission under the Securities Act. The registration of the Common Stock, the Pre-Funded Warrants, and the Warrants (which are included in the Units) under the Exchange Act has been declared effective by the Commission on the date hereof. Copies of such Registration Statement and of each amendment thereto, if any, including the related Preliminary Prospectuses, heretofore filed by the Company with the Commission have been delivered to the Underwriters. The term “Registration Statement” means such registration statement on Form S-1 (File No. 333-239958), as amended, as of the relevant Effective Date, including financial statements, all exhibits and any information deemed to be included or incorporated by reference therein, including any information deemed to be included pursuant to Rule 430A or Rule 430B of the Securities Act and the rules and regulations thereunder, as applicable. If the Company files a registration statement to register a portion of the Securities and relies on Rule 462(b) of the Securities Act and the rules and regulations thereunder for such registration statement to become effective upon filing with the Commission (the “Rule 462 Registration Statement”), then any reference to the “Registration Statement” shall be deemed to include the Rule 462 Registration Statement, as amended from time to time. The term “Preliminary Prospectus” as used herein means a preliminary prospectus as contemplated by Rule 430 or Rule 430A of the Securities Act and the rules and regulations thereunder as included at any time as part of, or deemed to be part of or included in, the Registration Statement. The term “Prospectus” means the final prospectus in connection with this Offering as first filed with the Commission pursuant to Rule 424(b) of the Securities Act and the rules and regulations thereunder or, if no such filing is required, the form of final prospectus included in the Registration Statement at the Effective Date, except that if any revised prospectus or prospectus supplement shall be provided to the Representative by the Company for use in connection with the Securities which differs from the Prospectus (whether or not such revised prospectus or prospectus supplement is required to be filed by the Company pursuant to Rule 424(b)), the term “Prospectus” shall also refer to such revised prospectus or prospectus supplement, as the case may be, from and after the time it is first provided to the Representative for such use. Any reference herein to the terms “amend”, “amendment” or “supplement” with respect to the Registration Statement, any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include: (i) the filing of any document under the Exchange Act after the Effective Date, the date of such Preliminary Prospectus or the date of the Prospectus, as the case may be, which is incorporated therein by reference, and (ii) any such document so filed. All references in this Agreement to the Registration Statement, a Preliminary Prospectus and the Prospectus, or any amendments or supplements to any of the foregoing shall be deemed to include any copy thereof filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval System (“EDGAR”). The term “General Disclosure Package” means, collectively, the Permitted Free Writing Prospectus(es) (as defined below) issued at or prior to the date hereof, the most recent preliminary prospectus related to this Offering, and the information included on Schedule I and Schedule II hereto.

(g) Issuance of Common Stock. The Closing Shares, Option Shares, Pre-Funded Warrant Shares, Warrant Shares, and Representative’s Warrant Shares are duly authorized and, when issued and paid for in accordance with the applicable Transaction Documents, will be duly and validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Company has reserved from its duly authorized capital stock the maximum number of shares of Common Stock issuable pursuant to this Agreement, the Pre-Funded Warrants, the Warrants and the Representative’s Warrant Agreement. The Closing Shares, Option Shares, Pre-Funded Warrant Shares, Warrant Shares, and Representative’s Warrant Shares are not and will not be subject to the preemptive rights of any holders of any security of the Company or similar contractual rights granted by the Company. All

corporate action required to be taken for the authorization, issuance and sale of the Closing Shares, Option Shares, Pre-Funded Warrant Shares, Warrant Shares, and Representative's Warrant Shares has been duly and validly taken. The Closing Shares, Option Shares, Pre-Funded Warrant Shares, Warrant Shares, and Representative's Warrant Shares will conform in all material respects to all statements with respect thereto contained in the Registration Statement, the General Disclosure Package and the Prospectus.

(h) Capitalization. The capitalization of the Company as of the date hereof is as set forth on Schedule 3.1(h). Except as set forth on Schedule 3.1(h), the Company has not issued any capital stock since its most recently filed periodic report under the Exchange Act, other than pursuant to the exercise of employee stock options under the Company's stock option plans, the issuance of shares of Common Stock to employees pursuant to the Company's employee stock purchase plans and pursuant to the conversion and/or exercise of Common Stock Equivalents outstanding as of the date of the most recently filed periodic report under the Exchange Act. No Person other than the Representative has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the transactions contemplated by the Transaction Documents, except such rights which have been waived prior to the date hereof. Except as a result of the purchase and sale of the Securities or as set forth on Schedule 3.1(h), there are no outstanding options, warrants, scrip rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities, rights or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire, any shares of Common Stock or the capital stock of any Subsidiary, or contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to issue additional shares of Common Stock or Common Stock Equivalents or the capital stock of any Subsidiary. Except as disclosed on the Registration Statement, the issuance and sale of the Securities will not obligate the Company or any Subsidiary to issue shares of Common Stock or other securities to any Person (other than the Underwriters). There are no outstanding securities or instruments of the Company or any Subsidiary that contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to redeem a security of the Company or such Subsidiary. Except as disclosed on the Registration Statement, the Company does not have any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement. All of the outstanding shares of capital stock of the Company are duly authorized, validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities and other laws or the applicable statute of limitations has expired, and none of such outstanding shares was issued in violation of any preemptive rights or similar rights to subscribe for or purchase securities. All of the securities of the Company have been duly authorized and validly issued in accordance with all requisite laws. The authorized shares of the Company conform in all material respects to all statements relating thereto contained in the Registration Statement, the General Disclosure Package and the Prospectus. The offers and sales of the Company's securities were at all relevant times either registered under the Securities Act and the applicable state securities or Blue Sky laws or, based in part on the representations and warranties of the purchasers, exempt from such registration requirements or the applicable statute of limitations has expired. No further approval or authorization of any stockholder, the Board of Directors or others is required for the issuance and sale of the Securities. There are no stockholders agreements, voting agreements or other similar agreements with respect to the Company's capital stock to which the Company is a party or, to the knowledge of the Company, between or among any of the Company's stockholders.

(i) SEC Reports; Financial Statements. The Company has filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, together with the Prospectus, being collectively referred to herein as the "SEC Reports") on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, to the knowledge of the Company, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a 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. The Company has been subject to Rule 144(i) under the Securities Act; it has filed all reports and other materials required to be filed by Section 13 or 15(d) of the Exchange Act, as applicable, during the preceding 48 months. The financial statements of the Company included in the Registration Statement, the Preliminary Prospectus, the General Disclosure Package, the Prospectus and the SEC Reports comply in all material respects

with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved (“GAAP”), except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of the Company and its consolidated Subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments. The agreements and documents described in the Registration Statement, the Preliminary Prospectus, the General Disclosure Package, the Prospectus, and the SEC Reports conform in all material aspects to the descriptions thereof contained therein and there are no agreements or other documents required by the Securities Act and the rules and regulations thereunder to be described in the Registration Statement, the Preliminary Prospectus, the General Disclosure Package, the Prospectus or the SEC Reports or to be filed with the Commission as exhibits to the Registration Statement, that have not been so described or filed. Each agreement or other instrument (however characterized or described) to which the Company or a Subsidiary is a party or by which it or such subsidiary is or may be bound or affected and (i) that is referred to in the Registration Statement, the General Disclosure Package, the Prospectus or the SEC Reports, or (ii) is material to the Company’s business, has been duly authorized and validly executed by the Company or a Subsidiary, respectively, is in full force and effect in all material respects and is enforceable against the Company or such Subsidiary and, to the Company’s knowledge, the other parties thereto, in accordance with its terms, except (x) as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting creditors’ rights generally, (y) as enforceability of any indemnification or contribution provision may be limited under the federal and state securities laws, and (z) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefore may be brought. Except as described in the Registration Statement, none of such agreements or instruments has been assigned by the Company or Subsidiary, and neither the Company nor, to the Company’s knowledge, a Subsidiary or any other party is in default thereunder and, to the Company’s knowledge, no event has occurred that, with the lapse of time or the giving of notice, or both, would constitute a default thereunder. To the Company’s knowledge, performance by the Company or the Subsidiary of the material provisions of such agreements or instruments will not result in a violation of any existing applicable law, rule, regulation, judgment, order or decree of any governmental agency or court, domestic or foreign, having jurisdiction over the Company, a subsidiary or any of their assets or businesses, including, without limitation, those relating to environmental laws and regulations.

(j) Material Changes; Undisclosed Events, Liabilities or Developments. Since the date of the latest audited financial statements included within the Registration Statement, except as specifically disclosed in the Registration Statement, the Preliminary Prospectus, the General Disclosure Package, or the Prospectus, (i) there has been no event, occurrence or development that has had or that could reasonably be expected to result in a Material Adverse Effect, (ii) the Company has not incurred any liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company’s financial statements pursuant to GAAP or disclosed in filings made with the Commission, (iii) the Company has not altered its method of accounting, (iv) the Company has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock and (v) the Company has not issued any equity securities to any officer, director or Affiliate, except pursuant to existing Company stock option plans and the issuance of Common Stock Equivalents as disclosed in the Registration Statement. The Company does not have pending before the Commission any request for confidential treatment of information. Except for the issuance of the Securities contemplated by this Agreement, no event, liability, fact, circumstance, occurrence or development has occurred or exists or is reasonably expected to occur or exist with respect to the Company or its Subsidiaries or their respective businesses, prospects, properties, operations, assets or financial condition that would be required to be disclosed by the Company under applicable securities laws at the time this representation is made or deemed made that has not been publicly disclosed at least one (1) Trading Day prior to the date that this representation is made. Unless otherwise disclosed in the Registration Statement, the Company has not: (i) issued any securities or incurred any liability or obligation, direct or contingent, for borrowed money; or (ii) declared or paid any dividend or made any other distribution on or in respect to its capital stock.

(k) Litigation. There has not been, and to the knowledge of the Company there is not pending or contemplated, any action, suit, inquiry, notice of violation, proceeding or investigation pending or, to the knowledge of the Company, threatened against or affecting the Company, any Subsidiary or any of their respective

properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an “Action”) which (i) adversely affects or challenges the legality, validity or enforceability of any of the Transaction Documents or the Securities or (ii) could, if there were an unfavorable decision, have or reasonably be expected to result in a Material Adverse Effect. Neither the Company nor any Subsidiary, nor, to the Company’s knowledge, any director or officer thereof, is or has been the subject of any Action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty. To the knowledge of the Company, there has not been, and there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or officer of the Company. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company or any Subsidiary under the Exchange Act or the Securities Act.

(l) Labor Relations. No labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company, which could reasonably be expected to result in a Material Adverse Effect. None of the Company’s or the Subsidiaries’ employees is a member of a union that relates to such employee’s relationship with the Company or such Subsidiary, and neither the Company nor any of the Subsidiaries is a party to a collective bargaining agreement, and the Company and the Subsidiaries believe that their relationships with their employees are good. To the knowledge of the Company, no executive officer of the Company or any Subsidiary, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement or non-competition agreement, or any other contract or agreement or any restrictive covenant in favor of any third party, and the continued employment of each such executive officer does not subject the Company or any of the Subsidiaries to any liability with respect to any of the foregoing matters that would reasonably be expected to have a Material Adverse Effect. The Company and the Subsidiaries are in compliance with all U.S. federal, state, local and foreign laws and regulations relating to employment and employment practices, terms and conditions of employment and wages and hours, except where the failure to be in compliance could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(m) Compliance. Neither the Company nor any Subsidiary: (i) is in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the Company or any Subsidiary under), nor has the Company or any Subsidiary received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived), (ii) is in violation of any judgment, decree or order of any court, arbitrator or other governmental authority or (iii) is or has been in violation of any statute, rule, ordinance or regulation of any governmental authority, including without limitation all foreign, federal, state and local laws relating to taxes, environmental protection, occupational health and safety, product quality and safety and employment and labor matters, except in each case as could not have or reasonably be expected to result in a Material Adverse Effect.

(n) Environmental Laws. The Company and the Subsidiaries (i) are in compliance with all federal, state, local and foreign laws relating to pollution or protection of human health or the environment (including ambient air, surface water, groundwater, land surface or subsurface strata), including laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, or toxic or hazardous substances or wastes (collectively, “Hazardous Materials”) into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands, or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations, issued, entered, promulgated or approved thereunder (“Environmental Laws”); (ii) have received all permits licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses; and (iii) are in compliance with all terms and conditions of any such permit, license or approval where in each clause (i), (ii) and (iii), the failure to so comply could be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect.

(o) FDA Compliance. The Company has operated and currently is in compliance in all material respects with all applicable laws, statutes, rules and regulations of the jurisdictions in which they are conducting business. The Company (i) is and at all times has been in material compliance with all laws, statutes, rules or regulations applicable to the ownership, research, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product candidate of the Company, including, without limitation, the Federal Food, Drug and Cosmetic Act (21 U.S.C. § 301 et seq.),

the Public Health Service Act (42 U.S.C. § 262 et. seq.) the federal Anti-Kickback Statute (42 U.S.C. § 1320a-7b(b)), the regulations promulgated pursuant to such laws, and any successor government programs, and comparable state laws, and all other local, state, federal, and foreign laws, rules, regulations, manual provisions, policies and administrative guidance relating to the regulation of the Company (“Regulatory Laws”); (ii) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other written correspondence or notice from the U.S. Food and Drug Administration (the “FDA”) or any other federal, state, local or foreign governmental or regulatory authority alleging or asserting material noncompliance with any Regulatory Laws or any licenses, exemptions, certificates, approvals, consents, clearances, authorizations, registrations, permits and supplements or amendments thereto required by any Regulatory Laws to conduct the Company’s business as described in the Registration Statement, the General Disclosure Package or the Prospectus (“Authorizations”); (iii) possesses all material Authorizations and such Authorizations are valid and in full force and effect, (iv) is in compliance with and is not in violation of, or in default under, any such Authorization, and to the knowledge of the Company, no event has occurred which allows, or after notice or lapse of time would allow, revocation, termination or modification of any Authorization or result in any other material impairment of the rights of the holder of any Authorization, and the Company does not have any reason to believe that any Authorization will not be renewed in the ordinary course; (v) has not received notice of any pending or completed claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from the FDA or any other federal, state, local or foreign governmental or regulatory authority or third party alleging non-compliance with any Regulatory Laws or Authorizations and, to the knowledge of the Company, neither the FDA nor any other federal, state, local or foreign governmental or regulatory authority or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (vi) has not received notice that the FDA or any other federal, state, local or foreign governmental or regulatory authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any material Authorizations and, to the knowledge of the Company, neither the FDA nor any other federal, state, local or foreign governmental or regulatory authority is considering such action; (vii) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Regulatory Laws or Authorizations and all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission), and (viii) is not a party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any governmental or regulatory authority.

(p) Tests and Preclinical and Clinical Trials. The preclinical studies, tests and clinical trials conducted by or on behalf of the Company that are described or referred to in the Registration Statement, the General Disclosure Package and the Prospectus, were and, if still pending, are being conducted in accordance with all applicable Regulatory Laws, including, without limitation, regulations relating to Good Clinical Practices and Good Laboratory Practices applicable to clinical trials, and all Authorizations. The descriptions of such studies, tests and trials, including the results thereof, contained in the Registration Statement, the General Disclosure Package and the Prospectus are accurate and complete and fairly present the data derived from such studies, tests and trials in all material respects. The Company is not aware of any studies, tests or trials, the results of which the Company believes are materially inconsistent with the study, test or trial results described or referred to in the Registration Statement, the General Disclosure Package and the Prospectus when viewed in the context in which such results are described and the clinical state of development. The Company has not received any notices or written correspondence from the FDA or any other federal, state, local or foreign governmental or regulatory authority or Institutional Review Boards or comparable authorities requiring the termination, suspension, material adverse modification, or partial or full clinical hold of any studies, tests or preclinical or clinical trials conducted by or on behalf of the Company and, to the knowledge of the Company, there are no reasonable grounds for the same.

(q) Authorizations. The Company has filed and received approval of all Authorizations issued by, and has made all declarations and filings with, the FDA or any other federal, state, local or foreign governmental or regulatory authority that are necessary for the ownership or lease of its properties or the conduct of its business as described in the Registration Statement, the General Disclosure Package and the Prospectus, or to permit all clinical and nonclinical studies and trials conducted by or on behalf of the Company, including, without limitation, all necessary FDA and applicable foreign regulatory agency approvals. The Company is in compliance with and is not in violation of, or in default under, any such Authorization. To the knowledge of the Company, no event has occurred which allows, or after notice or lapse of time would allow, revocation, termination or modification of any Authorization or result in any other material impairment of the rights of the holder of any Authorization and the Company does not have any reason to believe that any Authorization will not be renewed in the ordinary course.

(r) Title to Assets. Except as described in the Registration Statement, the General Disclosure Package or the Prospectus, the Company and the Subsidiaries have good and marketable title in fee simple to all real property owned by them and good and marketable title in all personal property owned by them that is material to the business of the Company and the Subsidiaries, in each case free and clear of all Liens, except for (i) Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and the Subsidiaries and (ii) Liens for the payment of federal, state or other taxes, for which appropriate reserves have been made therefor in accordance with GAAP and, the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company and the Subsidiaries are held by them under valid, subsisting and enforceable leases with which the Company and the Subsidiaries are in compliance.

(s) Intellectual Property. Except as provided in Schedule 3.1(s), the Company and the Subsidiaries have, or have rights to use, all patents, patent applications, trademarks, trademark applications, service marks, trade names, trade secrets, inventions, copyrights, licenses and other intellectual property rights and similar rights it believes are necessary or required for use in connection with their respective businesses as described in the Registration Statement, the General Disclosure Package or the Prospectus and which the failure to so have could have a Material Adverse Effect (collectively, the “Intellectual Property Rights”). To the knowledge of the Company, the Company is not now infringing, and except as provided in Schedule 3.1(s), upon commercialization will not infringe, any valid claim of any issued patents, copyrights or trademarks of others. The Company has not conducted a “freedom to operate” study. Neither the Company nor any Subsidiary has received a notice (written or otherwise) that any of the Intellectual Property Rights has expired, terminated or been abandoned, or is expected to expire or terminate or be abandoned, within two (2) years from the date of this Agreement, except where such action would not reasonably be expected to have a Material Adverse Effect. Other than as specifically described in the Registration Statement, the General Disclosure Package or the Prospectus, neither the Company nor any Subsidiary has received, since the date of the latest audited financial statements included within the Registration Statement, the General Disclosure Package, the Prospectus or the SEC Reports, a written notice of a claim or otherwise has any knowledge that the Company’s products or planned products as described in the Registration Statement, the General Disclosure Package or the Prospectus violate or infringe upon the rights of any Person, except as could not have or reasonably be expected to not have a Material Adverse Effect other than standard communications regarding the non-exclusive licenses currently being finalized with the National Institute of Allergy and Infectious Diseases, National Institutes of Health on behalf of the United States as indicated on Schedule 3.1(s). To the knowledge of the Company, all such Intellectual Property Rights are enforceable and there is no existing infringement by another Person of any of the Intellectual Property Rights. The Company and the Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of all of their intellectual properties, except where failure to do so could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(t) Insurance. The Company and the Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which the Company and the Subsidiaries are engaged, including, but not limited to, directors and officers insurance coverage. Neither the Company nor any Subsidiary 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 without a significant increase in cost.

(u) Transactions With Affiliates and Employees. Except as set forth in the Registration Statement, General Disclosure Package or Prospectus, none of the officers or directors of the Company or any Subsidiary and, to the knowledge of the Company, none of the employees of the Company or any Subsidiary is presently a party to any transaction with the Company or any Subsidiary (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, providing for the borrowing of money from or lending of money to or otherwise requiring payments to or from, any officer, director or such employee or, to the knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee, stockholder, member or partner, in each case in excess of \$120,000 other than for (i) payment of salary or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company.

(v) Sarbanes-Oxley; Internal Accounting Controls. The Company's disclosure controls and procedures and internal controls are effective. Except as set forth in the Registration Statement, the Company and the Subsidiaries are in material compliance with any and all applicable requirements of the Sarbanes-Oxley Act of 2002 that are effective as of the date hereof, and any and all applicable rules and regulations promulgated by the Commission thereunder that are effective as of the date hereof and as of the Closing Date. The Company and the Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance 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 conformity 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. Except as set forth in the Registration Statement, the Company and the Subsidiaries have established disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the Company and the Subsidiaries and designed such disclosure controls and procedures to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. The Company's certifying officers have evaluated the effectiveness of the disclosure controls and procedures of the Company and the Subsidiaries as of the end of the period covered by the most recently filed periodic report under the Exchange Act (such date, the "Evaluation Date"). The Company presented in its most recently filed periodic report under the Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date. Since the Evaluation Date, there have been no changes in the internal control over financial reporting (as such term is defined in the Exchange Act) of the Company and the Subsidiaries that have materially affected, or is reasonably likely to materially affect, the internal control over financial reporting of the Company and the Subsidiaries.

(w) Certain Fees. Except as set forth in the Registration Statement, the General Disclosure Package and Prospectus, no brokerage or finder's fees or commissions are or will be payable by the Company, any Subsidiary or Affiliate of the Company to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by the Transaction Documents. There are no other arrangements, agreements or understandings of the Company or, to the Company's knowledge, any of its stockholders that may affect the Underwriters' compensation, as determined by FINRA. Other than payments to the Underwriters for this Offering or as disclosed in the Registration Statement, and as made in connection with the issuance of the Convertible Debentures (as defined in the Registration Statement) or may be made pursuant to the engagement letter between the Company and the Representative dated May 6, 2020, the Company has not made and has no agreements, arrangements or understanding to make any direct or indirect payments (in cash, securities or otherwise) to: (i) any person, as a finder's fee, consulting fee or otherwise, in consideration of such person raising capital for the Company or introducing to the Company persons who raised or provided capital to the Company; (ii) any FINRA member; or (iii) any person or entity that has any direct or indirect affiliation or association with any FINRA member, within the 180-day period preceding the initial filing of the Registration Statement through the 90-day period after the Effective Date. None of the net proceeds of the Offering will be paid by the Company to any participating FINRA member or its affiliates, except as specifically authorized herein.

(x) Investment Company. The Company is not, and is not an Affiliate of, and immediately after receipt of payment for the Securities will not be or be an Affiliate of, an "investment company" within the meaning of the Investment Company Act of 1940, as amended. The Company shall conduct its business in a manner so that it will not become an "investment company" subject to registration under the Investment Company Act of 1940, as amended.

(y) Registration Rights. No Person has any right to cause the Company or any Subsidiary to effect the registration under the Securities Act of any securities of the Company or any Subsidiary, other than those rights that have been disclosed in the Registration Statement or have been waived or satisfied.

(z) Compliance with Exchange Act. (i) The Common Stock and the Warrants are registered pursuant to Section 12(b) of the Exchange Act and the Company has filed with the Commission a Form 8-A (Accession No. 0001437749-20-020182) providing for the registration of the Common Stock and Warrants pursuant to Section 12(b) under the Exchange Act, and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act nor has the Company received any notification that the Commission is contemplating terminating such registration. Except as

set forth on Schedule 3.1(z), the Company has not, in the 12 months preceding the date hereof, received notice from any Trading Market on which the Common Stock is or has been listed or quoted to the effect that the Company is not in compliance with the listing or maintenance requirements of such Trading Market. Except as set forth on Schedule 3.1(z), the Company is, and has no reason to believe that it will not in the foreseeable future continue to be, in compliance with all such listing and maintenance requirements. The Common Stock is currently eligible for electronic transfer through the Depository Trust Company or another established clearing corporation and the Company is current in payment of the fees of the Depository Trust Company (or such other established clearing corporation) in connection with such electronic transfer. The (i) shares of Common Stock, including the Closing Shares, the Option Shares, the Warrant Shares, the Pre-Funded Warrant Shares, and the Representative's Warrant Shares, and (ii) Warrants have been approved for listing on the Nasdaq Capital Market.

(aa) Compliance with Continued Listing Requirements. The Company has taken all necessary actions to ensure that, upon such time as the Nasdaq Stock Market LLC shall have approved the shares of Common Stock and Warrants for listing, it will be in compliance with all applicable corporate governance requirements set forth in the rules of the Nasdaq Stock Market LLC that are in effect.

(bb) Application of Takeover Protections. The Company and the Board of Directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Company's certificates of incorporation (or similar charter documents) or the laws of its state of incorporation that is or could become applicable as a result of the Underwriters and the Company fulfilling their obligations or exercising their rights under the Transaction Documents.

(cc) Disclosure: 10b-5. The Registration Statement (and any further documents to be filed with the Commission in connection with the Offering) contains all exhibits and schedules as required by the Securities Act. Each of the Registration Statement and any post-effective amendment thereto, if any, at the time it became effective, complied in all material respects with the Securities Act and the Exchange Act and the applicable rules and regulations under the Securities Act and did not and, as amended or supplemented, if applicable, will not, contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. The Preliminary Prospectus and the Prospectus, each as of its respective date, comply in all material respects with the Securities Act and the Exchange Act and the applicable rules and regulations. The Prospectus, as amended or supplemented, did not and will not contain as of the date thereof any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading; *provided, however*, that this representation and warranty shall not apply to the Underwriters' Information. As of its date and the date hereof, the General Disclosure Package did not and does not include any untrue statement of a material fact or omitted to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The SEC Reports, when they were filed with the Commission, conformed in all material respects to the requirements of the Securities Act and the Exchange Act, as applicable, and the applicable rules and regulations, and none of such documents, when they were filed with the Commission, contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein (with respect to the SEC Reports incorporated by reference in the Prospectus), in light of the circumstances under which they were made not misleading; and any further documents so filed and incorporated by reference in the Prospectus, when such documents are filed with the Commission, will conform in all material respects to the requirements of the Exchange Act and the applicable rules and regulations, as applicable, and will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made not misleading. No post-effective amendment to the Registration Statement reflecting any facts or events arising after the date thereof which represent, individually or in the aggregate, a fundamental change in the information set forth therein is required to be filed with the Commission. There are no documents required to be filed with the Commission in connection with the transaction contemplated hereby that (x) have not been filed as required pursuant to the Securities Act or (y) will not be filed within the requisite time period. There are no contracts or other documents required to be described in the Preliminary Prospectus or Prospectus, or to be filed as exhibits or schedules to the Registration Statement, which have not been described or filed as required. The press releases disseminated by the Company during the twelve months preceding the date of this Agreement taken as a whole do not contain any untrue statement of a material fact or omit to state a 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 and when made, not misleading.

(dd) No Integrated Offering. Neither the Company, nor any of its Affiliates, nor any Person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause this Offering of the Securities to be integrated with prior offerings by the Company for purposes of any applicable shareholder approval provisions of any Trading Market on which any of the securities of the Company are listed or designated.

(ee) Solvency. Based on the consolidated financial condition of the Company as of the Closing Date, after giving effect to the receipt by the Company of the proceeds from the sale of the Securities hereunder, (i) the fair saleable value of the Company's assets exceeds the amount that will be required to be paid on or in respect of the Company's existing debts and other liabilities (including known contingent liabilities) as they mature, (ii) the Company's assets do not constitute unreasonably small capital to carry on its business as now conducted and as proposed to be conducted including its capital needs taking into account the particular capital requirements of the business conducted by the Company, consolidated and projected capital requirements and capital availability thereof, through early 2022, and (iii) the current cash flow of the Company, together with the proceeds the Company would receive, were it to liquidate all of its assets, after taking into account all anticipated uses of the cash, would be sufficient to pay all amounts on or in respect of its liabilities when such amounts are required to be paid. The Company does not intend to incur debts beyond its ability to pay such debts as they mature (taking into account the timing and amounts of cash to be payable on or in respect of its debt). The Company has no knowledge of any facts or circumstances which lead it to believe that it will file for reorganization or liquidation under the bankruptcy or reorganization laws of any jurisdiction within one year from the Closing Date. Neither the Company nor any Subsidiary is in default with respect to any Indebtedness.

(ff) Tax Status. Except for matters that would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect, the Company and the Subsidiaries each (i) has made or filed all United States federal, state and local income and all foreign income and franchise tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations and (iii) has set aside on its books provision reasonably adequate for the payment of all material taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company or of any Subsidiary know of no basis for any such claim. The provisions for taxes payable, if any, shown on the financial statements filed with or as part of the Registration Statement are sufficient for all accrued and unpaid taxes, whether or not disputed, and for all periods to and including the dates of such consolidated financial statements. The term "taxes" mean all federal, state, local, foreign, and other net income, gross income, gross receipts, sales, use, ad valorem, transfer, franchise, profits, license, lease, service, service use, withholding, payroll, employment, excise, severance, stamp, occupation, premium, property, windfall profits, customs, duties or other taxes, fees, assessments, or charges of any kind whatsoever, together with any interest and any penalties, additions to tax, or additional amounts with respect thereto. The term "returns" means all returns, declarations, reports, statements, and other documents required to be filed in respect to taxes.

(gg) Foreign Corrupt Practices. Neither the Company nor any Subsidiary, nor to the knowledge of the Company or any Subsidiary, any agent or other person acting on behalf of the Company or any Subsidiary, has (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company or any Subsidiary (or made by any person acting on its behalf of which the Company is aware) which is in violation of law, or (iv) violated in any material respect any provision of FCPA. The Company has taken reasonable steps to ensure that its accounting controls and procedures are sufficient to cause the Company to comply in all material respects with the FCPA.

(hh) Accountants. To the knowledge and belief of the Company, the Company Auditor (i) is an independent registered public accounting firm as required by the Exchange Act and (ii) shall express its opinion with respect to the financial statements to be included in the Company's Annual Report for the fiscal year ending December 31, 2020.

(ii) Regulatory. The Company and the Subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state, local or foreign regulatory authorities, or by any similar foreign, federal, state or

local governmental or regulatory authority performing functions similar to those performed by such authorities necessary to conduct their respective businesses as described in the Registration Statement, the General Disclosure Package or the Prospectus, except where the failure to possess such permits could not reasonably be expected to result in a Material Adverse Effect (each, a “Material Permit”), and neither the Company nor any Subsidiary has received any notice of proceedings relating to the revocation or modification of any Material Permit. The disclosures in the Registration Statement concerning the effects of federal, state, local and all foreign regulation on the Company’s business as currently contemplated are correct in all material respects.

(jj) Stock Option Plans. Each stock option granted by the Company under the Company’s stock option plan was granted (i) in accordance with the terms of the Company’s stock option plan and (ii) with an exercise price at least equal to the fair market value of the Common Stock on the date such stock option would be considered granted under GAAP and applicable law. No stock option granted under the Company’s stock option plan has been backdated. The Company has not knowingly granted, and there is no and has been no Company policy or practice to knowingly grant, stock options prior to, or otherwise knowingly coordinate the grant of stock options with, the release or other public announcement of material information regarding the Company or the Subsidiaries or their financial results or prospects.

(kk) Office of Foreign Assets Control. Neither the Company nor any Subsidiary nor, to the Company’s knowledge, any director, officer, agent, employee or affiliate of the Company or any Subsidiary is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department.

(ll) U.S. Real Property Holding Corporation. The Company is not and has never been a U.S. real property holding corporation within the meaning of Section 897 of the Internal Revenue Code of 1986, as amended, and the Company shall so certify upon the Representative’s request.

(mm) Bank Holding Company Act. Neither the Company nor any of the Subsidiaries or Affiliates is subject to the Bank Holding Company Act of 1956, as amended (the “BHCA”) and to regulation by the Board of Governors of the Federal Reserve System (the “Federal Reserve”). Neither the Company nor any of the Subsidiaries or Affiliates owns or controls, directly or indirectly, five percent (5%) or more of the outstanding shares of any class of voting securities or twenty-five percent (25%) or more of the total equity of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve. Neither the Company nor any of the Subsidiaries or Affiliates exercises a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.

(nn) Money Laundering. The operations of the Company and the Subsidiaries are and have been conducted at all times in compliance with applicable financial record-keeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, applicable money laundering statutes and applicable rules and regulations thereunder (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 Subsidiary with respect to the Money Laundering Laws is pending or, to the knowledge of the Company or any Subsidiary, threatened.

(oo) D&O Questionnaires. To the Company’s knowledge, all information contained in the questionnaires completed by each of the Company’s directors and officers immediately prior to the Offering is true and correct in all respects and the Company has not become aware of any information which would cause the information disclosed in such questionnaires to become inaccurate and incorrect.

(pp) FINRA Affiliation. No officer, director or, to our knowledge, any beneficial owner of 5% or more of the Company’s shares of Common Stock or Common Stock Equivalents, has any direct or indirect affiliation or association with any FINRA member (as determined in accordance with the rules and regulations of FINRA) that is participating in the Offering. Except for securities purchased on the open market, no Company Affiliate is an owner of stock or other securities of any member of FINRA. No Company Affiliate has made a subordinated loan to any member of FINRA. No proceeds from the sale of the Securities (excluding underwriting compensation as disclosed in the Registration Statement and the Prospectus) will be paid to any FINRA member, any persons associated with a FINRA member or an affiliate of a FINRA member. Except as disclosed in the Prospectus, the Company has not issued any warrants or other securities or granted any options, directly or indirectly, to the Representative or any of the Underwriters named on Schedule I hereto within the 180-day period prior to the

initial filing date of the Prospectus. Except as disclosed in the Registration Statement and except for securities issued to the Representative as disclosed in the Prospectus and securities sold by the Representative on behalf of the Company, no person to whom securities of the Company have been privately issued within the 180-day period prior to the initial filing date of the Prospectus is a FINRA member, is a person associated with a FINRA member or is an affiliate of a FINRA member. To the Company's knowledge, no FINRA member participating in the Offering has a conflict of interest with the Company. For this purpose, a "conflict of interest" exists when a FINRA member, the parent or affiliate of a FINRA member or any person associated with a FINRA member in the aggregate beneficially own 5% or more of the Company's outstanding subordinated debt or common equity, or 5% or more of the Company's preferred equity. "FINRA member participating in the Offering" includes any associated person of a FINRA member that is participating in the Offering, any member of such associated person's immediate family and any affiliate of a FINRA member that is participating in the Offering. "Any person associated with a FINRA member" means (1) a natural person who is registered or has applied for registration under the rules of FINRA and (2) a sole proprietor, partner, officer, director, or branch manager of a FINRA member, or other natural person occupying a similar status or performing similar functions, or a natural person engaged in the investment banking or securities business who is directly or indirectly controlling or controlled by a FINRA member. When used in this Section 3.1(pp) the term "affiliate of a FINRA member" or "affiliated with a FINRA member" means an entity that controls, is controlled by or is under common control with a FINRA member. The Company will advise the Representative and Lucosky Brookman LLP if it learns that any officer, director or owner of 5% or more of the Company's outstanding shares of Common Stock or Common Stock Equivalents is or becomes an affiliate or associated person of a FINRA member firm.

(qq) Officers' Certificate. Any certificate signed by any duly authorized officer of the Company and delivered to Lucosky Brookman LLP on behalf of the Representative shall be deemed a representation and warranty by the Company to the Underwriters as to the matters covered thereby.

(rr) Board of Directors. The Board of Directors is comprised of the persons set forth under the heading of the Prospectus captioned "Management and Board of Directors." The qualifications of the persons serving as board members and the overall composition of the Board of Directors comply with the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder applicable to the Company and the rules of the Trading Market. At least one member of the Board of Directors qualifies as a "financial expert" as such term is defined under the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder and the rules of the Trading Market. In addition, at least a majority of the persons serving on the Board of Directors qualify as "independent" as defined under the rules of the Trading Market.

(ss) ERISA. The Company is not a party to an "employee benefit plan," as defined in Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), which: (i) is subject to any provision of ERISA and (ii) is or was at any time maintained, administered or contributed to by the Company or any of its ERISA Affiliates (as defined hereafter). These plans are referred to collectively herein as the "Employee Plans." An "ERISA Affiliate" of any person or entity means any other person or entity which, together with that person or entity, could be treated as a single employer under Section 414(b), (c), (m) or (o) of the Internal Revenue Code of 1986, as amended (the "Code"). Each Employee Plan has been maintained in material compliance with its terms and the requirements of applicable law. No Employee Plan is subject to Title IV of ERISA. The Registration Statement, Preliminary Prospectus and the Prospectus identify each employment, severance or other similar agreement, arrangement or policy and each material plan or arrangement required to be disclosed pursuant to the Rules and Regulations providing for insurance coverage (including any self-insured arrangements), workers' compensation, disability benefits, severance benefits, supplemental unemployment benefits, vacation benefits or retirement benefits, or deferred compensation, profit-sharing, bonuses, stock options, stock appreciation rights or other forms of incentive compensation, or post-retirement insurance, compensation or benefits, which: (i) is not an Employee Plan; (ii) is entered into, maintained or contributed to, as the case may be, by the Company or any of its ERISA Affiliates; and (iii) covers any officer or director or former officer or director of the Company or any of its ERISA Affiliates. These agreements, arrangements, policies or plans are referred to collectively as "Benefit Arrangements." Each Benefit Arrangement has been maintained in material compliance with its terms and with the requirements of applicable law. Except as disclosed in the Registration Statement, Preliminary Prospectus and the Prospectus, there is no liability in respect of post-retirement health and medical benefits for retired employees of the Company or any of its ERISA Affiliates, other than medical benefits required to be continued under applicable law. No "prohibited transaction" (as defined in either Section 406 of ERISA or Section 4975 of the Code) has occurred with respect to any Employee Plan; and each Employee Plan that is intended to be qualified under

Section 401(a) of the Code is so qualified, and nothing has occurred, whether by action or by failure to act, which could cause the loss of such qualification.

(tt) IT Systems. Except as would not, individually or in the aggregate, have a Material Adverse Effect, the Company reasonably believes that (i) the Company and the Subsidiaries own or have a valid right to access and use all computer systems, networks, hardware, software, databases, websites, and equipment used to process, store, maintain and operate data, information, and functions used in connection with the business of the Company and the Subsidiaries (the “Company IT Systems”), (ii) the Company IT Systems are adequate for, and operate and perform as required in connection with, the operation of the business of the Company and the Subsidiaries as currently conducted and (iii) the Company and the Subsidiaries have implemented reasonable backup, security and disaster recovery technology consistent with applicable regulatory standards;

(uu) Reverse Stock Split. The Company has the requisite corporate power and authority, and has obtained all requisite approval or authorization of any stockholder, the Board of Directors or others, in order to effect the reverse stock split of the Company’s shares of Common Stock (the “Reverse Stock Split”) as described in the Registration Statement, General Disclosure Package and Prospectus. No further approval or authorization of any stockholder, the Board of Directors or others is required in order to effect the Reverse Stock Split.

(vv) Ineligible Issuer Status. At the time of filing the Registration Statement and at the date hereof, the Company was and is an “ineligible issuer,” as defined under Rule 405 under the Securities Act.

ARTICLE IV. OTHER AGREEMENTS OF THE PARTIES

4.1 Amendments to Registration Statement. The Company has delivered, or will as promptly as practicable deliver, to the Underwriters complete conformed copies of the Registration Statement and of each consent and certificate of experts, as applicable, filed as a part thereof, and conformed copies of the Registration Statement (without exhibits), the Prospectus, as amended or supplemented, and the General Disclosure Package in such quantities and at such places as an Underwriter reasonably requests. Neither the Company nor any of its directors and officers has distributed and none of them will distribute, prior to the Closing Date, any offering material in connection with the offering and sale of the Securities other than the Prospectus, the General Disclosure Package and the Registration Statement. The Company shall not file any such amendment or supplement to which the Representative shall reasonably and timely object in writing.

4.2 Federal Securities Laws.

(a) Compliance. During the time when a Prospectus is required to be delivered under the Securities Act, the Company will use its best efforts to comply with all requirements imposed upon it by the Securities Act and the rules and regulations thereunder and the Exchange Act and the rules and regulations thereunder, as from time to time in force, so far as necessary to permit the continuance of sales of or dealings in the Securities in accordance with the provisions hereof and the Prospectus. If at any time when a Prospectus relating to the Securities is required to be delivered under the Securities Act, any event shall have occurred as a result of which, in the opinion of counsel for the Company or counsel for the Representative, the Prospectus, as then amended or supplemented, includes an untrue statement of a material fact or omits to state any 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, or if it is necessary at any time to amend the Prospectus to comply with the Securities Act, the Company will notify the Underwriters promptly and prepare and file with the Commission, subject to Section 4.1 hereof, an appropriate amendment or supplement in accordance with Section 10 of the Securities Act.

(b) Exchange Act Registration. For a period of three years from the Execution Date, the Company will use its best efforts to maintain the registration of the Common Stock, the Pre-Funded Warrants and the Warrants under the Exchange Act; provided, that such provision shall not prevent a sale, merger or similar transaction involving the Company. The Company will not deregister the Common Stock under the Exchange Act without the prior written consent of the Representative, which consent shall not be unreasonably withheld and provided that such provision shall not prevent a sale, merger or similar transaction involving the Company.

(c) Free Writing Prospectuses. The Company represents and agrees that it has not made and will not make any offer relating to the Securities that would constitute an issuer free writing prospectus, as defined in Rule 433 of the rules and regulations under the Securities Act, without the prior written consent of the Representative. Any

such free writing prospectus consented to by the Representative is herein referred to as a “Permitted Free Writing Prospectus.” The Company represents that it will treat each Permitted Free Writing Prospectus as an “issuer free writing prospectus” as defined in the rules and regulations under the Securities Act, and has complied and will comply with the applicable requirements of Rule 433 of the Securities Act, including timely Commission filing where required, legending and record keeping.

4.3 Delivery to the Underwriters of Prospectuses. The Company will deliver to the Underwriters, without charge, from time to time during the period when the Prospectus is required to be delivered under the Securities Act or the Exchange Act such number of copies of each Prospectus as the Underwriters may reasonably request.

4.4 Effectiveness and Events Requiring Notice to the Underwriters. The Company will use its best efforts to cause the Registration Statement to remain effective with a current prospectus until the later of nine (9) months from the Execution Date and the date on which the Warrants and Pre-Funded Warrants are no longer outstanding, and will notify the Underwriters immediately and confirm the notice in writing: (i) of the effectiveness of the Registration Statement and any amendment thereto; (ii) of the issuance by the Commission of any stop order or of the initiation, or the threatening, of any proceeding for that purpose; (iii) of the issuance by any state securities commission of any proceedings for the suspension of the qualification of the Securities for offering or sale in any jurisdiction or of the initiation, or the threatening, of any proceeding for that purpose; (iv) the electronic filing with the Commission of any amendment or supplement to the Registration Statement or Prospectus; (v) of the receipt of any comments or request for any additional information from the Commission; and (vi) of the happening of any event during the period described in this Section 4.4 that, in the judgment of the Company, makes any statement of a material fact made in the Registration Statement, the General Disclosure Package or the Prospectus untrue or that requires the making of any changes in the Registration Statement, the General Disclosure Package or the Prospectus in order to make the statements therein, in light of the circumstances under which they were made, not misleading. If the Commission or any state securities commission shall enter a stop order or suspend such qualification at any time, the Company will make every reasonable effort to obtain promptly the lifting of such order.

4.5 Review of Financial Statements. For a period of three (3) years from the Execution Date, the Company shall file with the SEC all reports required to be filed pursuant to the Exchange Act and, at its expense, shall cause its regularly engaged independent registered public accounting firm to review (but not audit except as required by law) the Company’s financial statements included in such reports, provided that such provision shall not prevent a sale, merger or similar transaction involving the Company.

4.6 Reports to the Underwriters: Expenses of the Offering.

(a) Periodic Reports, etc. For a period of three years from the Execution Date, the Company will furnish or make available to the Underwriters copies of such financial statements and other periodic and special reports as the Company from time to time furnishes generally to holders of any class of its securities registered under the Exchange Act and also promptly furnish or make available to the Underwriters: (i) a copy of each periodic report the Company shall be required to file with the Commission; (ii) a copy of every press release and every news item and article with respect to the Company or its affairs which was released by the Company; (iii) a copy of each Form 8-K prepared and filed by the Company; (iv) a copy of each registration statement filed by the Company under the Securities Act; (v) such additional documents and information with respect to the Company and the affairs of any future Subsidiaries of the Company as the Representative may from time to time reasonably request; provided that the Underwriters shall each sign, if requested by the Company, a Regulation FD compliant confidentiality agreement which is reasonably acceptable to the Representative in connection with such Underwriter’s receipt of such information. Documents filed with the Commission pursuant to its EDGAR system shall be deemed to have been delivered to the Underwriters pursuant to this Section.

(b) Transfer Sheets. For a period of one year from the Execution Date, the Company shall retain the Transfer Agent or a transfer and registrar agent acceptable to the Representative and will furnish to the Underwriters at the Company’s sole cost and expense such transfer sheets of the Company’s securities as an Underwriter may reasonably request, including the daily and monthly consolidated transfer sheets of the Transfer Agent and the DTC, provided, however, that such requests cannot be made more than once monthly; and provided that such provision shall not prevent a sale, merger or similar transaction involving the Company.

(c) Trading Reports. For a period of one (1) year after the date of this Agreement, the Company shall provide to the Underwriters, at the Company’s expense, such reports published by the Trading Market relating to price and

trading of such securities, as the Underwriters shall reasonably request; provided that such provision shall not prevent a sale, merger or similar transaction involving the Company.

(d) General Expenses Related to the Offering. The Company hereby agrees to pay on each of the Closing Date and each Option Closing Date, if any, to the extent not paid at the Closing Date, all expenses incident to the performance of the obligations of the Company under this Agreement, including, but not limited to: (a) all filing fees and communication expenses relating to the registration of the Securities to be sold in the Offering (including the Option Securities) with the Commission; (b) all FINRA Public Offering Filing System fees associated with the review of the Offering by FINRA; all fees and expenses relating to the listing of such Closing Units, Option Shares and Warrant Shares on the Trading Market and such other stock exchanges as the Company and the Representative together determine in good faith; (c) fees, expenses and disbursements relating to the registration or qualification of such Securities under the “blue sky” securities laws of such states and other jurisdictions as Representative may reasonably designate (including, without limitation, all filing and registration fees); (d) the costs of all mailing and printing of the underwriting documents (including, without limitation, the Underwriting Agreement, and any Blue Sky Surveys and, if appropriate, any Agreement Among Underwriters, any agreements with Selected Dealers, Underwriters’ Questionnaire and Power of Attorney), Registration Statements, Prospectuses and all amendments, supplements and exhibits thereto and as many preliminary and final Prospectuses as the Representative may reasonably deem necessary; (e) the cost and expense of the public relations firm referred to in Section 4.24 of this Agreement; (f) the costs of preparing, printing and delivering the Securities; (g) fees and expenses of the Transfer Agent for the Securities (including, without limitation, any fees required for same-day processing of any instruction letter delivered by the Company); (h) stock transfer and/or stamp taxes, if any, payable upon the transfer of securities from the Company to the Underwriters; (i) the fees and expenses of the Company’s accountants; (j) the fees and expenses of the Company’s legal counsel and other agents and representatives; (k) the Underwriters’ costs of mailing prospectuses to prospective investors; (l) all fees, expenses and disbursements relating to background checks of the Company’s officers and directors not to exceed \$15,000 in the aggregate; (m) the fees and expenses associated with the Underwriters’ use of the i-Deal system and NetRoadshow; and (n) the Company’s actual “road show” expenses for the Offering. The Underwriters may also deduct from the net proceeds of the Offering payable to the Company on the Closing Date, or each Option Closing Date, if any, all out-of-pocket fees, expenses and disbursements (including legal fees and expenses) of the Underwriters incurred as a result of providing services related to the Offering to be paid by the Company to the Underwriters; *provided, however*, that all such costs and expenses pursuant to this Section 4.6(d), including those referenced in clauses (m) and (n) above and legal expenses of counsel to the Underwriters and otherwise, which are incurred by the Underwriters and for which the Company shall be responsible shall not exceed \$125,000 in the aggregate in the event of a Closing of the Offering.

4.7 Application of Net Proceeds. The Company will apply the net proceeds from the Offering received by it in a manner consistent with the application described under the caption “Use of Proceeds” in the Prospectus.

4.8 Delivery of Earnings Statements to Security Holders. The Company will timely file such reports pursuant to the Exchange Act as are necessary in order to make generally available to its security holders as soon as practicable, but not later than the first day of the fifteenth full calendar month following the Execution Date, an earnings statement (which need not be certified by independent public or independent certified public accountants unless required by the Securities Act or the rules and regulations under the Securities Act, but which shall satisfy the provisions of Rule 158(a) under Section 11(a) of the Securities Act) covering a period of at least twelve consecutive months beginning after the Execution Date.

4.9 Stabilization. Neither the Company, nor, to its knowledge, any of its employees, directors or shareholders (without the consent of the Representative) has taken or will take, directly or indirectly, any action designed to or that has constituted or that might reasonably be expected to cause or result in, under the Exchange Act, or otherwise, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities.

4.10 Internal Controls. The Company will maintain a system of internal accounting controls sufficient to provide reasonable assurances that: (i) transactions are executed in accordance with management’s general or specific authorization; (ii) transactions are recorded as necessary in order to permit preparation of financial statements in accordance with GAAP and to maintain accountability for assets; (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 existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

4.11 Accountants. For a period of three (3) years from the Effective Date, the Company shall continue to retain a nationally recognized, independent PCAOB registered public accounting firm. The Underwriters acknowledge that the Company Auditor is acceptable to the Underwriters.

4.12 FINRA. The Company shall advise the Underwriters (who shall make an appropriate filing with FINRA) if it is aware that any officer, director, 5% or greater shareholder of the Company or Person that received the Company's unregistered equity securities in the past 180 days is or becomes an affiliate or associated person of a FINRA member firm prior to the earlier of the termination of this Agreement or the conclusion of the distribution of the Offering.

4.13 No Fiduciary Duties. The Company acknowledges and agrees that the Underwriters' responsibility to the Company is solely contractual and commercial in nature, based on arms-length negotiations and that neither the Underwriters nor their affiliates or any selected dealer shall be deemed to be acting in a fiduciary capacity, or otherwise owes any fiduciary duty to the Company or any of its affiliates in connection with the Offering and the other transactions contemplated by this Agreement. Notwithstanding anything in this Agreement to the contrary, the Company acknowledges that the Underwriters may have financial interests in the success of the Offering that are not limited to the difference between the price to the public and the purchase price paid to the Company by the Underwriters for the shares and the Underwriters have no obligation to disclose, or account to the Company for, any of such additional financial interests. The Company hereby waives and releases, to the fullest extent permitted by law, any claims that the Company may have against the Underwriters with respect to any breach or alleged breach of fiduciary duty by the Underwriters.

4.14 Warrant Shares. If all or any portion of a Pre-Funded Warrant, Warrant or a Representative's Warrant is exercised at a time when there is an effective registration statement to cover the issuance of the Pre-Funded Warrant Shares, Warrant Shares or the Representative's Warrant Shares, as the case may be, or if the Pre-Funded Warrant, Warrant or Representative's Warrant is exercised via cashless exercise at a time when such Pre-Funded Warrant Shares, Warrant Shares or Representative's Warrant Shares are eligible for resale under Rule 144 by a non-affiliate of the Company, the Pre-Funded Warrant Shares, Warrant Shares or the Representative's Warrant Shares issued pursuant to any such exercise shall be issued free of all restrictive legends. If at any time following the date hereof the Registration Statement (or any subsequent registration statement registering the sale or resale of the Pre-Funded Warrant Shares, Warrant Shares or the Representative's Warrant Shares) is not effective or is not otherwise available for the sale of the Pre-Funded Warrant Shares, Warrant Shares or the Representative's Warrant Shares, the Company shall immediately notify the holders that have provided it an address of the Pre-Funded Warrants, Warrants or the Representative's Warrant Agreement in writing that such registration statement is not then effective and thereafter shall promptly notify such holders when the registration statement is effective again and available for the sale of the Pre-Funded Warrant Shares, Warrant Shares or the Representative's Warrant Shares (it being understood and agreed that the foregoing shall not limit the ability of the Company to issue, or any holder thereof to sell, any of the Pre-Funded Warrant Shares or Warrant Shares in compliance with applicable federal and state securities laws).

4.15 Board Composition and Board Designations. The qualifications of the persons serving as board members of the Company and the overall composition of the Board of Directors shall comply with the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder and with the listing requirements of the Nasdaq Stock Market LLC and, if applicable, at least one member of the Board of Directors must qualify as a "financial expert" as such term is defined under the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder.

4.16 Securities Laws Disclosure; Publicity. At the request of the Representative, by 9:00 a.m. (New York City time) on the date hereof, the Company shall issue a press release disclosing the material terms of the Offering. The Company and the Representative shall consult with each other in issuing any press releases with respect to the Offering, and neither the Company nor any Underwriter shall issue any such press release nor otherwise make any such public statement without the prior consent of the Company, which consent shall not unreasonably be withheld or delayed, except if such disclosure is required by law, in which case the disclosing party shall promptly provide the other party with prior notice of such public statement or communication. The Company will not issue press releases or engage in any other publicity, without the Representative's prior consent, which consent will not be unreasonably withheld, for a period ending at 5:00 p.m. (New York City time) on the first business day following the 45th day following the Closing Date, other than normal and customary releases issued in the ordinary course of the Company's business.

4.17 Shareholder Rights Plan. No claim will be made or enforced by the Company or, with the consent of the Company, any other Person, that any Underwriter of the Securities is an "Acquiring Person" under any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or similar anti-takeover

plan or arrangement in effect or hereafter adopted by the Company, or that any Underwriter of Securities could be deemed to trigger the provisions of any such plan or arrangement, by virtue of receiving Securities.

4.18 Reservation of Common Stock. As of the date hereof, the Company has reserved and the Company shall continue to reserve and keep available at all times while any of the Pre-Funded Warrants, Warrants or Representative's Warrants are outstanding, free of preemptive rights, a sufficient number of shares of Common Stock for the purpose of enabling the Company to issue Option Shares pursuant to the Over-Allotment Option, Pre-Funded Warrant Shares pursuant to any exercise of the Pre-Funded Warrants, Warrant Shares pursuant to any exercise of the Warrants and Representative's Warrant Shares pursuant to any exercise of the Representative's Warrants.

4.19 Listing of Common Stock and Warrants. The Common Stock and the Warrants have been approved for trading on the Nasdaq Capital Market. The Company agrees to use its commercially reasonable best efforts to effect and maintain the trading of the Common Stock and the Warrants on the Nasdaq Capital Market for at least three (3) years after the Closing Date; provided that such provision shall not prevent a sale, merger or similar transaction involving the Company.

4.20 Right of First Refusal. Upon the Closing of the Offering, for a period of eighteen (18) months from such Closing, the Company grants each of Maxim and Joseph Gunnar & Co., LLC ("JG") the right of first refusal (the "Right of First Refusal") to act as lead managing underwriter and book-runner and/or placement agent for any and all future public or private equity, equity-linked or debt (excluding commercial bank debt) offerings undertaken during such period by the Company, any Subsidiary, or any successor to the Company (each, a "Subject Transaction"), at each of Maxim's and JG's sole and exclusive discretion, on terms and conditions customary to each of Maxim and JG for such Subject Transactions. The Right of First Refusal shall not apply to the private placement fund-raising efforts of Immutak. For the avoidance of doubt, the Right of First Refusal shall apply to: (a) the public equity fund-raising efforts of Immutak; and (b) solely in the event that either Immutak's securities become publicly traded or Immutak merges with and into the Company such that the Company's majority operations are the operations currently conducted by Immutak, to any offerings undertaken by Immutak and/or the Company. In the event that both Maxim and JG exercise their respective Right of First Refusal as to the same public equity offering, the economic participation between Maxim and JG for this Right of First Refusal on such future public equity offering shall be 75% to Maxim and 25% to JG. For the avoidance of any doubt, the Company shall not retain, engage or solicit any additional investment banker, book-runner, financial advisor, underwriter and/or placement agent in a Subject Transaction without the express written consent of Maxim and JG.

The Company shall notify Maxim and JG of its intention to pursue a Subject Transaction, including the material terms thereof, by providing written notice thereof by registered mail or overnight courier service addressed to Maxim. If Maxim fails to exercise its Right of First Refusal with respect to any Subject Transaction within ten (10) Business Days after the mailing of such written notice, then Maxim shall have no further claim or right with respect to the Subject Transaction. If JG fails to exercise its Right of First Refusal with respect to any Subject Transaction within ten (10) Business Days after the mailing of such written notice, then JG shall have no further claim or right with respect to the Subject Transaction. Each of Maxim and JG may elect, in its sole and absolute discretion, not to exercise its Right of First Refusal with respect to any Subject Transaction; provided that any such election by Maxim or JG shall not adversely affect its Right of First Refusal with respect to any other Subject Transaction during the eighteen (18) month period agreed to above.

4.21 Subsequent Equity Sales.

(a) From the date hereof until ninety (90) days after the Closing Date, neither the Company nor any Subsidiary shall issue, enter into any agreement to issue or announce the issuance or proposed issuance of any shares of Common Stock or Common Stock Equivalents.

(b) Notwithstanding the foregoing, this Section 4.21 shall not apply in respect of an Exempt Issuance.

4.22 Capital Changes. Until ninety (90) days after the Closing Date and except for reverse stock splits as disclosed in the Registration Statement, the Company shall not undertake a reverse or forward stock split or reclassification of the Common Stock without the prior written consent of Maxim.

4.23 Post Offering Investments. Provided that the Closing Securities are sold in accordance with the terms of this Agreement, in the event any individual or entity (including affiliates of such persons) that was introduced to the Company by any Underwriter subsequently provides the Company capital via any transaction, including, but not limited to, via any

exercise of the Closing Warrants or the Option Warrants (if any) issued in this Offering, during the period commencing ninety-one (91) days following the Closing Date and continuing for a period of fifteen (15) months thereafter, the Company shall be obligated to pay the applicable Underwriter a cash fee of eight percent (8%) of the gross proceeds of any such investments.

4.24 Financial Public Relations Firm. As of the Execution Date, the Company has retained a financial public relations firm reasonably acceptable to the Representative and the Company, which shall initially be CoreIR, which firm is experienced in assisting issuers in public offerings of securities and in their relations with their security holders, and shall retain such firm or another firm reasonably acceptable to the Representative for a period of not less than two (2) years after the Execution Date.

4.25 Research Independence. The Company acknowledges that each Underwriter's research analysts and research departments, if any, are required to be independent from their respective investment banking divisions and are subject to certain regulations and internal policies, and that such Underwriter's research analysts may hold and make statements or investment recommendations and/or publish research reports with respect to the Company and/or the Offering that differ from the views of its investment bankers. The Company hereby waives and releases, to the fullest extent permitted by law, any claims that the Company may have against such Underwriter with respect to any conflict of interest that may arise from the fact that the views expressed by their independent research analysts and research departments may be different from or inconsistent with the views or advice communicated to the Company by such Underwriter's investment banking divisions. The Company acknowledges that each Representative is a full service securities firm and as such from time to time, subject to applicable securities laws, may effect transactions for its own account or the account of its customers and hold long or short position in debt or equity securities of the Company.

ARTICLE V. DEFAULT BY UNDERWRITERS

If on the Closing Date or any Option Closing Date, if any, any Underwriter shall fail to purchase and pay for the portion of the Closing Securities or Option Securities, as the case may be, which such Underwriter has agreed to purchase and pay for on such date (otherwise than by reason of any default on the part of the Company), the Representative, or if a Representative is the defaulting Underwriter, the non-defaulting Underwriters, shall use their reasonable efforts to procure within 36 hours thereafter one or more of the other Underwriters, or any others, to purchase from the Company such amounts as may be agreed upon and upon the terms set forth herein, the Closing Securities or Option Securities, as the case may be, which the defaulting Underwriter or Underwriters failed to purchase. If during such 36 hours the Representative shall not have procured such other Underwriters, or any others, to purchase the Closing Securities or Option Securities, as the case may be, agreed to be purchased by the defaulting Underwriter or Underwriters, then (a) if the aggregate number of Closing Securities or Option Securities, as the case may be, with respect to which such default shall occur does not exceed 10% of the Closing Securities or Option Securities, as the case may be, covered hereby, the other Underwriters shall be obligated, severally, in proportion to the respective numbers of Closing Securities or Option Securities, as the case may be, which they are obligated to purchase hereunder, to purchase the Closing Securities or Option Securities, as the case may be, which such defaulting Underwriter or Underwriters failed to purchase, or (b) if the aggregate number of Closing Securities or Option Securities, as the case may be, with respect to which such default shall occur exceeds 10% of the Closing Securities or Option Securities, as the case may be, covered hereby, the Company or the Representative will have the right to terminate this Agreement without liability on the part of the non-defaulting Underwriters or of the Company except to the extent provided in Article VI hereof. In the event of a default by any Underwriter or Underwriters, as set forth in this Article V, the applicable Closing Date may be postponed for such period, not exceeding seven days, as the Representative, or if a Representative is the defaulting Underwriter, the non-defaulting Underwriters, may determine in order that the required changes in the Prospectus or in any other documents or arrangements may be effected. The term "Underwriter" includes any person substituted for a defaulting Underwriter. Any action taken under this Section shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

ARTICLE VI. INDEMNIFICATION

6.1 Indemnification of the Underwriters. The Company shall indemnify and hold harmless each Underwriter, its affiliates, the directors, officers, employees and agents of such Underwriter and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act from and against any and all losses, claims, liabilities, expenses and damages (including any and all investigative, legal and other expenses

reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding between any of the indemnified parties and any indemnifying parties or between any indemnified party and any third party, or otherwise, 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 statutory law or regulation, at common law or otherwise, insofar as such losses, claims, liabilities, expenses or damages arise out of or are based on (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), including the information deemed to be a part of the Registration Statement at the time of effectiveness and at any subsequent time pursuant to Rules 430A and 430B of the Securities Act and the rules and regulations thereunder, as applicable, or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading or (ii) any untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus, any preliminary prospectus supplement, any Permitted Free Writing Prospectus or the Prospectus (or any amendment or supplement to any of the foregoing) or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading or (iii) any untrue statement or alleged untrue statement of a material fact contained in any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the Offering of the Securities, including any roadshow or investor presentations made to investors by the Company (whether in person or electronically) (collectively, “Marketing Materials”) or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading or (iv) in whole or in part any inaccuracy in any material respect in the representations and warranties of the Company contained herein; *provided, however*, that the Company shall not be liable to the extent that such loss, claim, liability, expense or damage is based on any untrue statement or omission or alleged untrue statement or omission made in reliance on and in conformity with Underwriters’ Information. This indemnity agreement will be in addition to any liability that the Company might otherwise have. For all purposes of this Agreement, the information set forth in the Prospectus in the “Discretionary Accounts,” “Price Stabilization, Short Positions and Penalty Bids” and “Electronic Distribution” sections under the caption “Underwriting” constitutes the only information (the “Underwriters’ Information”) relating to the Underwriters furnished in writing to the Company by the Underwriters through the Representative specifically for inclusion in the preliminary prospectus, the Registration Statement or the Prospectus.

6.2 Indemnification of the Company. Each Underwriter, severally and not jointly, agrees to indemnify and hold harmless the Company, its affiliates, the directors, officers, employees and agents of the Company and each other person or entity, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, against any losses, liabilities, claims, damages and expenses whatsoever, as incurred (including but not limited to reasonable attorneys’ fees and any and all reasonable expenses whatsoever, incurred in investigating, preparing or defending against any litigation, commenced or threatened, or any claim whatsoever, and any and all amounts paid in settlement of any claim or litigation), joint or several, to which they or any of them may become subject under the Securities Act, the Exchange Act or otherwise, insofar as such losses, liabilities, claims, damages or expenses (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 the Registration Statement at the time of effectiveness and at any subsequent time pursuant to Rules 430A and 430B of the Securities Act and the rules and regulations thereunder, any Preliminary Prospectus, the Prospectus, or any amendment or supplement to any of them, 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 any such loss, liability, claim, damage or expense (or action in respect thereof) arises out of or is based upon any such untrue statement or alleged untrue statement or omission or alleged omission made therein in reliance upon the Underwriters’ Information; *provided, however*, that in no case shall any Underwriter be liable or responsible for any amount in excess of the underwriting discount and commissions applicable to the Securities purchased by such Underwriter hereunder.

6.3 Indemnification Procedures. Any party that proposes to assert the right to be indemnified under this Section 6 shall, promptly after receipt of notice of commencement of any action against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section 6, notify each such indemnifying party of the commencement of such action, enclosing a copy of all papers served, but the omission so to notify such indemnifying party shall not relieve the indemnifying party from any liability that it may have to any indemnified party under the foregoing provisions of this Section 6 unless, and only to the extent that, such omission results in the forfeiture of substantive rights or defenses by the indemnifying party. If any such action is brought against any indemnified party and it notifies the indemnifying party of its commencement, the indemnifying party will be entitled to participate in and, to the extent that it elects by delivering written notice to the indemnified party promptly after receiving notice of the commencement of the action from the indemnified party, jointly with any other indemnifying party similarly notified, to assume the defense of the action, with counsel satisfactory to the indemnified party, and after notice from the indemnifying party to the indemnified

party of its election to assume the defense, the indemnifying party will not be liable to the indemnified party for any legal or other expenses except as provided below and except for the reasonable out-of-pocket costs of investigation subsequently incurred by the indemnified party in connection with the defense. The indemnified party will have the right to employ its own counsel in any such action, but the fees, expenses and other charges of such counsel will be at the expense of such indemnified party unless (i) the employment of counsel by the indemnified party has been authorized in writing by one of the indemnifying parties in connection with the defense of such action, (ii) the indemnified party has reasonably concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the indemnifying party, (iii) the indemnified party has reasonably concluded that a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party shall not have the right to direct the defense of such action on behalf of the indemnified party), (iv) the indemnifying party does not diligently defend the action after assumption of the defense, or (v) the indemnifying party has not in fact employed counsel satisfactory to the indemnified party to assume the defense of such action within a reasonable time after receiving notice of the commencement of the action, in each of which cases the reasonable fees, disbursements and other charges of counsel shall be at the expense of the indemnifying party or parties. It is understood that the indemnifying party or parties shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable fees, disbursements and other charges of more than one separate firm admitted to practice in such jurisdiction at any one time for all such indemnified party or parties. All such fees, disbursements and other charges shall be reimbursed by the indemnifying party promptly as they are incurred. An indemnifying party shall not be liable for any settlement of any action or claim effected without its written consent (which consent will not be unreasonably withheld or delayed). No indemnifying party shall, without the prior written consent of each indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding relating to the matters contemplated by this Section 6 (whether or not any indemnified party is a party thereto), unless (x) such settlement, compromise or consent (i) includes an unconditional release of each indemnified party from all liability arising or that may arise out of such claim, action or proceeding and (ii) 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, and (y) the indemnifying party confirms in writing its indemnification obligations hereunder with respect to such settlement, compromise or judgment. Notwithstanding the foregoing, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 6(a) effected without its written consent if (A) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (B) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into and (iii) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.

6.4 Contribution. In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in the foregoing paragraphs of this Section 6 is applicable in accordance with its terms but for any reason is held to be unavailable, the Company and the Underwriters shall contribute to the total losses, claims, liabilities, expenses and damages (including any investigative, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted, but after deducting any contribution received by the Company from persons other than the Underwriters, such as persons who control the Company within the meaning of the Securities Act, officers of the Company who signed the Registration Statement and directors of the Company, who may also be liable for contribution), to which the Company and the Underwriter may be subject in such proportion as shall be appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other from the Offering of the Securities pursuant to this Agreement. The relative benefits received by the Company and the Underwriters shall be deemed to be in the same proportion as (x) the total proceeds from the Offering (net of underwriting discount and commissions but before deducting expenses) received by the Company bears to (y) the underwriting discount and commissions received by the Underwriters, in each case as set forth in the table on the cover page of the Prospectus. If, but only if, the allocation provided by the foregoing sentence is not permitted by applicable law, the allocation of contribution shall be made in such proportion as is appropriate to reflect not only the relative benefits referred to in the foregoing sentence but also the relative fault of the Company, on the one hand, and the Underwriters, on the other, with respect to the statements or omissions which resulted in such loss, claim, liability, expense or damage, or action in respect thereof, as well as any other relevant equitable considerations with respect to such offering. Such relative fault shall be determined by reference to whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or the Underwriters, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this Section 6.4 were to be determined by pro rata allocation or by any other method of allocation (even if the Underwriters

were treated as one entity for such purpose) which does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss, claim, liability, expense or damage, or action in respect thereof, referred to above in this Section 6.4 shall be deemed to include, for purpose of this Section 6.4, any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 6.4, no Underwriter shall be required to contribute any amount in excess of the underwriting discounts and commissions received by it. No person found 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 6.4, any person who controls a party to this Agreement within the meaning of the Securities Act will have the same rights to contribution as that party, and each officer of the Company who signed the Registration Statement will have the same rights to contribution as the Company, and each director, officer, employee, counsel or agent of an Underwriter will have the same rights to contribution as such Underwriter, subject in each case to the provisions hereof. Any party entitled to contribution, promptly after receipt of notice of commencement of any action against such party in respect of which a claim for contribution may be made under this Section 6.4, will notify any such party or parties from whom contribution may be sought, but the omission so to notify will not relieve the party or parties from whom contribution may be sought from any other obligation it or they may have under this Section 6.4. The obligations of the Underwriters to contribute pursuant to this Section 6.4 are several in proportion to the respective number of Securities to be purchased by each of the Underwriters hereunder and not joint. No party will be liable for contribution with respect to any action or claim settled without its written consent (which consent will not be unreasonably withheld).

6.5 Survival. The indemnity and contribution agreements contained in this Section 6 and the representations and warranties of the Company contained in this Agreement shall remain operative and in full force and effect regardless of (i) any investigation made by or on behalf of any Underwriter or any controlling Person thereof, (ii) acceptance of any of the Securities and payment therefor or (iii) any termination of this Agreement.

ARTICLE VII. MISCELLANEOUS

7.1 Termination.

(a) Termination Right. The Representative shall have the right to terminate this Agreement by notifying the Company at any time prior to any Closing Date, (i) if any domestic or international event or act or occurrence has materially disrupted, or in their opinion will in the immediate future materially disrupt, general securities markets in the United States; or (ii) if trading on any Trading Market shall have been suspended or materially limited, or minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities shall have been required by FINRA or by order of the Commission or any other government authority having jurisdiction, or (iii) if the United States shall have become involved in a new war or an increase in major hostilities, or (iv) if a banking moratorium has been declared by a New York State or federal authority, or (v) if a moratorium on foreign exchange trading has been declared which materially adversely impacts the United States securities markets, or (vi) if the Company shall have sustained a material loss by fire, flood, accident, hurricane, earthquake, theft, sabotage or other calamity or malicious act which, whether or not such loss shall have been insured, will, in the Representative's opinion, make it inadvisable to proceed with the delivery of the Securities, or (vii) if the Company is in material breach of any of its representations, warranties or covenants hereunder, or (viii) if the Representative shall have become aware after the date hereof of such a material adverse change in the conditions or prospects of the Company, or such adverse material change in general market conditions as in the Representative's judgment would make it impracticable to proceed with the Offering, sale and/or delivery of the Securities or to enforce contracts made by the Underwriters for the sale of the Securities.

(b) Expenses. In the event this Agreement shall be terminated pursuant to Section 7.1(a), within the time specified herein or any extensions thereof pursuant to the terms herein, the Company shall be obligated to pay to Maxim its actual and accountable out of pocket expenses related to the transactions contemplated herein then due and payable up to \$25,000 (provided, however, that such expense cap in no way limits or impairs the indemnification and contribution provisions of this Agreement). Notwithstanding the foregoing, any Advance received by the Representative will be reimbursed to the Company to the extent not actually incurred in compliance with FINRA Rule 5110(f)(2)(C).

(c) Indemnification. Notwithstanding any contrary provision contained in this Agreement, any election hereunder or any termination of this Agreement, and whether or not this Agreement is otherwise carried out, the provisions of Article VI shall not be in any way effected by such election or termination or failure to carry out the terms of this Agreement or any part hereof.

7.2 Entire Agreement. The Transaction Documents, together with the exhibits and schedules thereto, any Preliminary Prospectus and the Prospectus, contain the entire understanding of the parties with respect to the subject matter hereof and thereof and supersede all prior agreements and understandings, oral or written, with respect to such matters, which the parties acknowledge have been merged into such documents, exhibits and schedules. Notwithstanding anything herein to the contrary, the Engagement Agreement dated May 6, 2020 by and between the Company and Maxim and the Engagement Agreement, dated June 12, 2020 (collectively, the “Engagement Agreements”), by and between the Company and Maxim, shall continue to be effective and the terms therein, shall continue to survive and be enforceable by Maxim in accordance with its terms, provided that, in the event of a conflict between the terms of the foregoing agreements and this Agreement, the terms of this Agreement shall prevail.

7.3 Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of: (a) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or e-mail attachment at the email address set forth on the signature pages attached hereto at or prior to 5:30 p.m. (New York City time) on a Trading Day, (b) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or e-mail attachment at the e-mail address as set forth on the signature pages attached hereto on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (c) the second (2nd) Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or (d) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be as set forth on the signature pages attached hereto.

7.4 Amendments; Waivers. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Company and Maxim. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right.

7.5 Headings. The headings herein are for convenience only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof.

7.6 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns.

7.7 Governing Law. All questions concerning the construction, validity, enforcement and interpretation of the Transaction Documents shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Agreement and any other Transaction Documents (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any action, suit or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is improper or is an inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law. If either party shall commence an action or proceeding to enforce any provisions of the Transaction Documents, then, in addition to the obligations of the Company under Article VI, the prevailing party in such action, suit or proceeding shall be reimbursed by the other party for its reasonable attorneys’ fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

7.8 Survival. The representations and warranties contained herein shall survive the Closing and the Option Closing, if any, and the delivery of the Securities.

7.9 Execution. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to each other party, it being understood that the parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a “.pdf” format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or “.pdf” signature page were an original thereof.

7.10 Severability. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the parties hereto shall use their commercially reasonable efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the remaining terms, provisions, covenants and restrictions without including any of such that may be hereafter declared invalid, illegal, void or unenforceable.

7.11 Remedies. In addition to being entitled to exercise all rights provided herein or granted by law, including recovery of damages, the Underwriters and the Company will be entitled to specific performance under the Transaction Documents. The parties agree that monetary damages may not be adequate compensation for any loss incurred by reason of any breach of obligations contained in the Transaction Documents and hereby agree to waive and not to assert in any action for specific performance of any such obligation the defense that a remedy at law would be adequate.

7.12 Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then such action may be taken or such right may be exercised on the next succeeding Business Day.

7.13 Construction. The parties agree that each of them and/or their respective counsel have reviewed and had an opportunity to revise the Transaction Documents and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Transaction Documents or any amendments thereto. In addition, each and every reference to share prices and shares of Common Stock in any Transaction Document shall be subject to adjustment for reverse and forward stock splits, stock dividends, stock combinations and other similar transactions of the Common Stock that occur after the date of this Agreement.

7.14 WAIVER OF JURY TRIAL. IN ANY ACTION, SUIT, OR PROCEEDING IN ANY JURISDICTION BROUGHT BY ANY PARTY AGAINST ANY OTHER PARTY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY, THE PARTIES EACH KNOWINGLY AND INTENTIONALLY, TO THE GREATEST EXTENT PERMITTED BY APPLICABLE LAW, HEREBY ABSOLUTELY, UNCONDITIONALLY, IRREVOCABLY AND EXPRESSLY WAIVE FOREVER ANY RIGHT TO TRIAL BY JURY.

7.15 No Third Party Beneficiaries. The provisions of this Agreement shall be binding upon and shall inure solely to the benefit of the parties hereto, are not intended to confer upon any Person other than the parties hereto, and the Underwriters where so indicated any rights, benefits, remedies, obligations or liabilities hereunder.

(Signature Pages Follow)

If the foregoing correctly sets forth the understanding between the Underwriters and the Company, please so indicate in the space provided below for that purpose, whereupon this letter shall constitute a binding agreement among the Company and the several Underwriters in accordance with its terms.

Very truly yours,

GEOVAX LABS, INC.

By: _____
Name: David A. Dodd
Title: Chairman, President, and Chief
Executive Officer

Address for Notice:

GeoVax Labs, Inc.
1900 Lake Park Drive, Suite 380
Smyrna, GA 30080
Attention: David A. Dodd, Chairman, President and Chief Executive Officer
Email: ddodd@geovax.com

Copy to:

Womble Bond Dickinson (US) LLP
271 17th Street NW, Suite 2400
Atlanta, Georgia 30363
Telephone: (404) 879-2455
Attention: T. Clark Fitzgerald III, Esq.
Email: clark.fitzgerald@wbd-us.com

Accepted by the Representative, acting for themselves and as
Representative of the Underwriters named on Schedule I hereto,
as of the date first above written:

MAXIM GROUP LLC

By: _____
Name: Clifford A. Teller
Title: Executive Managing Director,
Investment Banking

Address for Notice:

405 Lexington Avenue
New York, New York 10174
Facsimile: (212) 895-3783
Attention: Clifford A. Teller
Email: cteller@maximgrp.com

Copy to:

Lucosky Brookman LLP
101 Wood Avenue South, 5th Floor
Woodbridge, New Jersey 08830
Telephone: (732) 395-4400
Attention: Joseph Lucosky, Esq.
Email: jlucosky@lucbro.com

SCHEDULE I

SCHEDULE OF UNDERWRITERS

<u>Underwriters</u>	<u>Closing Units</u>	<u>Closing Shares</u>	<u>Closing Pre-Funded Warrants</u>	<u>Closing Warrants</u>	<u>Closing Purchase Price</u>
Maxim Group LLC	1,920,000	1,732,500	187,500	1,920,000	\$4.60 (Shares) or \$4.59 (Pre-Funded Warrants)
Joseph Gunnar & Co., LLC	640,000	577,500	62,500	640,000	\$4.60 (Shares) or \$4.59 (Pre-Funded Warrants)
Total	2,560,000	2,310,000	250,000	2,560,000	

SCHEDULE II

Pricing Information

Number of Closing Units: 2,560,000

Number of Closing Shares: 2,310,000

Number of Closing Pre-Funded Warrants: 250,000

Number of Closing Warrants: 2,560,000

Number of Option Shares or Option Pre-Funded Warrants: 384,000

Number of Option Warrants: 384,000

Public Offering Price per Closing Unit with Closing Shares: \$5.00

Public Offering Price per Closing Unit with Closing Pre-Funded Warrants: \$4.99

Public Offering Price per Closing Share: \$4.99

Public Offering Price per Closing Pre-Funded Warrant: \$4.98

Public Offering Price per Closing Warrant: \$0.01

Public Offering Price per Option Share: \$4.99

Public Offering Price per Option Pre-Funded Warrant: \$4.98

Public Offering Price per Option Warrant: \$0.01

Underwriting Discount per Closing Unit with Closing Shares: \$0.40

Underwriting Discount per Closing Unit with Closing Pre-Funded Warrants: \$0.40

Underwriting Discount per Option Share: \$0.40

Underwriting Discount per Option Pre-Funded Warrant: \$0.40

Underwriting Discount per Option Warrant: \$0.00

Proceeds to Company per Closing Unit with Closing Shares (before expenses): \$4.60

Proceeds to Company per Closing Unit with Closing Pre-Funded Warrants (before expenses): \$4.59

Proceeds to Company per Option Share (before expenses): \$4.59

Proceeds to Company per Option Pre-Funded Warrant (before expenses): \$4.58

Proceeds to Company per Option Warrant (before expenses): \$0.01

EXHIBIT A

FORM OF LOCK-UP AGREEMENT

[_____], 2020

Maxim Group LLC
405 Lexington Avenue
New York, New York 10174

Re: GeoVax Labs, Inc.—Public Offering

Ladies and Gentlemen:

The undersigned, an officer, director and/or holder of common stock, par value \$0.001 per share (the “**Common Stock**”), or rights to acquire shares of Common Stock (the “**Shares**”), of GeoVax Labs, Inc. (the “**Company**”), understands that you are the representative (the “**Representative**”) of the several underwriters, if any (collectively, the “**Underwriters**”), named or to be named in the final form of **Schedule I** to the underwriting agreement (the “**Underwriting Agreement**”) to be entered into among the Underwriters and the Company, providing for the public offering (the “**Public Offering**”) of Shares and warrants to purchase Shares (collectively, the “**Securities**”) pursuant to a registration statement filed or to be filed with the U.S. Securities and Exchange Commission (the “**SEC**”). Capitalized terms used herein and not otherwise defined shall have the meanings set forth in the Underwriting Agreement.

In consideration of the Underwriters’ 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, for the benefit of the Company, the Representative and the other Underwriters that, without the prior written consent of the Representative, the undersigned will not, during the period specified in the following paragraph (the “**Lock-Up Period**”), directly or indirectly, unless otherwise provided herein, (a) offer, sell, agree to offer or sell, solicit offers to purchase, grant any call option or purchase any put option with respect to, pledge, encumber, assign, borrow or otherwise dispose of (each a “**Transfer**”) any Relevant Security (as defined below) or otherwise publicly disclose the intention to do so, or (b) establish or increase any “put equivalent position” or liquidate or decrease any “call equivalent position” with respect to any Relevant Security (in each case within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), and the rules and regulations thereunder) with respect to any Relevant Security or otherwise enter into any swap, derivative or other transaction or arrangement that Transfers to another, in whole or in part, any economic consequence of ownership of a Relevant Security, whether or not such transaction is to be settled by the delivery of Relevant Securities, other securities, cash or other consideration, or otherwise publicly disclose the intention to do so. As used herein, the term “**Relevant Security**” means any Share, any warrant to purchase Shares or any other security of the Company or any other entity that is convertible into, or exercisable or exchangeable for, Shares or any other equity security of the Company, in each case owned beneficially or otherwise by the undersigned on the date of closing of the Public Offering or acquired by the undersigned during the Lock-Up Period.

The restrictions in the foregoing paragraph shall not apply to (a) any exercise (including a cashless exercise or broker-assisted exercise and payment of tax obligations) of options or warrants to purchase Shares; provided that any Shares received upon such exercise, conversion or exchange will be subject to the Lock-Up Period, (b) any establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of Shares (a “**Trading Plan**”), provided that (i) the Trading Plan shall not provide for or permit any transfers, sales or other dispositions of Shares during the Lock-Up Period and (ii) the Trading Plan would not require any filing under Section 16(a) of the Exchange Act and no such filing is voluntarily made, or (c) any transfer of Shares acquired in open market transactions following the closing of the Public Offering, provided the transfer would not require any filing under Section 16(a) of the Exchange Act and no such filing is voluntarily made. The Lock-Up Period will commence on the date of this Lock-up Agreement and continue and include the date that is one-hundred and eighty (180) days after the closing of the Public Offering.

In addition, the undersigned further agrees that, except for the registration statement filed or to be filed in connection with the Public Offering, during the Lock-Up Period the undersigned will not, without the prior written consent

of the Representative: (a) file or participate in the filing with the SEC of any registration statement or circulate or participate in the circulation of any preliminary or final prospectus or other disclosure document, in each case with respect to any proposed offering or sale of a Relevant Security beneficially owned by the undersigned, or (b) exercise any rights the undersigned may have to require registration with the SEC of any proposed offering or sale of a Relevant Security beneficially owned by the undersigned .

In furtherance of the undersigned's obligations hereunder, the undersigned hereby authorizes the Company during the Lock-Up Period to cause any transfer agent for the Relevant Securities to decline to transfer, and to note stop transfer restrictions on the stock register and other records relating to, Relevant Securities for which the undersigned is the record owner and the transfer of which would be a violation of this Lock-Up Agreement and, in the case of Relevant Securities for which the undersigned is the beneficial but not the record owner, agrees that during the Lock-Up Period it will use its reasonable best efforts to cause the record owner to authorize the Company to cause the relevant transfer agent to decline to transfer, and to note stop transfer restrictions on the stock register and other records relating to, such Relevant Securities to the extent such transfer would be a violation of this Lock-Up Agreement.

Notwithstanding the foregoing, the undersigned may transfer the undersigned's Relevant Securities:

- (i) as a *bona fide* gift or gifts,
- (ii) to any trust, partnership, limited liability company or other legal entity commonly used for estate planning purposes which is established for the direct or indirect benefit of the undersigned or a member or members of the immediate family of the undersigned,
- (iii) if the undersigned is a corporation, partnership, limited liability company, trust or other business entity, (1) to another corporation, partnership, limited liability company, trust or other business entity that is a direct or indirect affiliate (as defined in Rule 405 under the Securities Act of 1933, as amended) of the undersigned, (2) to limited partners, limited liability company members or stockholders of the undersigned or holders of similar equity interests in the undersigned , or (3) in connection with a sale, merger or transfer of all or substantially all of the assets of the undersigned or any other change of control of the undersigned, not undertaken for the purpose of avoiding the restrictions imposed by this Lock-Up Agreement,
- (iv) if the undersigned is a trust, to the beneficiary of such trust,
- (v) by testate or intestate succession,
- (vi) by operation of law, such as pursuant to a qualified domestic order or in connection with a divorce settlement,
- (vii) pursuant to the Underwriting Agreement, or
- (viii) to the Company solely in an amount necessary to satisfy tax obligations (withholding or otherwise) in connection with any grant of restricted Shares, exercise or vesting of options or warrants to purchase Shares;

provided, in the case of clauses (i)-(vi), that (A) such transfer shall not involve a disposition for value, (B) the transferee agrees in writing with the Underwriters and the Company to be bound by the terms of this Lock-Up Agreement, and (C) such transfer would not require any filing under Section 16(a) of the Exchange Act and no such filing is voluntarily made.

For purposes of this Lock-Up Agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Lock-Up Agreement and that this Lock-Up Agreement has been duly authorized (if the undersigned is not a natural person) and constitutes the legal, valid and binding obligation of the undersigned, enforceable in accordance with its terms. Upon request, the undersigned will execute any additional documents necessary in connection with the enforcement hereof. Any

obligations of the undersigned shall be binding upon the successors and assigns of the undersigned from the date of this Lock-Up Agreement.

The undersigned understands that, if the Underwriting Agreement does not become effective, or if the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Securities to be sold thereunder, the undersigned shall be released from all obligations under this Lock-Up Agreement.

The undersigned, whether or not participating in the Public Offering, understands that the Underwriters are entering into the Underwriting Agreement and proceeding with the Public Offering in reliance upon this Lock-Up Agreement.

This Lock-Up Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflict of laws principles thereof. Delivery of a signed copy of this Lock-Up Agreement by facsimile or e-mail/pdf transmission shall be effective as the delivery of the original hereof.

Very truly yours,

Signature: _____

Name (printed): _____

Title (if applicable): _____

Entity (if applicable): _____

EXHIBIT B

OFFICERS' CERTIFICATE

GEOVAX LABS, INC.

The undersigned, David A. Dodd and Mark W. Reynolds, the duly elected and duly qualified Chief Executive Officer and Chief Financial Officer, respectively, of GeoVax Labs, Inc., a Delaware corporation (the "Company"), hereby certify the following on behalf of the Company, in connection with the transactions contemplated by the Underwriting Agreement (the "Underwriting Agreement"), dated September [___], 2020, by and between the Company and Maxim Group LLC, as representative of the several Underwriters, if any, named on Schedule I thereto:

1. The undersigned officers have carefully examined the Registration Statement, the General Disclosure Package, any Issuer Free Writing Prospectus and the Prospectus and, in their opinion, the Registration Statement and each amendment thereto, as of time it became effective and as of the Closing Date 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 not misleading, and the General Disclosure Package, as of its date and as of the Closing Date, any Issuer Free Writing Prospectus as of its date and as of the Closing Date and the Prospectus and each amendment or supplement thereto, as of the respective date thereof and as of the Closing Date, did not include any untrue statement of a material fact and did not omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances in which they were made, not misleading.
2. Since the effective date of the Registration Statement, no event has occurred which should have been set forth in a supplement or amendment to the Registration Statement, the General Disclosure Package or the Prospectus.
3. To the best of their knowledge after reasonable investigation, as of the Closing Date, the representations and warranties of the Company in the Underwriting Agreement are true and correct and the Company has complied in all material respects with all agreements and satisfied all conditions on its part to be performed or satisfied hereunder at or prior to the Closing Date.
4. There has not been, subsequent to June 30, 2020, any material adverse change in the financial position or results of operations of the Company, or any change or development that, singularly or in the aggregate, would involve a Material Adverse Effect.

Capitalized terms used but not otherwise defined herein shall have the meanings ascribed to such terms in the Underwriting Agreement.

This certificate is to assist the Underwriters in conducting and documenting their investigation of the affairs of the Company in connection with the Offering of the Securities pursuant to the terms of the Underwriting Agreement and the other transactions described in the Transaction Documents, and each of the Underwriters, Lucosky Brookman LLP and Womble Bond Dickinson (US) LLP are entitled to rely on this Certificate for such purpose and (if applicable) in connection with the delivery by such counsel of their respective legal opinions and negative assurance statement.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the undersigned have executed this Officers' Certificate on behalf of the Company as of this [] day of September, 2020.

Name: David A. Dodd
Title: Chief Executive Officer

Name: Mark W. Reynolds
Title: Chief Financial Officer

[SIGNATURE PAGE TO OFFICERS' CERTIFICATE]

EXHIBIT C

SECRETARY'S CERTIFICATE

GEOVAX LABS, INC.

September [___], 2020

The undersigned, acting solely in his capacity as the duly elected, qualified and acting Secretary of GeoVax Labs, Inc., a Delaware corporation (the "Company"), and not in his individual capacity, hereby gives this certificate pursuant to Section 2.3(i) of that certain underwriting agreement, dated September [___], 2020, by and between the Company and Maxim Group LLC, as representative of the several Underwriters, if any, named on Schedule I thereto (the "Underwriting Agreement"). Unless otherwise defined herein, the capitalized terms used herein shall have the meanings ascribed to them in the Underwriting Agreement.

The undersigned, [], Secretary of the Company, hereby certifies as of the date hereof as follows:

1. Attached hereto as Exhibit A is a true, correct and complete copy of the Company's amended and restated certificate of incorporation, as further amended, in effect on the date hereof (the "Certificate of Incorporation"). The Certificate of Incorporation is in full force and effect on the date hereof, and no amendments or modifications to the Certificate of Incorporation have been authorized or filed with the Secretary of State of the State of Delaware.

2. Attached hereto as Exhibit B is a true, correct and complete copy of the Company's amended and restated bylaws, in effect on the date hereof (the "Bylaws"), and no amendments or modifications to the Bylaws have been authorized.

3. Attached hereto as Exhibit C is a true, correct and complete copies of resolutions duly adopted by the Company's board of directors or a committee thereof at meetings held on [___], 2020, in which the transactions contemplated by the Registration Statement, the Prospectus and the Transaction Documents were authorized and approved. Such resolutions are in full force and effect, have not been amended, modified or rescinded and are the only resolutions related to the subject matter thereof.

4. Each person who, as a director or officer of the Company, signed, and delivered by facsimile, portable document file (.pdf) or otherwise (a) the Underwriting Agreement, (b) the Transaction Documents and (c) any and all other documents or instruments executed and delivered to the Representative in connection with the transactions contemplated by the Underwriting Agreement, was duly elected or appointed, qualified and acting as such director or officer, and was duly authorized to execute and deliver such documents or other instruments at the respective times of such execution and delivery.

5. All persons who, as officers or directors of the Company or attorneys-in-fact of such officers or directors, signed, and delivered by facsimile, portable document file (.pdf) or otherwise: (a) the Registration Statement on Form S-1, as amended (File No. 333-239958), that the Company filed with the Commission on July 20, 2020, and [___], which was subsequently declared effective by the Commission on [___], 2020, and (b) any and all other documents or instruments executed and delivered to the Commission in connection with such Registration Statement were, at the respective times of such signing, delivery or filing, duly elected or appointed, qualified and acting as such director, officer or duly appointed and acting as such attorney-in-fact, and the signatures of such persons appearing on such documents are their genuine signatures or true facsimiles or portable document thereof.

6. Attached hereto as Exhibit D are true, correct and complete copies of a good standing (or equivalent) certificate as of a recent date for the Company and each Subsidiary by the relevant authority of its jurisdiction of incorporation or organization, and such certificates attached thereto have not been amended (except as attached thereto) since the date reflected thereon.

7. David A. Dodd, the Company's Chief Executive Officer, has executed and delivered on behalf of the Company the Underwriting Agreement and the other Transaction Documents.

This certificate is to assist the Underwriters in conducting and documenting their investigation of the affairs of the Company in connection with the Offering of the Securities pursuant to the terms of the Underwriting Agreement and the other transactions described in the Transaction Documents, and each of the Underwriters, Lucosky Brookman, LLP and Womble Bond Dickinson (US) LLP are entitled to rely on this Certificate for such purpose and (if applicable) in connection with the delivery by such counsel of their respective legal opinions and negative assurance statement.

This certificate may be executed in multiple counterparts, each of which shall be deemed an original, and all of which taken together shall constitute one and the same instrument. Delivery of an executed signature page of this certificate by electronic or facsimile transmission shall be as effective as delivery of a manually executed counterpart hereof.

[Signature page follows]

IN WITNESS WHEREOF, I have hereunder signed my name on this [__] day of September, 2020.

Name: Mark W. Reynolds

Title: Secretary

The undersigned as Chief Executive Officer of the Company hereby certifies that Mark W. Reynolds is the duly elected, appointed, qualified and acting Secretary of the Company, and that the signature appearing above is his genuine signature.

David A. Dodd, Chief Executive Officer

[Signature page to GeoVax Lab, Inc. Secretary's Certificate]

Secretary's Certificate

Exhibit A

Certificate of Incorporation

Secretary's Certificate

Exhibit B

Bylaws

Secretary's Certificate

Exhibit C

Board Resolutions

Secretary's Certificate

Exhibit D

Good Standing Certificates

EXHIBIT D

CHIEF FINANCIAL OFFICER'S CERTIFICATE

GEOVAX LABS, INC.

September [____], 2020

I, Mark W. Reynolds, do hereby certify that I am the Chief Financial Officer of GeoVax Labs, Inc., a Delaware corporation (the "Company"), and, in my capacity as such and not in any individual capacity, and based upon a diligent examination of the financial records of the Company, the scope and nature of such examination being designed to identify information relevant to the subjects addressed below, do hereby certify to the Representative (as defined below) that:

1. I am providing this certificate in connection with the offering (the "Offering") by the Company of an aggregate of [____] Units ("Units"), with each Unit consisting of one share of the Company's common stock, par value \$0.001 per share (the "Common Stock"), and one warrant to purchase one share of Common Stock pursuant to Section 2.3(j) of that certain underwriting agreement, dated September [____], 2020 (the "Underwriting Agreement"), by and between the Company and Maxim Group LLC, as representative of the several Underwriters, if any, named on Schedule I thereto. The Offering is being made pursuant to the registration statement on Form S-1, as amended (File No. 333-239958) (the "Registration Statement"), that was filed with the Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended, and that was subsequently declared effective by the SEC on September [____], 2020. Unless otherwise defined herein, the capitalized terms used herein shall have the meanings ascribed to them in the Underwriting Agreement.

2. I am familiar with the accounting, operations and records systems of the Company and its subsidiaries and I have responsibility for the Company's financial and accounting matters. I have (i) read the Registration Statement and the Prospectus; and (ii) supervised the compilation of and reviewed the financial information set forth in the Registration Statement and the Prospectus (collectively, the "Financial Information"). Such Financial Information has been derived from the applicable accounting or financial records of the Company or its subsidiaries, which I believe, to the best of my knowledge, are accurate, complete and reliable.

3. There were no significant decreases in the Company's cash and cash equivalents, total current liabilities and operating expenses during the Company's second quarter ended June 30, 2020 as compared with amounts shown on the Company's unaudited interim financial statements for the fiscal quarter ended June 30, 2019, except as disclosed in the Registration Statement or the Prospectus.

4. I have prepared or reviewed the amounts and information identified in the pages of the Registration Statement and the Prospectus [and Company's presentation], attached as Annex A hereto (collectively, the "Financial and Numerical Information"). To the best of my knowledge, such Financial and Numerical Information, as of the date hereof, matches or is accurately derived from the applicable accounting or financial records of the Company or its subsidiaries.

This certificate is to assist the Underwriters in conducting and documenting their investigation of the affairs of the Company in connection with the Offering of the Securities pursuant to the terms of the Underwriting Agreement and the other transactions described in the Transaction Documents, and each of the Underwriters, Lucosky Brookman, LLP and Womble Bond Dickinson (US) LLP are entitled to rely on this Certificate for such purpose and (if applicable) in connection with the delivery by such counsel of their respective legal opinions and negative assurance statement.

[Signature page follows]

IN WITNESS WHEREOF, the undersigned has executed and delivered this Chief Financial Officer Certificate on behalf of the Company as of the date first written above.

GEOVAX LABS, INC.

By: _____
Name: Mark W. Reynolds
Title: Chief Financial Officer

[Signature page to Chief Financial Officer Certificate—GeoVax Labs, Inc.]

EXHIBIT E

FORM OF WARRANT

[attached hereto]

EXHIBIT F

FORM OF REPRESENTATIVE'S WARRANT

[attached hereto]

EXHIBIT G

FORM OF WARRANT AGENT AGREEMENT

[attached hereto]

EXHIBIT H

FORM OF PRE-FUNDED WARRANT

[attached hereto]

GeoVax Labs, Inc. Underwriting Agreement Schedules

Schedule 3.1(a) Subsidiaries

GeoVax, Inc., a Georgia corporation (100% owned) *
Immutak Oncology, Inc., a Delaware corporation (94% owned) *

*The shares of these corporations owned by GeoVax Labs, Inc. were pledged as part of the Bridge Financing, as described in the Registration Statement.

Schedule 3.1(h) Capitalization

Preferred Stock, \$.01 par value

Shares Authorized	10,000,000
Series B Convertible Preferred Stock, \$1000 stated value, issued and outstanding	100

Common Stock, \$.001 par value

Shares Authorized	600,000,000
Shares Outstanding	15,436,913

Stock Options

As a result of reverse stock splits effected in April 2019 and January 2020, the Company's existing stock option grants were adjusted to a de minimis amount. On June 19, 2020, the Company adopted the 2020 Stock Incentive Plan and reserved 5,000,000 shares for future issuance pursuant to the Plan. The Company expects to resume stock option grants at appropriate levels to its employees and directors.

Stock Purchase Warrants

	<u>Expiration</u>	<u>Ex. Price</u>	<u>Shares</u>
Series I Warrants	Aug - 24 Dec	\$ 0.50	626,264(1)
June 2020 Warrants	6/26/25	\$ 0.50	2,400,000(2)

- (1) Series I Warrants have a price protection antidilution. Both price and number of shares are adjusted so that the total exercise price is the same.
- (2) The June 2020 Warrants have price protection antidilution. No increase in number of shares.

Convertible Debentures

	<u>Face Value</u>	<u>Conv Price</u>	<u>Shares</u>
Convertible Debentures	\$ 1,200,000	\$ 0.50	2,400,000(1)

- (1) See the Registration Statement for a full description of the conversion rights of the Convertible Debentures, including mandatory conversion (at a 20% discount) upon consummation of a public offering.

Stock Issuances Since Most Recent Periodic Report

On 8/3/20 the Company issued 10,332 shares of its Common Stock to Content Carnivores LLC in compensation for consulting services during the months of July and August 2020, pursuant to an ongoing Consulting Agreement dated May 1, 2020.

Schedule 3.1(s) Intellectual Property

National Institutes of Health (NIH) National Institutes of Health (NIH)

The MVA backbone that the Company uses in its vaccines was provided by the laboratory of Dr. Bernard Moss of the National Institute of Allergy and Infectious Diseases (NIAID) of the National Institutes of Health (NIH). The Company has agreed on the material terms for a non-exclusive commercial license to the NIH MVA backbone for our SARS CoV-2 vaccine with the NIH, which includes the use of the patents and patent applications listed below. The Company has also agreed on material terms for a non-exclusive research and development license to use the MVA backbone and these listed patents and applications for our other vaccine candidates. The licenses have been approved by the appropriate committees within the NIH and are awaiting final signature. If the Company elects to proceed with one or more vaccines developed under the research and development license, the Company will negotiate appropriate commercialization licenses.

U.S. Patent/Patent Application	Title	Estimated Expiration Date
U.S. 6,998,252	Recombinant poxviruses having foreign DNA expressed under the control of poxvirus regulatory sequences.	Feb. 2023
U.S. 7,015,024	Compositions containing recombinant poxviruses having foreign DNA expressed under the control of poxvirus regulatory sequences.	Mar. 2023
U.S. 7,045,136	Methods of immunization using recombinant poxviruses having foreign DNA expressed under the control of poxvirus regulatory sequences.	May 2023
U.S. 7,045,313	Recombinant vaccinia virus containing a chimeric gene having foreign DNA flanked by vaccinia regulatory DNA.	Feb. 2023
U.S. 9,133,480	Recombinant modified vaccinia ankara (MVA) vaccinia virus containing restructured insertion sites.	Mar. 2032
U.S. 9,879,231	Recombinant modified vaccinia ankara (MVA) vaccinia virus containing restructured insertion sites.	Oct. 2031
U.S. 9,133,478	Modified vaccinia Ankara (MVA) virus recombinants comprising heterologous coding sequences inserted into the intergenic regions between essential genes	Jun. 2031
U.S. 10,421,978	Intergenic sites between conserved genes in the genome of modified vaccinia ankara (MVA) vaccinia virus	Aug. 2027
U.S. App. No. 16/344,774	Prefusion coronavirus spike proteins and their uses.	Oct. 2037
U.S. App. No. 16/579,276	Intergenic Sites Between Conserved Genes in the Genome of Modified Vaccinia Ankara (MVA) Vaccinia Virus	Aug. 2027
U.S. Prov. App. No. 62/972,886	2019-nCoV vaccine.	Feb. 2041

**CERTIFICATE OF AMENDMENT
TO THE CERTIFICATE OF INCORPORATION
OF GEOVAX LABS, INC.**

GeoVax Labs, Inc. (the “Corporation”), does hereby certify that the Corporation’s Certificate of Incorporation originally filed with the Delaware Secretary of State on June 17, 2008, as previously amended by:

- Certificate of Merger filed June 18, 2008, as further amended by the following documents;
- Certificate of Amendment to the Certificate of Incorporation filed April 13, 2010;
- Certificate of Amendment to the Certificate of Incorporation filed April 27, 2010;
- Certificate of Designation filed on March 20, 2012;
- Certificate of Amendment to the Certificate of Incorporation filed August 1, 2013;
- Amendment to Certificate of Designation filed on December 12, 2013;
- Certificate of Designation filed on December 12, 2013;
- Certificate of Designation filed on February 27, 2015;
- Certificate of Amendment to the Certificate of Incorporation filed May 13, 2015;
- Certificate of Amendment to the Certificate of Incorporation filed June 14, 2016;
- Certificate of Designation filed on May 9, 2017;
- Certificate of Amendment to the Certificate of Incorporation of the Corporation filed August 4, 2017;
- Certificate of Designation filed on February 19, 2019;
- Certificate of Designation filed on February 26, 2019;
- Certificate of Amendment to the Certificate of Incorporation of the Company filed April 30, 2019;
- Certificate of Designation filed July 16, 2019;
- Certificate of Designation filed July 24, 2019;
- Certificate of Amendment to the Certificate of Incorporation of the Corporation filed January 21, 2020; and
- Certificate of Designation filed on January 23, 2020,

is hereby further amended pursuant to Section 242 of the General Corporation Law of the State of Delaware.

The Corporation does hereby further certify that this Certificate of Amendment was duly adopted by the Corporation’s Board of Directors and by the stockholders of the Corporation in accordance with the applicable provisions of Section 242 of the General Corporation Law of the State of Delaware.

The Certificate of Incorporation of the Corporation, as amended, is amended as follows:

The first paragraph of Article IV of the Certificate of Incorporation, as amended, shall be deleted in its entirety and replaced with the following:

“The total number of shares of all classes of stock which the Corporation shall have the authority to issue is 610,000,000 shares, which are divided into two classes consisting of: (a) 600,000,000 shares of Common Stock, par value \$0.001 per share, and (b) 10,000,000 shares of Preferred Stock, par value \$0.01 per share.

Upon the effectiveness of this Certificate of Amendment of the Certificate of Incorporation on September 25, 2020 at 12:01 a.m. Eastern Time (the “Effective Time”), each twenty (20) shares of the Corporation’s Common Stock, par value \$0.001 per share (“Old Common Stock”), issued and outstanding immediately prior to the Effective Time will automatically and without any action on the part of the respective holders thereof, be combined and reclassified into one (1) share of Common Stock, par value \$0.001 per share (the “New Common Stock”) (and such combination and conversion, the “Reverse Stock Split”).

Notwithstanding the immediately preceding sentence, no fractional shares of New Common Stock shall be issued to the holders of record of Old Common Stock in connection with the Reverse Stock Split and the Corporation shall not recognize on its stock record books any purported transfer of any fractional share of

New Common Stock. In lieu thereof, the Corporation shall make a cash payment equal to the Market Value (as subsequently defined herein) of such fractional share of Common Stock to holders thereof who would otherwise be entitled to receive fractional shares, except for the provisions hereof, upon surrender of certificates representing those shares to the Corporation's transfer agent. The ownership of such fractional interests shall not entitle the holder thereof to any voting, dividend or other right, except the right to receive payment therefor as described above. For the purposes hereof, "Market Value" of shares of Common Stock shall mean an amount per share equal to the closing price of the Common Stock on the business day immediately preceding the Effective Time as reported by the OTC Market (or another exchange on which the Common Stock is then listed). Each stock certificate that, immediately prior to the Effective Time, represented shares of Old Common Stock shall, from and after the Effective Time, automatically and without the necessity of presenting the same for exchange, represent that number of whole shares of New Common Stock into which the shares of Old Common Stock represented by such certificate shall have been reclassified (including any full shares of New Common Stock issued with respect to fractional shares of Old Common Stock as set forth above), provided, however, that each holder of record of a certificate that represented shares of Old Common Stock shall receive, upon surrender of such certificate, a new certificate representing the number of whole shares of New Common Stock into which the shares of Old Common Stock represented by such certificate shall have been reclassified."

The remainder of the Certificate of Incorporation shall remain unchanged and in full force and effect.

This Certificate of Amendment shall be effective as of 12:01 a.m. Eastern Time on September 25, 2020.

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed on September 24, 2020.

GEOVAX LABS, INC.

/s/ David A. Dodd
David A. Dodd
President and Chief Executive Officer

**PRE-FUNDED COMMON STOCK PURCHASE WARRANT
GEOVAX LABS, INC.**

Warrant Shares: [_____]

Original Issuance Date: [_____], 2020

THIS PRE-FUNDED COMMON STOCK PURCHASE WARRANT (this “Warrant”) certifies that, for value received, _____ or its assigns (the “Holder”) is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the date hereof (the “Original Issuance Date”) until this Warrant is exercised in full (the “Termination Date”) but not thereafter, to subscribe for and purchase from GeoVax Labs, Inc., a Delaware corporation (the “Company”), up to [___] shares (as subject to adjustment hereunder, the “Warrant Shares”) of common stock of the Company, par value \$0.001 per share (“Common Stock”). The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. In addition to the terms defined elsewhere in this Warrant, the following terms have the meanings indicated in this Section 1:

“Affiliate” means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 under the Securities Act.

“Business Day” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided that banks shall not be deemed to be authorized or obligated to be closed due to a “shelter in place,” “non-essential employee” or similar closure of physical branch locations at the direction of any governmental authority if such banks’ electronic funds transfer systems (including for wire transfers) are open for use by customers on such day.

“Commission” means the United States Securities and Exchange Commission.

“Common Stock Equivalents” means any securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Person” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“Registration Statement” means the Company’s registration statement on Form S-1, as amended (File No. 333-239958).

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“Trading Day” means a day on which the Common Stock is traded on a Trading Market.

“Trading Market” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market or the New York Stock Exchange (or any successors to any of the foregoing).

“Transfer Agent” means American Stock Transfer & Trust Company, LLC, the current transfer agent of the Company, with a mailing address of 6201 15th Avenue, Brooklyn, NY 11219 and a facsimile number of 718-765-8717, and any successor transfer agent of the Company.

“VWAP” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if the Common Stock is traded on OTCQB or OTCQX, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock are then reported on the OTC Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the holders of a majority in interest of the Warrants then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

“Warrants” means this Warrant and other Common Stock purchase warrants issued by the Company and delivered to the purchasers thereof pursuant to the Registration Statement.

Section 2. Exercise.

a) Exercise of Warrant. Subject to the provisions of Section 2(e) herein, exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Original Issuance Date and on or before the Termination Date by delivery to the Company (or such other office or agency of the Company as it may designate by notice in writing to the registered Holder at the address of the Holder appearing on the books of the Company) of a duly executed facsimile copy or PDF copy submitted by e-mail (or e-mail attachment) of the Notice of Exercise in the form annexed hereto (the “Notice of Exercise”). Within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined in Section 2(d)(i) herein) following the date of exercise as aforesaid, the Holder shall deliver the aggregate Exercise Price for the Warrant Shares specified in the applicable Notice of Exercise by wire transfer or cashier’s check drawn on a United States bank unless the cashless exercise procedure specified in Section 2(c) below is specified in the applicable Notice of Exercise. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date on which the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one (1) Trading Day of receipt of such notice. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

b) Exercise Price. The exercise price per share of Common Stock under this Warrant shall be \$0.01, subject to adjustment hereunder (the “Exercise Price”).

c) Cashless Exercise. If at the time of exercise hereof there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of the Warrant Shares to the Holder, then this Warrant may also be exercised, in whole or in part, at such time by means of a “cashless

exercise” in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing [(A-B) (X)] by (A), where:

(A) = the last VWAP immediately preceding the time of delivery of the Notice of Exercise giving rise to the applicable “cashless exercise”, as set forth in the applicable Notice of Exercise (to clarify, the “last VWAP” will be the last VWAP as calculated over an entire Trading Day such that, in the event that this Warrant is exercised at a time that the Trading Market is open, the prior Trading Day’s VWAP shall be used in this calculation);

(B) = the Exercise Price of this Warrant, as adjusted hereunder; and

(X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

If Warrant Shares are issued in such a cashless exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the Securities Act, the Warrant Shares shall take on the registered characteristics of the Warrants being exercised. The Company agrees not to take any position contrary to this Section 2(c).

d) Mechanics of Exercise.

i. Delivery of Warrant Shares Upon Exercise. The Company shall cause the Warrant Shares purchased hereunder to be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder’s or its designee’s balance account with The Depository Trust Company through its Deposit or Withdrawal at Custodian system (“DWAC”) if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) this Warrant is being exercised via cashless exercise, and otherwise by physical delivery of a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the address specified by the Holder in the Notice of Exercise by the date that is the earlier of: (i) two (2) Trading Days after the delivery to the Company of the Notice of Exercise, and (ii) the number of Trading Days comprising the Standard Settlement Period after the delivery to the Company of the Notice of Exercise, all subject to receipt of any cash payments required by the Holder (such date, the “Warrant Share Delivery Date”). Upon delivery of the Notice of Exercise, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the Warrant Shares, provided that payment of the aggregate Exercise Price (other than in the case of a cashless exercise) is received within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period following delivery of the Notice of Exercise. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Warrant Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Warrant Shares subject to such exercise (based on the VWAP of the Common Stock on the date of the applicable Notice of Exercise), \$10 per Trading Day (increasing to \$20 per Trading Day on the fifth (5th) Trading Day after such liquidated damages begin to accrue) for each Trading Day after such Warrant Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable. As used herein, “Standard Settlement Period” means the standard settlement period, expressed in a number of Trading Days, on the Company’s primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Exercise. Notwithstanding the foregoing, with respect to any Notice(s) of Exercise delivered by 12:00 p.m. (New York City time) on the Original Issuance Date, which may be delivered at any time after the time of execution of the Underwriting Agreement, dated as of September 24, 2020, between the Company and Maxim Group LLC, as

representative of the several underwriters, the Company agrees to deliver the Warrant Shares subject to such notice(s) by 4:00 p.m. (New York City time) on the Original Issuance Date and the Original Issuance Date shall be the Warrant Share Delivery Date for purposes hereunder; provided that payment of the aggregate Exercise Price (other than in the case of a cashless exercise) is received on or prior to 4:00 p.m. (New York City time) on the Original Issuance Date.

ii. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. Compensation for Buy-In on Failure to Timely Deliver Warrant Shares Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares in accordance with the provisions of Section 2(d)(i) above pursuant to an exercise on or before the Warrant Share Delivery Date (other than any such failure that is solely due to any action or inaction by the Holder with respect to such exercise), and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall (A) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

v. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall round up or down, as applicable, to the nearest whole share.

vi. Charges, Taxes and Expenses. Issuance of Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event that Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise

shall be accompanied by the Assignment Form attached hereto duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto. The Company shall pay all Transfer Agent fees required for same-day processing of any Notice of Exercise and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Warrant Shares.

vii. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

e) Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's Affiliates (such Persons, "Attribution Parties")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 2(e), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Company shall within two Trading Days confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% (or, upon election by a Holder prior to the issuance of any Warrants, 9.99%) of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon at least sixty-one (61) days' prior notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any

increase in the Beneficial Ownership Limitation will not be effective until the 61st day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2(e) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if at any time after the issuance of this Warrant the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to all of the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

c) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to all of the holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, to the extent that

the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

d) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder (without regard to any limitation in Section 2(e) on the exercise of this Warrant), the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 2(e) on the exercise of this Warrant). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Company under this Warrant in accordance with the provisions of this Section 3(d) pursuant to written agreements prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction). Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume

all of the obligations of the Company under this Warrant with the same effect as if such Successor Entity had been named as the Company herein. For the avoidance of doubt, if, at any time while this Warrant is outstanding, a Fundamental Transaction occurs, pursuant to the terms of this Section 3(d), the Holder shall not be entitled to receive more than one of (i) the consideration receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction, or (ii) the assumption by the Successor Entity of all of the obligations of the Company under this Warrant and the option to receive a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant.

e) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

f) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3, the Company shall promptly deliver to the Holder by facsimile or email a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be delivered by facsimile or email to the Holder at its last facsimile number or email address as it shall appear upon the Warrant Register of the Company, at least twenty (20) calendar days prior to the applicable record or effective date hereinafter specified, a notice (unless such information is filed with the Commission, in which case a notice shall not be required) stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 4. Transfer of Warrant.

a) Transferability. This Warrant and all rights hereunder are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. In order to effectuate a transfer (in whole or in part) of this Warrant, the Holder shall surrender this Warrant to the Company within three (3) Trading Days of the date on which the Holder delivers an assignment form to the Company assigning this Warrant in full. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the initial issuance date of this Warrant and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the “Warrant Register”), in the name of the record Holder hereof from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise; No Settlement in Cash. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i), except as expressly set forth in Section 3. Without limiting the rights of a Holder to receive Warrant Shares on a “cashless exercise,” and to receive the cash payments contemplated pursuant to Sections 2(d)(i) and 2(d)(iv), In no event, including if the Company is for any reason unable to issue and deliver Warrant Shares upon exercise of this Warrant as required pursuant to the terms hereof, shall the Company be required to net cash settle an exercise of this Warrant or cash settle in any other form.

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

c) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then, such action may be taken or such right may be exercised on the next succeeding Business Day.

d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further

covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Warrant (whether brought against a party hereto or their respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is improper or is an inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Warrant and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law. If either party shall commence an action, suit or proceeding to enforce any provisions of this Warrant, the prevailing party in such action, suit or proceeding shall be reimbursed by the other party for their reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, and the Holder does not utilize cashless exercise, will have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies. Without limiting any other provision of this Warrant, if the Company willfully and knowingly fails to comply with any provision of this Warrant, which results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

h) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Exercise, shall be in writing and delivered personally, by facsimile or e-mail, or sent by a nationally recognized overnight courier service, addressed to the Company, at 1900 Lake Park Drive, Suite 380, Smyrna, Georgia 30080, Attention: Mark W. Reynolds, E-mail: MReynolds@GeoVax.com, or such other facsimile number, email address or address as the Company may specify for such purposes by notice to the Holders. Any and all notices or other communications or deliveries to be provided by the Company hereunder shall be in writing and delivered personally, by facsimile or e-mail, or sent by a nationally recognized overnight courier service addressed to each Holder at the facsimile number, e-mail address or address of such Holder appearing on the books of the Company. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the time of transmission, if such notice or communication is delivered via facsimile at the facsimile number or via e-mail at the e-mail address set forth in this Section prior to 5:30 p.m. (New York City time) on any date, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or via e-mail at the e-mail address set forth in this Section on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Company or any subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K.

i) Limitation of Liability. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a stockholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

j) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

k) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company, on the one hand, and either: (i) the Holder or the beneficial owner of this Warrant, on the other hand, or (ii) the vote or written consent of the Holders of at least 50.1% of the then outstanding Warrants issued by the Company, on the other hand, provided that adjustments may be made to the Warrant terms and rights of this Warrant in accordance with Section 3 of this Warrant without the consent of any Holder or beneficial owner of the Warrants.

m) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

(Signature Page Follows)

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the date first above indicated.

GEOVAX LABS, INC.

By: _____
Name:
Title:

NOTICE OF EXERCISE

TO: GEOVAX LABS, INC.

(1) The undersigned hereby elects to purchase _____ Warrant Shares of the Company pursuant to the terms of the attached Warrant (only if exercised in full), and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

(2) Payment shall take the form of (check applicable box):

- in lawful money of the United States; or
- if permitted the cancellation of such number of Warrant Shares as is necessary, in accordance with the formula set forth in subsection 2(c), to exercise this Warrant with respect to the maximum number of Warrant Shares purchasable pursuant to the cashless exercise procedure set forth in subsection 2(c).

(3) Please issue said Warrant Shares in the name of the undersigned or in such other name as is specified below:

The Warrant Shares shall be delivered to the following DWAC Account Number:

[SIGNATURE OF HOLDER]

Name of Investing Entity: _____

Signature of Authorized Signatory of Investing Entity: _____

Name of Authorized Signatory: _____

Title of Authorized Signatory: _____

Date: _____

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: _____
(Please Print)

Address: _____

Phone Number: _____
(Please Print)

Email Address: _____

Dated: _____, _____

Holder's Signature: _____

Holder's Address: _____



Exhibit 99.1

GeoVax Announces Pricing of \$12.8 Million Public Offering; Uplisting to Nasdaq and Reverse Stock Split

ATLANTA, GA, September 24, 2020 – GeoVax Labs, Inc. (NasdaqCM: GOVX, GOVXW) (“GeoVax” or the “Company”), a biotechnology company developing human immunotherapies and vaccines against infectious diseases and cancer, today announced the pricing of its underwritten public offering of 2,560,000 units at a price to the public of \$5.00 per unit. Each unit issued in the offering consists of one share of common stock (or pre-funded warrant to purchase common stock in lieu thereof) and one warrant to purchase one share of common stock at an exercise price of \$5.00. The common stock (or pre-funded warrants to purchase common stock in lieu thereof) and warrants are immediately separable and will be issued separately. The common stock and warrants are expected to begin trading on the Nasdaq Capital Market, on September 25, 2020, under the symbols “GOVX” and “GOVXW,” respectively. GeoVax expects to receive gross proceeds of \$12.8 million, before deducting underwriting discounts and commissions and other estimated offering expenses. Concurrent with the offering, the Company will effectuate a reverse split of its issued and outstanding common stock at a ratio of 1-for-20. The reverse stock split is expected to be effective at 12:01 a.m., Eastern Time, on Friday, September 25, 2020. The share numbers and pricing information in this release are adjusted to reflect the impact of the reverse stock split.

GeoVax has granted the underwriters a 45-day option to purchase up to an additional 384,000 shares of common stock, pre-funded warrants and/or warrants at the public offering price to cover over-allotments, if any. The offering is expected to close on September 29, 2020, subject to customary closing conditions.

Maxim Group LLC is acting as sole book-running manager for the offering and Joseph Gunnar & Co., LLC is acting as co-manager for the offering.

The offering is being conducted pursuant to the Company's registration statement on Form S-1 (File No. 333-239958), as amended, previously filed with and subsequently declared effective by the Securities and Exchange Commission (“SEC”). A final prospectus relating to the offering will be filed with the SEC and will be available on the SEC’s website at <http://www.sec.gov>. Electronic copies of the final prospectus relating to this offering, when available, may be obtained from Maxim Group LLC, 405 Lexington Avenue, 2nd Floor, New York, NY 10174, at (212) 895-3745.

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

About GeoVax

GeoVax Labs, Inc. is a clinical-stage biotechnology company developing human vaccines against infectious diseases and cancer using a novel patented Modified Vaccinia Ankara-Virus Like Particle (MVA-VLP) based vaccine platform. On this platform, MVA, a large virus capable of carrying several vaccine antigens, expresses proteins that assemble into VLP immunogens within (*in vivo*) the person receiving the vaccine. The production of VLPs in the person being vaccinated mimics virus production in a natural infection, stimulating both the humoral and cellular arms of the immune system to recognize, prevent, and control the target infection. The MVA-VLP derived vaccines elicit durable immune responses in the host similar to a live-attenuated virus, while providing the safety characteristics of a replication-defective vector.

GeoVax’s current development programs are focused on preventive vaccines against COVID-19, HIV, Zika

Virus, hemorrhagic fever viruses (Ebola, Sudan, Marburg, and Lassa), and malaria, as well as therapeutic vaccines against multiple cancers. The Company has designed a preventive HIV vaccine candidate to fight against the subtype of HIV prevalent in the commercial markets of the Americas, Western Europe, Japan, and Australia; human clinical trials for this program are managed by the HIV Vaccine Trials Network (HVTN) with the support of the National Institutes of Health (NIH). GeoVax's HIV vaccine is also part of two separate collaborative efforts to apply its innovative gene therapy approach toward a functional cure for HIV.

Cautionary Note Regarding Forward-Looking Statements

This release contains forward-looking statements regarding the timing and success of the proposed offering, the Company's reverse stock split of outstanding shares of common stock and treasury shares, and the timing and financial impact of GeoVax's ability to implement its business plan, expected revenues and future success. The words "believe," "may," "estimate," "continue," "anticipate," "intend," "should," "plan," "could," "target," "potential," "is likely," "will," "expect" and similar expressions, as they relate to us, are intended to identify forward-looking statements. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. Actual results may differ materially from those included in these statements due to a variety of factors, including whether: GeoVax can develop and manufacture its vaccines with the desired characteristics in a timely manner, GeoVax's vaccines will be safe for human use, GeoVax's vaccines will effectively prevent targeted infections in humans, GeoVax's vaccines will receive regulatory approvals necessary to be licensed and marketed, GeoVax raises required capital to complete vaccine development, there is development of competitive products that may be more effective or easier to use than GeoVax's products, GeoVax will be able to enter into favorable manufacturing and distribution agreements, our common stock and warrants begin trading on the Nasdaq Capital Market as expected, the offering closes as expected, the impact of the COVID-19 pandemic continues, and other factors, over which GeoVax has no control.

Further information on our risk factors is contained in our registration statement on Form S-1 (File No. 333-239958) that we have filed with the SEC and the final prospectus, when available. Any forward-looking statement made by us herein speaks only as of the date on which it is made. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

Contact:

GeoVax Labs, Inc.
investor@geovax.com
678-384-7220