

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

FORM S-1  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

VivoSim Labs, Inc.  
(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

2836  
(Primary Standard Classification  
Code Number)

27-1488943  
(I.R.S. Employer  
Identification Number)

11555 Sorrento Valley Road, Suite 100  
San Diego, CA 92121  
(858) 224-1000  
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Keith Murphy  
Executive Chairman  
VivoSim Labs, Inc.  
11555 Sorrento Valley Road, Suite 100  
San Diego, CA 92121  
(858) 224-1000  
(Name, address including zip code, and telephone number, including area code, of agent for service)

*With copies to:*

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**Approximate date of commencement of proposed sale to the public:** From time to time after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

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

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

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

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

Large accelerated filer	<input type="checkbox"/>		Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>		Smaller reporting company	<input checked="" type="checkbox"/>
			Emerging growth company	<input type="checkbox"/>

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

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

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**The information in this prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting offers to buy these securities in any state where the offer or sale is not permitted.**

**SUBJECT TO COMPLETION, DATED MARCH 27, 2026**

**PRELIMINARY PROSPECTUS**



**Up to 2,366,862 Shares of Common Stock (or Pre-Funded Warrants to Purchase up to 2,366,862 Shares of Common Stock in lieu of Common Stock)**

**Common Warrants to Purchase up to 3,550,293 Shares of Common Stock**

**Placement Agent Warrants to Purchase up to 118,343 Shares of Common Stock**

**Up to 2,366,862 Shares of Common Stock Underlying the Pre-Funded Warrants**

**Up to 8,875,733 Shares of Common Stock Underlying the Common Warrants**

**Up to 118,343 Shares of Common Stock Underlying the Placement Agent Warrants**

This is a best efforts public offering of up to \$4,000,000 of shares of common stock or pre-funded warrants in lieu thereof, together with common warrants to purchase up to an aggregate of up to \$15,000,000 of shares of common stock. Each share of common stock, or pre-funded warrant in lieu thereof, is being sold together with a common warrant to purchase one and a half shares of common stock at an assumed combined public offering price of \$1.69 per share and accompanying common warrant (the last reported sale price per share of our common stock on the Nasdaq Capital Market on March 26, 2026). The shares of common stock, or pre-funded warrants in lieu thereof, and common warrants are immediately separable and will be issued separately in this offering, but must be purchased together in this offering. Each common warrant will have an exercise price of \$[ ], will be immediately exercisable and will expire on the fifth anniversary of the original issuance date. The common warrants have price protection against subsequent dilutive issuances of shares of common stock, options, warrants and convertible securities, subject to a \$0.01 per share of common stock floor, as further described herein. At any time after the closing of the Initial Tranche (as defined below) of the offering, the holders of the common warrants may exchange the common warrants on a cashless basis for a number of shares of common stock determined by multiplying the total number of shares of common stock with respect to which the common warrant is then being exercised by the Black Scholes Value (as defined in the common warrant) divided by the lower of the two closing bid prices of the common stock in the two days prior to the time of such exercise, but in any event not less than \$0.01 (as may be adjusted for stock dividends, subdivisions, or combinations and the like).

This offering is comprised of two tranches. Pursuant to the initial tranche (the "Initial Tranche"), purchasers of shares of common stock, or pre-funded warrants in lieu thereof, and accompanying common warrants will purchase up to \$3,000,000 of shares of common stock. Pursuant to the Second Tranche, purchasers of shares of common stock, or pre-funded warrants in lieu thereof, and accompanying common warrants to purchase one and a half shares of common stock will purchase up to \$1,000,000 of shares of common stock on the 30<sup>th</sup> day following the closing of the Initial Tranche (the "Second Tranche Closing Date), subject to the satisfaction of certain conditions, including that (i) the closing price of our common stock on the trading day immediately before the Second Tranche Closing Date must be equal to the closing price of our common stock on the trading day immediately prior to the closing date of the Initial Tranche and (ii) the average daily trading volume of our common stock during the ten (10) consecutive trading days immediately prior to the Second Tranche Closing Date must be at least \$100,000. The closing of the Second Tranche, if any, is referred to herein as the "Second Tranche Closing". There can be no assurances that the conditions to closing the Second Tranche will be satisfied or that there will be a Second Tranche Closing.

We are also offering to certain purchasers, if any, whose purchase of shares of common stock in this offering would otherwise result in such purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock immediately following the consummation of this offering, the opportunity to purchase pre-funded warrants, in lieu of shares of common stock that would otherwise result in such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock. The public offering price of each pre-funded warrant to purchase one share of common stock and accompanying common warrant to purchase one and a half shares of common stock will be equal to the price at which one share of common stock and accompanying common warrant to purchase one and a half shares of common stock is sold to the public in this offering, minus \$0.001, and the exercise price of each pre-funded warrant will be \$0.001 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 pre-funded warrant we sell, the number of shares of common stock we are offering will be decreased on a one-for-one basis.

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Information presented regarding the common stock, or pre-funded warrants in lieu thereof, and accompanying common warrants is based on an assumed combined public offering price of \$1.69 per share (the last reported sale price per share of our common stock on the Nasdaq Capital Market on March 26, 2026) and accompanying common warrant (or \$1.689 per pre-funded warrant and accompanying common warrant). The actual public offering price per share of common stock and accompanying common warrant and per pre-funded warrant and accompanying common warrant, as the case may be, will be determined between us, the Placement Agent (as defined below) and the investors at the time of pricing, may be at a discount to the current market price, and may be based upon a number of factors, including our history and our prospects, the industry in which we operate, our past and present operating results, the previous experience of our executive officers and the general condition of the securities markets at the time of this offering. Therefore, the assumed combined public offering price used throughout this prospectus may not be indicative of the final offering price.

This offering will terminate on April 30, 2026 unless (i) the closing occurs prior thereto or (ii) we decide to terminate the offering (which we may do at any time in our discretion) prior to that date. We will have one closing for all securities purchased in this offering and the combined public offering price per share of common stock (or pre-funded warrant) and accompanying common warrant will be fixed for the duration of this offering. Investors purchasing securities offered hereby will execute a securities purchase agreement with us (the “Securities Purchase Agreement”).

Our shares of common stock are listed on the Nasdaq Capital Market under the symbol “VIVS.” On March 26, 2026, the last reported sale price of our common stock was \$1.69.

There is no established public trading market for the common warrants or pre-funded warrants and we do not expect a market to develop. Without an active trading market, the liquidity of the common warrants and pre-funded warrants will be limited. In addition, we do not intend to list the common warrants or pre-funded warrants on the Nasdaq Capital Market, any other national securities exchange or any other trading system.

We have engaged Joseph Gunnar & Co., LLC (the “Placement Agent”) to act as our Placement Agent, to use its reasonable best efforts to arrange for the sale of the securities offered by this prospectus. The Placement Agent is not purchasing or selling any of the securities we are offering, and the Placement Agent is not required to arrange the purchase or sale of any specific number or dollar amount of securities. We have agreed to pay to the Placement Agent the Placement Agent fees set forth in the table below, which assumes that we sell all of the securities offered by this prospectus. We are also seeking to register the issuance of warrants to purchase up to 118,343 shares of common stock (the “Placement Agent Warrants”) to the Placement Agent (assuming securities offered hereunder are only sold to investors introduced by the Placement Agent), as well as 118,343 shares of common stock issuable upon exercise of the Placement Agent Warrants at an assumed exercise price of \$2.11 per share (equal to 125% of the assumed combined public offering price per share and accompanying common warrant to purchase one and a half shares of common stock).

There is no minimum number of securities or minimum aggregate amount of proceeds for this offering to close. We expect this offering to be completed not later than one business day following the commencement of this offering and we will deliver all securities to be issued in connection with this offering delivery versus payment (“DVP”)/receipt versus payment (“RVP”)/DWAC upon receipt of investor funds received by the Company. Accordingly, neither we nor the Placement Agent have made any arrangements to place investor funds in an escrow account or trust account since the Placement Agent will not receive investor funds in connection with the sale of the securities offered hereunder.

Because there is no minimum offering amount required as a condition to closing in this offering, the actual public offering amount, the Placement Agent’s fee, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth above and throughout this prospectus. We have agreed to pay the Placement Agent the Placement Agent fees set forth in the table below and elsewhere in this prospectus. See “Plan of Distribution” on page 33 for more information regarding the Placement Agent’s fees. Because there is no minimum offering amount required as a condition to closing this offering, we may sell fewer than all of the securities offered hereby, which may significantly reduce the amount of proceeds received by us, and investors in this offering will not receive a refund in the event that we do not sell an amount of securities sufficient to pursue our business goals described in this prospectus. We will bear all of our costs associated with the offering and certain costs incurred by the Placement Agent.

You should read this prospectus, together with additional information described under the headings “*Incorporation of Certain Information By Reference*” and “*Where You Can Find More Information*,” carefully before you invest in any of our securities.

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Investing in our securities involves a high degree of risk. See the section entitled “*Risk Factors*” beginning on page 9 of this prospectus and under similar headings in documents incorporated by reference into this prospectus for a discussion of risks that should be considered in connection with an investment in our securities.

	Per Share and Common Warrant	Per Pre- Funded Warrant and Common Warrant	Total
Public offering price	\$	\$	\$
Placement Agent fees <sup>(1)</sup>	\$	\$	\$
Proceeds, before expenses, to us <sup>(2)</sup>	\$	\$	\$

(1) Represents a cash fee equal to 7.5% of the aggregate purchase price paid by investors in this offering. We have also agreed to reimburse the Placement Agent for certain of its offering-related expenses. See “*Plan of Distribution*” beginning on page 33 of this prospectus for a description of the compensation to be received by the Placement Agent.

(2) Does not include proceeds from the exercise of the common warrants and pre-funded warrants in cash, if any.

Delivery of the shares of common stock, pre-funded warrants and common warrants offered hereby in the Initial Tranche is expected to be made on or about [ ], 2026, subject to the satisfaction of customary closing conditions. Delivery of shares of common stock, pre-funded warrants and common warrants offered hereby in the Second Tranche would, subject to the satisfaction of certain conditions and customary closing conditions, be made on the Second Tranche Closing Date.

**You should rely only on the information contained in this prospectus or any prospectus supplement or amendment hereto. We have not authorized anyone to provide you with different information. Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

Placement Agent:

**Joseph Gunnar & Co., LLC**

The date of this prospectus is [ ], 2026

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Table of Contents

<a href="#">About This Prospectus</a>	ii
<a href="#">Prospectus Summary</a>	1
<a href="#">Special Note Regarding Forward-Looking Statements</a>	6
<a href="#">Market, Industry and Other Data</a>	7
<a href="#">Risk Factors</a>	9
<a href="#">Use of Proceeds</a>	14
<a href="#">Dilution</a>	15
<a href="#">Description of Capital Stock</a>	17
<a href="#">Description of Securities We Are Offering</a>	21
<a href="#">Material U.S. Federal Income Tax Considerations for Non-U.S. Holders</a>	27
<a href="#">Plan of Distribution</a>	33
<a href="#">Legal Matters</a>	36
<a href="#">Experts</a>	36
<a href="#">Incorporation of Certain Information By Reference</a>	37
<a href="#">Where You Can Find More Information</a>	38
<a href="#">Disclosure of Commission Position on Indemnification for Securities Act Liabilities</a>	39

## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-1 that we filed with the U.S. Securities and Exchange Commission (the “SEC”). The registration statement we filed with the SEC includes exhibits that provide more detail of the matters discussed in this prospectus. You should read this prospectus and the related exhibits filed with the SEC before making your investment decision. You should rely only on the information provided in this prospectus. In addition, this prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information.

This prospectus includes important information about us, the securities being offered and other information you should know before investing in our securities. You should not assume that the information contained in this prospectus is accurate on any date subsequent to the date set forth on the front cover of this prospectus, even though this prospectus is delivered or securities are sold or otherwise disposed of on a later date. It is important for you to read and consider all information contained in this prospectus when making your investment decision. All of the summaries in this prospectus are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading “Where You Can Find More Information.”

We have not, and the Placement Agent has not, authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. The information contained in this prospectus or in any applicable free writing prospectus is current only as of its date, regardless of its time of delivery or any sale of our securities. Our business, financial condition, results of operations and prospects may have changed since that date.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

To the extent there is a conflict between the information contained in this prospectus, on the one hand, and the information contained in any document incorporated by reference filed with the SEC before the date of this prospectus, on the other hand, you should rely on the information in this prospectus. If any statement in a document incorporated by reference is inconsistent with a statement in another document incorporated by reference having a later date, the statement in the document having the later date modifies or supersedes the earlier statement.

Neither we nor the Placement Agent have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons who come into possession of this prospectus and any free writing prospectus in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus and any free writing prospectus applicable to that jurisdiction.

This prospectus is an offer to sell only the securities offered hereby, and only under circumstances and in jurisdictions where it is lawful to do so. We are not, and the Placement Agent is not, making an offer to sell these securities in any state or jurisdiction where the offer or sale is not permitted.

We may also provide a prospectus supplement or post-effective amendment to the registration statement to add information to, or update or change information contained in, this prospectus. You should read both this prospectus and any applicable prospectus supplement or post-effective amendment to the registration statement together with the additional information to which we refer you in the section of this prospectus titled “Where You Can Find Additional Information.”

This prospectus includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. Industry publications and third-party research, surveys and studies often indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information and such information is inherently imprecise.

In addition, while we are responsible for all of the disclosure contained in this prospectus and the documents incorporated by reference in this prospectus and we believe the industry, market and competitive position data included in this prospectus and the documents incorporated by reference in this prospectus is reliable and based on reasonable assumptions, such data involve risks and uncertainties and are subject to change based on various factors, including those discussed in the section titled “Special Note Regarding Forward-Looking Statements” in this prospectus and in the section titled “Risk Factors” incorporated by reference in this prospectus from our most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties or by us. Accordingly, investors should not place undue reliance on this information.

## PROSPECTUS SUMMARY

*This summary highlights selected information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our securities. You should read this entire prospectus carefully, including the sections of this prospectus titled “Risk Factors,” and “Special Note Regarding Forward-Looking Statements” and under similar captions in the documents incorporated by reference into this prospectus, before making an investment decision. Unless otherwise indicated, all references in this prospectus to “VivoSim,” the “company,” “we,” “our,” “us” or similar terms refer to VivoSim Labs, Inc. and its wholly owned subsidiaries, including VivoSim, Inc. and Organovo, Inc.*

### Overview

VivoSim Labs, Inc. (Nasdaq: VIVS), together with its wholly owned subsidiaries (collectively, “VivoSim”, “we”, “us” and “our”), is a pharmaceutical and biotechnology services company that is focused on providing testing of drugs and drug candidates in three-dimensional (“3D”) human tissue models of liver and intestine. We offer partners liver and intestinal toxicology insights using our new approach methodologies (“NAM”) models. We anticipate accelerated adoption of human tissue models following the U.S. Food and Drug Administration (“FDA”) announcement on April 10, 2025 to refine animal testing requirements in favor of these non-animal NAM methods. We also expect to offer bespoke services in the areas of investigational toxicology, mechanism of drug action elucidation, and other applications of these complex human tissue models.

We also advance product candidates to treat inflammatory bowel disease (“IBD”) discovered and developed using our complex human tissue intestinal models. Prior to March 2025, we were a clinical stage biotechnology company that was focused on developing FXR314 in IBD, including ulcerative colitis (“UC”), based on demonstration of clinical promise in 3D human tissues as well as strong preclinical data. Our clinical focus was in advancing FXR314 in IBD, including UC and Crohn’s disease (“CD”). We planned to start a Phase 2a clinical trial in UC in the calendar year 2025 and were also exploring the potential for combination therapies using FXR314 and approved mechanisms in preclinical animal studies and our IBD disease models. We have also advanced a second program since 2023, a novel drug that will be a new chemical entity (“NCE”) to an undisclosed target discovered in our intestinal models to have activity for UC and CD. This drug program (the “Preclinical IBD Program”) has now left the in-silico phase in recent quarters, and has moved to medicinal chemistry stage, the real-world synthesis of novel candidate compounds.

In March 2025, we sold our FXR program for \$10.0 million, with \$9.0 million paid at closing and \$1.0 million held in escrow for a period of 15 months, with future milestones of up to \$50.0 million in the aggregate to be paid if the lead asset, FXR314, hits key development, regulatory and commercial milestones.

Effective April 24, 2025, we changed our corporate name to VivoSim Labs, Inc. by filing a Certificate of Amendment to our Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware. We changed our name to reflect our new business model, which includes the use of other longstanding assets of the Company, intestinal and liver tox models and expertise, and our IP portfolio for 3D bioprinting.

We continue to advance our Preclinical IBD Program, with the goal of having a product candidate ready for an Investigational New Drug with the FDA by December 2026.

We are now offering liver toxicology predictive screening and research services as well as working on predicting and studying the intestinal side effect profiles of drugs that are therapeutic candidates of pharmaceutical and biotech companies at all stages of drug development. We plan to not only market this directly to pharmaceutical and biotech companies, but also partner with specific contract research organizations to complement our offering and to quickly grow our portfolio of clients. Our services offer the potential benefit of reducing the significant risk and cost of bringing therapeutics to market through the regulatory process. It is estimated that less than 10% of drug candidates entering clinical trials are approved, with a portion of the failures due to unexpected liver toxicity or intestinal intolerability. In addition, even approved drugs are occasionally withdrawn after liver toxicity is determined to be caused by the drug in a phenomenon called drug induced liver injury. We presented findings at the May 2025 Digestive Disease Week scientific conference showing that our liver toxicology platform had a best-in-class predictive power. Our liver predictive power was shown to be 87.5% for a set of challenging liver toxicity cases – inclusive of classic cases of “liver tox misses” drugs with unforeseen liver toxicity found in clinical trials or drugs that were withdrawn from the market after liver toxicity issues emerged later. The platform identified correctly that 87.5% of the known liver-toxic drugs could be seen as liver toxic using NAMkind™ liver. This is known as the sensitivity of the platform, which we believe at 87.5% is a world’s best. Importantly, the specificity was 100%, meaning that none of the compounds tested that are not liver toxic were incorrectly identified as having liver toxicity issues by the platform.

We use our proprietary technologies to build functional 3D human tissues that mimic key aspects of native human tissue composition, architecture, function, and disease. We believe these attributes can enable critical complex, multicellular disease models that can be used to study and develop clinically effective drugs across multiple therapeutic areas.

We have also used these human disease models to identify new molecular targets responsible for driving IBD and to explore the mechanism of action of known drugs including JAK inhibitors and related molecules. A portion of our internal research continues to focus on early stage internal drug discovery programs, validating targets, and testing potentially licensable or transactable external drug compounds to identify drug candidates for partnering and/or internal clinical development. This includes the Preclinical IBD Program, which has reached a more mature stage than other efforts in this area.

### **Corporate Information**

We were incorporated in Delaware under the name Organovo Holdings, Inc. in January 2012 and in April 2025, changed our name to VivoSim Labs, Inc. We are operating the business of our subsidiaries, including Organovo, Inc., our wholly-owned subsidiary, which we acquired in February 2012, and VivoSim, Inc., our wholly-owned subsidiary. Organovo, Inc. was incorporated in Delaware in April 2007. VivoSim, Inc. was incorporated in Delaware in April 2025. Our common stock has traded on the Nasdaq Capital Market under the symbol “VIVS” since April 24, 2025. Prior to that time, it had traded on the Nasdaq Capital Market under the symbol “ONVO” since December 27, 2019, prior to that it had traded on the Nasdaq Global Market under the symbol “ONVO” since August 8, 2016 and prior to that it traded on the NYSE MKT under the symbol “ONVO”.

Our principal executive offices are located at 11555 Sorrento Valley Road, Suite 100, San Diego, CA 92121, and our telephone number is (858) 224-1000. Our website address is [www.vivosim.ai](http://www.vivosim.ai). Any information contained on, or that can be accessed through, our website is not incorporated by reference into, nor is it in any way part of this prospectus and should not be relied upon in connection with making any decision with respect to an investment in our securities. We are required to file annual, quarterly and current reports, proxy statements and other information with the SEC. You may obtain any of the documents filed by us with the SEC at no cost from the SEC’s website at <http://www.sec.gov>.

We are a “smaller reporting company” as defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and have elected to take advantage of certain of the scaled disclosure available for smaller reporting companies in this prospectus as well as our filings under the Exchange Act.

## The Offering

Issuer	VivoSim Labs, Inc.
Common stock offered by us	Up to 2,366,862 shares of common stock.
Pre-funded warrants offered by us	<p>We are also offering pre-funded warrants to purchase up to 2,366,862 shares of common stock, in lieu of shares of common stock to purchasers whose purchase of shares in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock immediately following the consummation of this offering, has the opportunity to purchase, if the purchaser so chooses, pre-funded warrants (each pre-funded warrant to purchase one share of our common stock) in lieu of shares that would otherwise result in the purchaser's beneficial ownership exceeding 4.99% of our outstanding common stock (or, at the election of the purchaser, 9.99%). The purchase price of each pre-funded warrant and accompanying common warrant to purchase one and a half shares will equal the price at which one share of common stock and accompanying warrant to purchase one and a half shares of common stock is being sold to the public in this offering, minus \$0.001, and the exercise price of each pre-funded warrant will be \$0.001 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 pre-funded warrant we sell, the number of shares we are offering will be decreased on a one-for-one basis. See "<i>Description of Securities We Are Offering</i>" on page 21 for more information. You should also read the form of pre-funded warrant, which will be filed as an exhibit to the registration statement that includes this prospectus. We are also registering the shares of common stock issuable upon the exercise of the pre-funded warrants. There is no established public trading market for the pre-funded warrants, and we do not expect a market to develop. In addition, we do not intend to list the pre-funded warrants on the Nasdaq Capital Market, any other national securities exchange or any other nationally recognized trading system. Without a trading market, the liquidity of the pre-funded warrants will be extremely limited.</p>
Common warrants offered by us	<p>Common warrants to purchase up to an aggregate of 3,550,293 shares of common stock. Each share of common stock or pre-funded warrant to purchase one share of common stock is being sold together with a common warrant to purchase one and a half shares of common stock. Each common warrant has an exercise price of \$[ ] per share, will be immediately exercisable and will expire on the fifth anniversary of the original issuance date. The common warrants have price protection against subsequent dilutive issuances of shares of common stock, options, warrants and convertible securities, subject to a \$0.01 per share of common stock floor, as further described herein. At any time after the closing of the Initial Tranche of the offering, the holders of the common warrants may exchange the common warrants on a cashless basis for a number of shares of common stock determined by multiplying the total number of shares of common stock with respect to which the common warrant is then being exercised by the Black Scholes Value (as defined in the common warrant) divided by the lower of the two closing bid prices of the common stock in the two days prior to the time of such exercise, but in any event not less than \$0.01 (as may be adjusted for stock dividends, subdivisions, or combinations and the like). The exercise price and the number of shares of common stock purchasable upon the exercise of the common warrants is subject to customary adjustments for stock splits and similar recapitalization transactions. The shares of common stock or the pre-funded warrants, as the case may be, and the accompanying common warrants can only be purchased together in this offering but will be issued separately and will be immediately separable upon issuance. See "<i>Description of Securities We Are Offering</i>" on page 21 for more information. You should also read the form of common warrant, which will be filed as an exhibit to the registration statement that includes this prospectus. We are also registering the shares of common stock issuable upon the exercise of the common warrants. There is no established public trading market for the common warrants, and we do not expect a market to develop. In addition, we do not intend to list the common warrants on the Nasdaq Capital Market, any other national securities exchange or any other nationally recognized trading system. Without a trading market, the liquidity of the pre-funded warrants will be extremely limited.</p>

Placement Agent Warrants offered by us	We have also agreed to issue to the Placement Agent as compensation in connection with this offering Placement Agent Warrants to purchase up to 118,343 shares of common stock. The Placement Agent Warrants have an assumed exercise price of \$2.11 per share (equal to 125% of the assumed combined public offering price per share of common stock and accompanying common warrant to purchase one and a half shares of common stock). The Placement Agent Warrants will be exercisable six months following issuance, and will terminate on the third anniversary of the initial exercise date. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the Placement Agent Warrants. See the descriptions of the Placement Agent Warrants in “ <i>Description of Securities We Are Offering</i> ” on page 21 and “ <i>Plan of Distribution</i> ” on page 33 for more information. You should also read the form of Placement Agent Warrant, which will be filed as an exhibit to the registration statement that includes this prospectus.
Term of the offering	This offering will terminate on April 30, 2026, unless we decide to terminate the offering (which we may do at any time in our discretion) prior to that date.
Initial Tranche	This offering is comprised of two tranches (each, a “Tranche”). Pursuant to the Initial Tranche, purchasers of shares of common stock, or pre-funded warrants in lieu thereof, and accompanying common warrants will purchase up to \$3,000,000 of shares of common stock.
Second Tranche	Pursuant to the Second Tranche, purchasers of shares of common stock, or pre-funded warrants in lieu thereof, and accompanying common warrants to purchase one and a half shares of common stock will purchase up to \$1,000,000 of shares of common stock on the Second Tranche Closing Date, subject to the satisfaction of certain conditions, including that (i) the closing price of our common stock on the trading day immediately before the Second Tranche Closing Date must be equal to the closing price of our common stock on the trading day immediately prior to the closing date of the Initial Tranche and (ii) the average daily trading volume of our common stock during the ten (10) consecutive trading days immediately prior to the Second Tranche Closing Date must be at least \$100,000. There can be no assurances that the conditions to closing the Second Tranche will be satisfied or that there will be a Second Tranche Closing.
Common stock outstanding (as of December 31, 2025)	2,607,962
Common stock to be outstanding immediately after this offering	4,974,824 shares, assuming no sale of pre-funded warrants, which, if sold, would reduce the number of shares of common stock that we are offering on a one-for-one basis, and further assuming no exercise of any common warrants or Placement Agent Warrants issued in this offering.
Lock-up agreements	We, our executive officers, our directors and our 10% or greater stockholders will enter into lock-up agreements with the Placement Agent. Under these agreements, we and each of these persons may not offer, sell, contract to sell or otherwise dispose of or hedge common stock or securities convertible or exchangeable for common stock, subject to certain exceptions. The restrictions contained in these agreement will be in effect for a period of ninety (90) days after the date of the last closing of a Tranche of this offering. For more information, see “ <i>Plan of Distribution</i> .”
Use of proceeds	We intend to use the net proceeds from this offering for working capital and general corporate purposes, which could include capital expenditures, research and development expenditures, regulatory affairs expenditures, legal expenditures, including intellectual property protection and maintenance expenditures, acquisitions of new technologies and investments and business combinations. See “ <i>Use of Proceeds</i> ” on page 14 for more information.

Risk factors	Investing in our securities involves a high degree of risk. As an investor, you should be able to bear a complete loss of your investment. You should carefully consider the information set forth in the “ <i>Risk Factors</i> ” section beginning on page 9 of this prospectus and the other information included and incorporated by reference in this prospectus.
Best efforts offering	We have agreed to offer and sell the securities offered hereby to the purchasers through the Placement Agent. The Placement Agent is not required to buy or sell any specific number or dollar amount of the securities offered hereby, but it will use its reasonable best efforts to solicit offers to purchase the securities offered by this prospectus. See “ <i>Plan of Distribution</i> ” on page 33 for more information.
Nasdaq Capital Market trading symbol	Our common stock is listed on the Nasdaq Capital Market under the symbol “VIVS.”

The number of shares immediately outstanding following this offering is based on 2,607,962 shares of common stock outstanding as of December 31, 2025 and excludes the following as of December 31, 2025:

- 234,606 shares of common stock issuable upon the exercise of stock options outstanding at a weighted average exercise price of approximately \$13.55 per share;
- 539,060 shares of common stock issuable upon the exercise of warrants to purchase shares of our common stock, which are currently exercisable at an exercise price of \$9.60 per share;
- 83 shares of common stock available for issuance pursuant to the 2021 Inducement Equity Plan;
- 113,730 shares of common stock available for issuance pursuant to the Amended and Restated 2022 Equity Incentive Plan;
- 3,708 shares of common stock available for issuance pursuant to the 2023 Employee Stock Purchase Plan; and
- 75,000 shares of common stock reserved for future issuance upon vesting of restricted stock units granted subsequent to December 31, 2025.

Unless otherwise indicated, all information in this prospectus assumes no exercise of options under our equity incentive plans, no sale of pre-funded warrants in this offering, which, if sold, would reduce the number of shares of common stock that we are offering on a one-for-one basis, no issuance or exercise of common warrants and Placement Agent Warrants and that there is a Second Tranche Closing for the maximum amount thereof.

In addition, the number of shares of our common stock outstanding immediately after this offering excludes additional shares of common stock that we may sell pursuant to a Sales Agreement that we entered into with JonesTrading Institutional Services LLC on March 16, 2018 (the “Sales Agreement”). As of the date of this prospectus, we may sell up to \$3.1 million of shares of our common stock remaining available for sale by us under the Sales Agreement. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities pursuant to shelf registration statements with a value more than one-third of the aggregate market value of our common stock held by non-affiliates in any 12 month period, so long as the aggregate market value of our common stock held by non-affiliates is less than \$75 million.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and any accompanying prospectus supplement may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Exchange Act, about VivoSim. These forward-looking statements are intended to be covered by the safe harbor for forward-looking statements provided by the Private Securities Litigation Reform Act of 1995. Forward-looking statements are not statements of historical fact, and can be identified by the use of forward-looking terminology such as “believes”, “expects”, “may”, “will”, “could”, “should”, “projects”, “plans”, “goal”, “targets”, “potential”, “estimates”, “pro forma”, “seeks”, “intends” or “anticipates” or the negative thereof or comparable terminology. Forward-looking statements include discussions of strategy, financial projections, guidance and estimates (including their underlying assumptions), statements regarding plans, objectives, expectations or consequences of various transactions, and statements about the future performance, operations, products and services of VivoSim. We caution our stockholders and other readers not to place undue reliance on such statements.

You should read this prospectus, any accompanying prospectus supplement and the documents incorporated by reference completely and with the understanding that our actual future results may be materially different from what we currently expect. Our business and operations are and will be subject to a variety of risks, uncertainties and other factors. Consequently, actual results and experience may materially differ from those contained in any forward-looking statements. Such risks, uncertainties and other factors that could cause actual results and experience to differ from those projected include, but are not limited to, the risk factors described in the “Risk Factors” section beginning on page 9 of this prospectus.

You should assume that the information appearing in this prospectus, any accompanying prospectus supplement and any related free writing prospectus is accurate as of its date only. Because the risk factors referred to above could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements made by us or on our behalf, you should not place undue reliance on any forward-looking statements. Further, any forward-looking statement speaks only as of the date on which it is made. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. All written or oral forward-looking statements attributable to us or any person acting on our behalf made after the date of this prospectus are expressly qualified in their entirety by the risk factors and cautionary statements contained in and incorporated by reference into this prospectus. Unless legally required, we do not undertake any obligation to release publicly any revisions to such forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events.

## **MARKET, INDUSTRY AND OTHER DATA**

Unless otherwise indicated, we have based the information concerning economic conditions, our industry and our market contained in this prospectus on a variety of sources, including information from third-party industry analysts and publications and our own estimates and research. This information involves a number of assumptions, estimates and limitations. The industry publications, surveys and forecasts and other public information generally indicate or suggest that their information has been obtained from sources believed to be reliable. None of the third-party industry publications used in this prospectus were prepared on our behalf. The industries in which we operate are subject to a high degree of uncertainty and risk due to a variety of factors, and are subject to change based on various factors, including those discussed in the “Risk Factors” section of this prospectus and in the other information contained in this prospectus. These and other factors could cause the information concerning our industry to differ materially from those expressed in this prospectus and incorporated by reference herein.

## **DIVIDEND POLICY**

We have never declared or paid cash dividends on our common stock. We currently intend to retain our future earnings, if any, for use in our business and therefore do not anticipate paying cash dividends in the foreseeable future. Payment of future dividends, if any, will be at the discretion of our board of directors after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs and plans for expansion.

## RISK FACTORS

*Investment in our securities involve a substantial degree of risk and should be regarded as speculative. As a result, the purchase of our securities should be considered only by persons who can reasonably afford to lose their entire investment. Before you elect to purchase our securities, you should carefully consider the risk and uncertainties described below in addition to the risks and uncertainties described under “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended March 31, 2025, any subsequent Quarterly Report on Form 10-Q and our other filings with the SEC, all of which are incorporated by reference herein. Additional risks and uncertainties of which we are unaware or which we currently believe are immaterial could also materially adversely affect our business, financial condition or results of operations. If any of the risks or uncertainties discussed in this prospectus occur, our business, prospects, liquidity, financial condition and results of operations could be materially and adversely affected, in which case the trading price of our common stock could decline, and you could lose all or part of your investment.*

### **Risks related to this Offering**

***We need to raise capital in this offering to support our operations. If we are unable to raise capital in this offering, our financial position will be materially adversely impacted.***

We have incurred substantial losses since our inception, and we expect to continue to incur additional losses for the next several years. For the three months ended December 31, 2025, we had net losses of \$2.7 million. From our inception through December 31, 2025, we had an accumulated deficit of \$350.2 million. We believe that current cash on hand, prior to the receipt of any proceeds from this offering, is not sufficient to fund operations beyond July 2026. If we were to receive net proceeds of \$3.4 million from this offering, we believe that the net proceeds from this offering, together with our existing cash and cash equivalents, will meet our capital needs into 2027. If we receive the foregoing net proceeds of \$3.4 million in this offering, and if we raise an additional \$5.0 million in net proceeds through the sale of securities or otherwise throughout 2026, we believe that we will then meet our capital needs through the end of 2027. In addition, the report of our independent registered public accounting firm on our financial statements for the fiscal year ended March 31, 2025 contains explanatory language that substantial doubt exists about our ability to continue as a going concern. If we do not have access to sufficient cash and liquidity to finance our business operations as currently contemplated, we would be compelled to reduce general and administrative expenses and delay research and development projects, including the purchase of scientific equipment and supplies, until we are able to obtain sufficient financing. We have no additional committed sources of capital and may find it difficult to raise money on terms favorable to us or at all. The failure to obtain sufficient capital to support our operations would have a material adverse effect on our business, financial condition and results of operations. If such sufficient financing is not received timely, we would then need to pursue a plan to license or sell assets, seek to be acquired by another entity, cease operations and/or seek bankruptcy protection.

***We may not satisfy the conditions to closing the Second Tranche and may not receive all of the proceeds from this offering.***

The securities purchase agreements that purchasers in this offering will enter into with us will contain a number of conditions that must be satisfied before a Second Tranche Closing can occur. All of those conditions may never be met in the future. If the conditions to the Second Tranche Closing are not met or waived by the purchasers, we may not have access to funds needed to finance our operations, which could lead to adverse financial conditions.

***Purchasers who purchase our securities in this offering pursuant to a securities purchase agreement may have rights not available to purchasers that purchase without the benefit of a securities purchase agreement.***

In addition to rights and remedies available to all purchasers in this offering under federal securities and state law, the purchasers that enter into a securities purchase agreement will also be able to bring claims of breach of contract against us. The ability to pursue a claim for breach of contract provides those investors with the means to enforce the covenants uniquely available to them under the securities purchase agreement including: timely delivery of securities, indemnification for breach of contract, an agreement not enter into equity financings for a period post-closing and an agreement not to enter into variable rate financings for a period post-closing.

***This is a best efforts offering, no minimum amount of securities is required to be sold, and we may not raise the amount of capital we believe is required for our business plans, including our near-term business plans.***

The Placement Agent has agreed to use its reasonable best efforts to solicit offers to purchase the securities in this offering. The Placement Agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of the securities. There is no required minimum number of securities or amount of proceeds that must be sold as a condition to completion of this offering. Because there is no minimum offering amount required as a condition to the closing of this offering, the actual offering amount, Placement Agent fees and proceeds to us are not presently determinable and may be substantially less than the maximum amounts set forth herein. We may sell fewer than all of the securities offered hereby, which may significantly reduce the amount of proceeds received by us, and investors in this offering will not receive a refund in the event that we do not sell an amount of securities sufficient to support our continued operations, including our near-term continued operations. See “Use of Proceeds” on page 14 for more information. We may not raise the amount of capital we believe is required for our operations in the short-term and may need to raise additional funds to complete such short-term operations. Such additional fundraises may not be available or available on terms acceptable to us.

***Our management has broad discretion as to the use of the net proceeds from this offering.***

Our management will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in the section titled “Use of Proceeds.” Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. Our management might not apply our net proceeds in ways that ultimately increase the value of your investment, and the failure by our management to apply these funds effectively could harm our business. If we do not invest or apply the net proceeds from this offering in ways that enhance stockholder value, we may fail to achieve expected results, which could cause our common stock price to decline.

***If you purchase securities in this offering, you will experience immediate and substantial dilution and may experience additional dilution in the future.***

Investors purchasing shares of our common stock and accompanying common warrants in this offering will pay a price per share that substantially exceeds the as adjusted net tangible book value per share. As a result, investors purchasing our common stock and accompanying common warrants in this offering will incur immediate dilution of \$0.36 per share, representing the difference between the assumed public offering price of \$1.69 per share, which is the last reported sale price of our common stock on the Nasdaq Capital Market on March 26, 2026, and our as adjusted net tangible book value as of December 31, 2025, and after deducting Placement Agent fees and estimated offering expenses payable by us. For more information on the dilution you may suffer as a result of investing in this offering, see “Dilution.”

***We will likely not receive any additional funds upon the exercise of the common warrants.***

The common warrants may be exercised on a cashless basis during the term of the common warrants, in which case the holder would not pay a cash purchase price upon exercise, but instead would receive upon such exercise the number of shares of common stock determined by multiplying the total number of shares of common stock with respect to which the common warrant is then being exercised by the Black Scholes Value (as defined in the common warrant) divided by the lower of the two closing bid prices of the common stock in the two days prior to the time of such exercise, but in any event not less than \$0.01 (as may be adjusted for stock dividends, subdivisions, or combinations and the like). Accordingly, it is highly unlikely that a holder of the common warrants would wish to pay an exercise price in cash to receive one share of common stock when they could instead choose the cashless exercise option and pay no cash to receive more shares of common stock than would be issuable upon a cash exercise. As a result, we will likely not receive any additional funds and do not expect to receive any additional funds upon the exercise of the common warrants.

***If the common warrants are cashlessly exercised, shareholders are likely to suffer substantial dilution.***

The common warrants may be exercised on a cashless basis during the term of the common warrants, in which case the holder would not pay a cash purchase price upon exercise, but instead would receive upon such exercise the number of shares of common stock determined by multiplying the total number of shares of common stock with respect to which the common warrant is then being exercised by the Black Scholes Value (as defined in the common warrant) divided by the lower of the two closing bid prices of the common stock in the two days prior to the time of such exercise, but in any event not less than \$0.01 (as may be adjusted for stock dividends, subdivisions, or combinations and the like). Accordingly, stockholders are likely to suffer substantial dilution as a result of this transaction.

***Because there is no minimum required for the offering to close, investors in this offering will not receive a refund in the event that we do not sell an amount of securities sufficient to pursue the business goals outlined in this prospectus.***

We have not specified a minimum offering amount nor have or will we establish an escrow account in connection with this offering. Because there is no escrow account and no minimum offering amount, investors could be in a position where they have invested in our company, but we are unable to fulfill our objectives due to a lack of interest in this offering. Further, because there is no escrow account in operation and no minimum investment amount, any proceeds from the sale of securities offered by us will be available for our immediate use, despite uncertainty about whether we would be able to use such funds to effectively implement our business plan. Investor funds will not be returned under any circumstances whether during or after the offering.

***We may issue additional equity or convertible debt securities in the future, which may result in additional dilution to you.***

In order to raise additional capital, we expect to in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock. We cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share and accompanying common warrant paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock in future transactions may be higher or lower than the price per share in this offering.

***Future sales of shares of our common stock in the public market, or the perception that such sales could occur, could cause our stock price to fall.***

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales could occur, following this offering could cause the market price of our common stock to decline. A substantial majority of the outstanding shares of our common stock are, and the shares of common stock sold in this offering, as well as shares issuable upon exercise of common warrants or pre-funded warrants, upon issuance will be, freely tradable without restriction or further registration under the Securities Act. We may sell large quantities of our common stock at any time pursuant to one or more separate offerings in the future, including through “at the market offerings” pursuant the Sales Agreement. We cannot predict the effect that future sales of common stock or other equity-related securities would have on the market price of our common stock.

***There is no public market for common warrants or the pre-funded warrants to purchase shares of our common stock being offered by us in this offering.***

There is no established public trading market for the common warrants or pre-funded warrants to purchase shares of our common stock that are being offered as part of this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the common warrants or pre-funded warrants on any national securities exchange or other nationally recognized trading system, including the Nasdaq Capital Market. Without an active market, the liquidity of the common warrants and pre-funded warrants will be limited.

***The common warrants and pre-funded warrants are speculative in nature.***

The common warrants and pre-funded warrants do not confer any rights of common stock ownership on their holders, such as voting rights or the right to receive dividends, but rather merely represent the right to acquire shares of common stock at a fixed price. Specifically, commencing on the date of issuance, holders of the common warrants may exercise their right to acquire common stock and pay an exercise price of \$[ ] per share, subject to certain adjustments, prior to five years from the date on which such warrants were issued, after which date any unexercised common warrants will expire and have no further value. Holders of pre-funded warrants may exercise their right to acquire common stock at any time after issuance and the pre-funded warrants have an exercise price of \$0.001, subject to certain adjustments, and do not expire until exercised in full. Moreover, following this offering, the market value of the common warrants and pre-funded warrants, if any, is uncertain and there can be no assurance that the market value of the common warrants or the pre-funded warrants will equal or exceed their imputed offering price.

***Holders of the common warrants and pre-funded warrants offered hereby will have no rights as common stockholders with respect to the shares of our common stock underlying the common warrants and pre-funded warrants until such holders exercise their common warrants and pre-funded warrants and acquire our common stock, except as otherwise provided in the common warrants and pre-funded warrants.***

Until holders of the common warrants and pre-funded warrants acquire shares of our common stock upon exercise thereof, such holders will have no rights with respect to the shares of our common stock underlying such warrants. Upon exercise of the common warrants and pre-funded warrants, the holders will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

### **Risks Related to Our Common Stock and Liquidity Risks**

***We could fail to maintain the listing of our common stock on the Nasdaq Capital Market, which could seriously harm the liquidity of our stock and our ability to raise capital or complete a strategic transaction.***

The Nasdaq Stock Market LLC (“Nasdaq”) has established continued listing requirements, including a requirement to maintain a minimum closing bid price of at least \$1 per share. If a company trades for 30 consecutive business days below such minimum closing bid price, it will receive a deficiency notice from Nasdaq. Assuming it is in compliance with the other continued listing requirements, Nasdaq would provide such company a period of 180 calendar days in which to regain compliance by maintaining a closing bid price at least \$1 per share for a minimum of ten consecutive business days. There can be no assurance that we will continue to maintain compliance with the minimum bid price requirement or other listing requirements necessary for us to maintain the listing of our common stock on the Nasdaq Capital Market.

As a result of prior non-compliance with the Nasdaq requirement to maintain a minimum of \$2,500,000 in stockholders’ equity, as set forth in Nasdaq Listing Rule 5550(b)(1) (“Rule 5550(b)(1)”), we are to subject to a Mandatory Panel Monitor until April 30, 2026. If, within that one-year monitoring period, the Listing Qualifications Staff of Nasdaq (the “Staff”) finds us again out of compliance with Rule 5550(b)(1), we will not be permitted to provide the Staff with a plan of compliance with respect to that deficiency and the Staff will not be permitted to grant additional time for us to regain compliance with respect to that deficiency, nor will we be afforded an applicable cure or compliance period pursuant to Nasdaq Listing Rule 5810(c)(3). Instead, the Staff will issue a Delist Determination Letter and we will have an opportunity to request a new hearing with the initial Hearings Panel or a newly convened Hearings Panel if the initial Hearings Panel is unavailable. We will have the opportunity to respond/present to the Hearings Panel as provided by Nasdaq Listing Rule 5815(d)(4)(C). Our securities may be at that time delisted from Nasdaq.

A delisting from the Nasdaq Capital Market and commencement of trading on the Over-the-Counter Bulletin Board would likely result in a reduction in some or all of the following, each of which could have a material adverse effect on stockholders:

- the liquidity of our common stock;
- the market price of our common stock (and the accompanying valuation of our Company);
- our ability to obtain financing or complete a strategic transaction;
- the number of institutional and other investors that will consider investing in shares of our common stock;
- the number of market makers or broker-dealers for our common stock; and
- the availability of information concerning the trading prices and volume of shares of our common stock.

*There is no assurance that an active market in our common stock will continue at present levels or increase in the future.*

Our common stock is currently traded on the Nasdaq Capital Market, but there is no assurance that an active market in our common stock will continue at present levels or increase in the future. As a result, an investor may find it difficult to dispose of our common stock on the timeline and at the volumes they desire. This factor limits the liquidity of our common stock and may have a material adverse effect on the market price of our common stock and on our ability to raise additional capital.

### **Risks Related to Our Capital Requirements, Finances and Operations**

*We may engage in strategic transactions, including acquisitions, investments, joint development agreements or divestitures that may have an adverse effect on our business.*

We may pursue transactions, including acquisitions of complementary businesses, technology licensing arrangements, strategic relationships, and joint development agreements to expand our product offerings and geographic presence as part of our business strategy, which could be material to our financial condition and results of operations. We may also consider divesting programs or other assets or out-licensing our technology. We may not complete transactions in a timely manner, on a cost-effective basis, or at all, and we may not realize the expected benefits of any acquisition, license arrangement, strategic relationship, joint development agreement or divestiture. Other companies may compete with us for these strategic opportunities. We also could experience negative effects on our results of operations and financial condition from charges related to acquisitions and investments, amortization of intangible assets and asset impairment charges, and other issues that could arise in connection with, or as a result of, acquisitions or divestitures, including issues related to internal control over financial reporting, regulatory or compliance issues and potential adverse short-term effects on results of operations through increased costs or otherwise. Acquisitions involve numerous risks, including the following:

- difficulties in finding suitable partners or acquisition candidates or purchasers for programs or assets that we may seek to divest;
- difficulties in obtaining financing on favorable terms, if at all;
- difficulties in completing transactions on favorable terms, if at all;
- the possibility that we will pay more than the value we derive from the acquisition, which could result in future non-cash impairment charges and/or a dilution of future earnings per share;
- the assumption of certain known and unknown liabilities of acquired companies;
- the incurrence of debt, contingent liabilities, or future write-offs of intangible assets or goodwill;
- difficulties in retaining key relationships with employees, customers, partners and suppliers following any transaction; and
- difficulties in operating in different business markets where we may not have historical experience.

Any of these factors could have a negative impact on our business, results of operations or financial position. Further, past and potential acquisitions entail risks, uncertainties and potential disruptions to our business, especially where we have limited experience as a company developing or marketing a particular product or technology. Following any acquisition, we must integrate the new business, which can be expensive, time-consuming and cause disruptions to our existing operations. Failure to timely and successfully integrate acquired businesses may result in non-compliance with regulatory or other requirements and may result in unexpected costs, including as a result of inadequate cost containment and failure to fully realize expected synergies. As a result of any of the foregoing, we may not realize the expected benefit from any acquisition or investment. If we cannot integrate acquired businesses, products or technologies, our business, financial conditions and results of operations could be materially and adversely affected.

Any divestitures may result in a dilutive impact to our future earnings, as well as significant write-offs, including those related to goodwill and other intangible assets, which could have a material adverse effect on our results of operations and financial condition. Divestitures could involve additional risks, including difficulties in the separation of operations, services, products and personnel, the diversion of management's attention from other business concerns, the disruption of our business and the potential loss of key employees. We may not be successful in managing these or any other significant risks that we encounter in divesting a product or technology.

***Changes to tax laws, which changes may have retroactive application, could adversely affect the Company or holders of our common stock.***

In recent years, many changes have been made to applicable tax laws and changes are likely to continue to occur in the future. The “One Big Beautiful Bill Act”, which was signed into law on July 4, 2025 (the “OBBA”), made significant changes to the U.S. federal income tax laws in various areas which may be subject to further clarification and the issuance of interpretive guidance. Among the notable changes, the OBBA permanently extended certain provisions that were enacted in the Tax Cuts and JOBS Act of 2017, most of which expired after December 31, 2025. We are assessing the legislation and the effect on our consolidated financial statements.

Future changes in tax laws could have a material adverse effect on our business, cash flow, financial condition or results of operations. The impact of these tax reforms on holders of our common stock is uncertain and could be adverse. We urge our stockholders to consult with their legal and tax advisors with respect to such legislation and the potential tax consequences of investing in our common stock.

#### **Risks Related to Litigation**

***Claims, litigation, government investigations and other proceedings may adversely affect our business, operating results and financial condition.***

We are, from time to time, involved in various claims, litigation matters and regulatory proceedings that could have a material adverse effect on us. These matters may include intellectual property disputes, contract disputes, employment and tax matters and other proceedings and litigation, including class action lawsuits. It is not possible to predict the outcome of pending or future litigation and any such claims, with or without merit, could be time consuming and expensive, and may require the Company to incur substantial costs and divert the resources of management.

For example, on August 27, 2024, H.C. Wainwright & Co., LLC (“H.C. Wainwright”) filed a complaint against us in the State of New York alleging that we breached a tail financing provision included in an engagement agreement we entered into with H.C. Wainwright in May 2023. In its complaint, H.C. Wainwright is seeking compensatory and consequential damages and attorneys’ fees. On October 18, 2024, we filed an answer to the complaint and on September 2, 2025, we filed an amended answer and counterclaimed for rescission, fraudulent inducement, and breach of contract, alleging that the Court should rescind the engagement agreement and award us damages, interest, costs, and attorneys’ fees because H.C. Wainwright misrepresented the services it would provide and breached its duties to us under the engagement agreement. We have briefed H.C. Wainwright’s motion to dismiss our counterclaims. We are defending against H.C. Wainwright’s claims and pursuing our counterclaims vigorously, but there is no guarantee that we will be successful in these efforts.

Determining legal reserves or possible losses from claims against us involves judgment and may not reflect the full range of uncertainties and unpredictable outcomes. Until the final resolution of such matters, we may be exposed to losses in excess of the amount recorded, and such excess amounts could have a material effect on our business, results of operations and financial condition. In addition, it is possible that a resolution of any claim, including as a result of a settlement, could require us to make substantial future payments or require us to change our business practices each of which could have a material adverse effect on our business, operating results and financial condition.

## USE OF PROCEEDS

We estimate that we will receive net proceeds of approximately \$3.4 million, after deducting the estimated Placement Agent fees and estimated offering expenses payable by us (based on an assumed combined public offering price of \$1.69 per share of common stock and accompanying warrant to purchase one and a half shares of common stock), which was the last reported sales price of our common stock on the Nasdaq Capital Market on March 26, 2026) and assuming no sale of any pre-funded warrants and no exercise of common warrants or Placement Agent Warrants. We cannot predict when or if the pre-funded warrants, the common warrants and the Placement Agent Warrants will be exercised. It is possible that the common warrants and the Placement Agent Warrants may expire and may never be exercised. However, because this is a best efforts offering and there is no minimum offering amount required as a condition to the closing of this offering, the actual offering amount, the Placement Agents fees and net proceeds to us are not presently determinable and may be substantially less than the maximum amounts set forth on the cover page of this prospectus.

The common warrants may be exercised on a cashless basis during the term of the common warrants, in which case the holder would not pay a cash purchase price upon exercise, but instead would receive upon such exercise the number of shares of common stock determined by multiplying the total number of shares of common stock with respect to which the common warrant is then being exercised by the Black Scholes Value (as defined in the common warrant) divided by the lower of the two closing bid prices of the common stock in the two days prior to the time of such exercise, but in any event not less than \$0.01 (as may be adjusted for stock dividends, subdivisions, or combinations and the like). As a result, we will likely not receive any additional funds and do not expect to receive any additional funds upon the exercise of the common warrants.

We intend to use the proceeds of this offering for working capital and general corporate purposes, which could include capital expenditures, research and development expenditures, regulatory affairs expenditures, legal expenditures, including intellectual property protection and maintenance expenditures, acquisitions of new technologies and investments and business combinations. Pending these uses, we may invest the net proceeds in short- and intermediate-term interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the United States government.

This expected use of net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. We cannot currently allocate specific percentages of the net proceeds to us from this offering that we may use for the purposes specified above. Our management will have broad discretion in the application of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not result in our being profitable or increase our market value. See *“Risk Factors—Risks Related to this Offering and the Ownership of Our Common Stock—Our management has broad discretion as to the use of the net proceeds from this offering.”*

## DILUTION

If you purchase our common stock in this offering, your interest will be diluted to the extent of the difference between the public offering price per share of common stock and accompanying common warrant to purchase one and a half shares of common stock and the net tangible book value per share of our common stock after this offering (excluding the shares of common stock issuable upon exercise of the common warrants and Placement Agent Warrants being offering in this offering and the payment of the exercise price therefor).

As of December 31, 2025, we had net tangible book value of approximately \$3.2 million, or \$1.23 per share. Net tangible book value per share represents the amount of total tangible assets less total liabilities divided by the number of shares of our common stock outstanding.

After giving effect to the issuance and sale of 2,366,862 shares of our common stock in this offering and accompanying common warrants to purchase 3,550,293 shares of our common stock (excluding the shares of common stock issuable upon exercise of (i) the common warrants being offered in this offering and (ii) the Placement Agent Warrants) at an assumed combined public offering price of \$1.69 per share and accompanying common warrant to purchase one and a half shares of common stock, the last reported sale price of our common stock on the Nasdaq Capital Market on March 26, 2026, assuming no sale of pre-funded warrants in this offering and no exercise of common warrants or Placement Agent Warrants and after deducting estimated Placement Agent fees and estimated offering expenses payable by us, our as adjusted net tangible book value as of December 31, 2026 would have been approximately \$6.6 million, or approximately \$1.33 per share. This amount represents an immediate increase in net tangible book value of approximately \$0.10 per share to our existing stockholders and an immediate dilution in net tangible book value of approximately \$0.36 per share to new investors purchasing shares of common stock in this offering.

Dilution per share to new investors is determined by subtracting as adjusted net tangible book value per share after this offering from the offering price per share paid by new investors. The as adjusted information below is based on an assumed combined public offering price of \$1.69 per share and accompanying common warrant to purchase one and a half shares of common stock, the last reported sale price of our common stock on the Nasdaq Capital Market on March 26, 2026, and is illustrative only, and dilution following the closing of this offering will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

The following table illustrates this dilution, assuming the holders of the common warrants do not exercise any of the common warrants:

Assumed public offering price per share and accompanying common warrant		\$	1.69
Net tangible book value per share as of December 31, 2025	\$	1.23	
Increase in net tangible book value per share attributable to this offering	\$	0.10	
As adjusted net tangible book value per share, after giving effect to this offering		\$	1.33
Dilution per share to investors purchasing shares in this offering		\$	0.36

The dilution information discussed above is illustrative only and may change based on the actual public offering price, the actual number of shares of common stock, pre-funded warrants and accompanying common warrants we offer in this offering and other terms of this offering determined at pricing.

A \$0.50 increase or decrease in the assumed public offering price of \$1.69 per share of common stock and accompanying common warrant to purchase one and a half shares of common stock, based on the last reported sale price for our common stock as reported on the Nasdaq Capital Market on March 26, 2026, would decrease the number of shares of our common stock and accompanying common warrants offered in this offering by approximately 540,378 shares and accompanying common warrants to purchase 810,567 shares or increase the number of shares of our common stock and accompanying common warrants offered in this offering by approximately 994,483 shares and accompanying common warrants to purchase 1,491,724 shares.

We may also increase or decrease the number of shares of common stock and accompanying common warrants we are offering. An increase of 100,000 in the number of shares of common stock and accompanying common warrants offered by us would increase our as adjusted net tangible book value by approximately \$0.2 million, or \$0.01 per share, and decrease the dilution per share to investors participating in this offering by \$0.01 per share, assuming the assumed offering price per share remains the same and after deducting the estimated Placement Agent fees and estimated offering expenses payable by us. Similarly, a decrease of 100,000 in the number of shares of common stock and accompanying common warrants offered by us would decrease our as adjusted net tangible book value by approximately \$0.1 million or less than \$0.01 per share, and decrease the dilution per share to investors participating in this offering by less than \$0.01 per share, assuming the assumed offering price per share remains the same and after deducting the estimated Placement Agent fees and estimated offering expenses payable by us.

The number of shares immediately outstanding following this offering is based on 2,607,962 shares of common stock outstanding as of December 31, 2025 and excludes the following as of December 31, 2025:

- 234,606 shares of common stock issuable upon the exercise of stock options outstanding at a weighted average exercise price of approximately \$13.55 per share;
- 539,060 shares of common stock issuable upon the exercise of warrants to purchase shares of our common stock, which are currently exercisable at an exercise price of \$9.60 per share;
- 83 shares of common stock available for issuance pursuant to the 2021 Inducement Equity Plan;
- 113,730 shares of common stock available for issuance pursuant to the Amended and Restated 2022 Equity Incentive Plan;
- 3,708 shares of common stock available for issuance pursuant to the 2023 Employee Stock Purchase Plan; and
- 75,000 shares of common stock reserved for future issuance upon vesting of restricted stock units granted subsequent to December 31, 2025.

To the extent options, restricted units or warrants are additionally exercised or settled or other shares are issued, there may be further dilution to investors. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. As of the date of this prospectus, we may sell up to \$3.1 million of shares of our common stock remaining available for sale by us under the Sales Agreement. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities pursuant to shelf registration statements with a value more than one-third of the aggregate market value of our common stock held by non-affiliates in any 12 month period, so long as the aggregate market value of our common stock held by non-affiliates is less than \$75 million. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

## DESCRIPTION OF CAPITAL STOCK

The following description summarizes the most important terms of our capital stock. Because it is only a summary of the provisions of our certificate of incorporation, as amended (the “Certificate of Incorporation”), and our amended and restated bylaws (the “Bylaws”), it does not contain all of the information that may be important to you. For a complete description of the matters set forth in this “Description of Capital Stock,” you should refer to our Certificate of Incorporation and Bylaws, each of which are included as exhibits to the registration statement of which this prospectus is a part, and to the applicable provisions of Delaware law.

Our authorized capital stock consists of 200,000,000 shares of common stock, \$0.001 par value per share, and 25,000,000 shares of preferred stock, \$0.001 par value per share. Our Board of Directors (the “Board”) may establish the rights and preferences of the preferred stock from time to time. As of December 31, 2025, there were 2,607,962 shares of our common stock issued and outstanding and no shares of preferred stock issued and outstanding.

### Common Stock

*Dividend Rights.* Subject to limitations under Delaware law and preferences that may apply to any then-outstanding shares of preferred stock, holders of common stock are entitled to share ratably in dividends, if any, as may be declared from time to time by our Board in its discretion from funds legally available therefor. Dividends, if any, will be contingent upon our revenues and earnings, if any, and capital requirements and financial conditions. The payment of dividends, if any, will be within the discretion of our Board. We presently intend to retain all earnings, if any, and accordingly our Board does not anticipate declaring any dividends prior to a business combination.

*Voting Rights.* Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of the stockholders. Our Certificate of Incorporation does not provide for cumulative voting for the election of directors. Generally, all matters to be voted on by stockholders must be approved by a majority (or, in the case of election of directors, by a plurality) of the votes cast by all shares of common stock that are present in person or represented by proxy. The Certificate of Incorporation establishes a classified board of directors that is divided into three classes with staggered three-year terms. Only the directors in one class will be subject to election at each annual meeting of our stockholders, with the directors in the other classes continuing for the remainder of their respective three-year terms. The Certificate of Incorporation and the Bylaws also provide that the directors may be removed only for cause. In addition, VivoSim has reserved the right to amend, alter, change or repeal any provision in the Certificate of Incorporation, subject to any approval of our stockholders as may be required under the General Corporation Law of the State of Delaware (“DGCL”), and our Board is authorized to adopt, amend or repeal the Bylaws.

*No Preemptive or Similar Rights.* Our common stock is not entitled to preemptive rights, and is not subject to conversion, redemption or sinking fund provisions.

*Right to Receive Liquidation Distributions.* In the event of a liquidation, dissolution or winding up, the holders of common stock are entitled to share pro rata all assets remaining after payment in full of all liabilities and after providing for each class of stock, if any, having preference over the common stock, subject to the liquidation preference of any then outstanding shares of preferred stock.

*Fully Paid and Non-Assessable.* All of the outstanding shares of our common stock are duly authorized, validly issued, fully paid and non-assessable.

### Preferred Stock

As of the date of this prospectus, no shares of preferred stock are issued and outstanding. Our Board is authorized, subject to limitations prescribed by Delaware law, to issue up to 25,000,000 shares of preferred stock in one or more series, to determine and fix from time to time the number of shares to be included in such series, and to fix the designations, powers, preferences and rights, qualifications, limitations and restrictions thereof, including, without limitation, dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions), redemption price or prices and liquidation preferences of such series, in each case without further vote or action by the stockholders. Our Board can also increase or decrease the number of shares of any such series, but not above the total number of authorized shares and not below the number of shares of such series then outstanding, without any further vote or action by the stockholders.

Our Board may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control and may adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. We have no current plans to issue any shares of preferred stock.

## **Warrants**

As of March 26, 2026, we had outstanding warrants to purchase an aggregate of 539,060 shares of common stock with an exercise price of \$9.60 per share, all of which are currently exercisable (subject to certain beneficial ownership requirements) and expire on May 13, 2029.

All of the outstanding warrants contain provisions for the adjustment of the exercise price in the event of stock dividends, stock splits or similar transactions. In addition, certain of the warrants contain a “cashless exercise” feature that allows the holders thereof to exercise the warrants without a cash payment to us under certain circumstances. Certain of the warrants also contain provisions that provide certain rights to warrant holders in the event of a fundamental transaction, including a merger or consolidation with or into another entity, such as:

- the right to receive the same amount and kind of consideration paid to the holders of common stock in the fundamental transaction;
- the right to require us or a successor entity to purchase the unexercised portion of certain warrants at the warrant’s respective fair value using the Black Scholes option pricing formula; or
- the right to require us a successor entity to redeem the unexercised portion of certain warrants for the same consideration paid to holders of common stock in the fundamental transaction at the warrant’s respective fair value using the Black Scholes option pricing formula.

## **Anti-Takeover Effects of Certain Provisions of our Certificate of Incorporation, Bylaws and the General Corporation Law of the State of Delaware**

Certain provisions of Delaware law, along with the Certificate of Incorporation and the Bylaws, may have the effect of delaying, deferring or discouraging another person from acquiring control of us. These provisions are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed, in part, to encourage persons seeking to acquire control of us to first negotiate with our Board. However, these provisions could have the effect of delaying, discouraging or preventing attempts to acquire us, which could deprive the stockholders of opportunities to sell their shares of our common stock at prices higher than prevailing market prices.

### *Delaware Law*

We are subject to Section 203 of the DGCL, which prohibits persons deemed to be “interested stockholders” from engaging in a “business combination” with a publicly held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an “interested stockholder” is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation’s voting stock. Generally, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by our Board.

## *Choice of Forum*

The Bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, another state or federal court located in the State of Delaware) will be the sole and exclusive forum for: (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of a fiduciary duty by any of our directors, officers or stockholders to us or our stockholders; (3) any action arising pursuant to any provision of the DGCL or the Certificate of Incorporation or the Bylaws; or (4) any action asserting a claim governed by the internal affairs doctrine. The provision will not apply to suits brought to enforce a duty or liability created by the Securities Act, the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. As a result, the choice of forum provision will not apply to suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. However, the Certificate of Incorporation does not relieve us of our duties to comply with federal securities laws and the rules and regulations thereunder, and our stockholders will not be deemed to have waived our compliance with these laws, rules and regulations. The Bylaws also provide that any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and to have consented to this choice of forum provision.

This choice of forum provision in the Bylaws may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, employees or agents, which may discourage such lawsuits against us and our directors, officers, employees or agents. In addition, stockholders who do bring a claim in the Court of Chancery in the State of Delaware could face additional litigation costs in pursuing any such claim, particularly if they do not reside in or near Delaware. Furthermore, the enforceability of similar choice of forum provisions in other companies' governing documents has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable.

*Board of Directors Vacancies.* Any vacancy or newly created directorship in our Board, however occurring, shall be filled only by the vote of a majority of the directors then in office, although less than a quorum, and shall not be filled by the stockholders, unless our Board determines by resolution that any such vacancy or newly created directorship shall be filled by the stockholders. In addition, the number of directors constituting our Board shall be determined from time to time by a resolution adopted by our Board. These provisions may prevent a stockholder from increasing the size of our Board and then gaining control of our Board by filling the resulting vacancies with its own nominees. This makes it more difficult to change the composition of our Board and promotes continuity of management.

*Classified Board.* Our Board is divided into three classes. The directors in each class will serve for a three-year term, one class being elected each year by the stockholders. This system of electing and removing directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors.

*Stockholder Meetings.* The Bylaws provide that a special meeting of stockholders may be called only by the chairperson of our Board, chief executive officer or president (in the absence of a chief executive officer) or a majority of the authorized number of directors, thus prohibiting a stockholder (in the capacity as a stockholder) from calling a special meeting. These provisions might delay the ability of the stockholders to force consideration of a proposal or for stockholders controlling a majority of the capital stock to take any action, including the removal of directors.

*Elimination of Stockholder Action by Written Consent.* The Certificate of Incorporation and the Bylaws eliminate the right of stockholders to act by written consent without a meeting unless the action to be effected by written consent and the taking of such action by written consent is approved in advance by resolution of our Board. As a result, a holder controlling a majority of the capital stock would not be able to amend the Bylaws or remove directors without holding a meeting of the stockholders called in accordance with the Bylaws.

*Advance Notice Requirements for Stockholder Proposals and Director Nominations.* The Bylaws establish advance notice procedures with respect to stockholder proposals to be brought before a stockholder meeting and the nomination of candidates for election as directors. The Bylaws also specify certain requirements regarding the form and content of a stockholder's notice. These provisions might preclude the stockholders from bringing matters before an annual meeting of stockholders or from making nominations for directors at an annual meeting of stockholders if the proper procedures are not followed. We expect that these provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us.

*No Cumulative Voting.* The Certificate of Incorporation does not permit stockholders to cumulate their votes in the election of directors. Accordingly, the holders of a majority of the outstanding shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they choose, other than any directors that holders of Preferred Stock may be entitled to elect.

*Directors Removed Only for Cause.* The Certificate of Incorporation and the Bylaws provide that no member of our Board may be removed from office by the stockholders except for cause.

*Issuance of Undesignated Preferred Stock.* The ability of our Board, without action by the stockholders, to issue up to 25,000,000 shares of undesignated preferred stock with voting or other rights or preferences as designated by our Board could impede the success of any attempt to change control of our company. This may have the effect of deferring hostile takeovers or delaying changes in control or management of our company.

*Amendment of Charter Provisions.* VivoSim has reserved the right to amend, alter, change or repeal any provision in the Certificate of Incorporation, subject to any approval of our stockholders as may be required under the DGCL, and our Board is authorized to adopt, amend or repeal the Bylaws. The provisions of the DGCL, the Certificate of Incorporation and the Bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in the composition of our Board. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

### **Transfer Agent and Registrar**

The Transfer Agent and Registrar for our common stock is Continental Stock Transfer & Trust Company, One State Street, 30th Floor, New York, NY 10004.

### **Listing**

Our common stock is listed on the Nasdaq Capital Market under the symbol "VIVS". There is no established public trading market for the pre-funded warrants or common warrants to be sold in this offering, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the common warrants or pre-funded warrants on any national securities exchange.

## DESCRIPTION OF SECURITIES WE ARE OFFERING

We are offering up to 2,366,862 shares of our common stock or pre-funded warrants in lieu thereof to purchase up to 2,366,862 shares of our common stock, together with common warrants to purchase up to an aggregate of 3,550,293 shares of common stock. Each share of common stock or pre-funded warrant in lieu thereof is being sold together with a common warrant to purchase one and a half shares of common stock. For each pre-funded warrant we sell, the number of shares of common stock we are offering will be decreased on a one-for-one basis. The shares of common stock or pre-funded warrants in lieu thereof and accompanying common warrants will be issued separately and will be immediately separable upon issuance but must be purchased together in this offering. We are also registering the shares of common stock issuable from time to time upon exercise of the common warrants and pre-funded warrants offered hereby.

### **Common Stock**

The material terms and provisions of our common stock are described under the caption “*Description of Capital Stock – Common Stock*” in this prospectus and are incorporated herein by reference.

### **Common Warrants**

The following summary of certain terms and provisions of the common warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the common warrant, the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of common warrant for a complete description of the terms and conditions of the common warrants.

We are offering common warrants to purchase up to an aggregate of 3,550,293 shares of our common stock.

### ***Duration and Exercise Price***

Each common warrant issued in this offering represents the right to purchase one share of common stock at an initial exercise price of \$[ ] per share. Each common warrant may be exercised only in cash and at the election of the holder immediately upon issuance and from time to time thereafter through and including the fifth anniversary of their issuance date.

The common warrants will be exercisable in whole or in part by delivering to the Company a completed instruction form for exercise and complying with the requirements for exercise set forth in the common warrant. Payment of the exercise price may be made solely in cash.

### ***Cashless Exercise***

At any time after the closing of the Initial Tranche (as defined below) of the offering, the holders of the common warrants may exchange the common warrants on a cashless basis for a number of shares of common stock determined by multiplying the total number of shares of common stock with respect to which the common warrant is then being exercised by the Black Scholes Value (as defined in the common warrant) divided by the lower of the two closing bid prices of the common stock in the two days prior to the time of such exercise, but in any event not less than \$0.01 (as may be adjusted for stock dividends, subdivisions, or combinations and the like).

### ***No Fractional Shares***

No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the common warrants. As to any fraction of a share which the holder would otherwise be entitled to purchase upon such exercise, the number of shares of common stock to be issued shall be rounded up to the nearest whole number.

### ***Exercise Limitation***

In general, a holder will not have the right to exercise any portion of a common warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% (or, at the election of the holder, 9.99%), of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the warrant. However, any holder may increase or decrease such percentage to any other percentage not in excess of 9.99% upon notice to us, provided that any increase in this limitation will not be effective until 61 days after such notice from the holder to us and such increase or decrease will apply only to the holder providing such notice.

### ***Adjustments for Dilutive Issuances***

If, during the period the begins on the date of the closing of the Initial Tranche and ends ninety (90) days after the last closing of a Tranche of this offering, we effect a Subsequent Financing (as defined in the Securities Purchase Agreement), or are deemed to have effected a Subsequent Financing, any shares of common stock (including the issuance or sale of common stock owned or held by or for the account of the Company) issued or sold or deemed to have been issued or sold) for a consideration per share (the “New Issuance Price”) less than a price equal to the exercise price of the common warrants in effect immediately prior to such issue or sale or deemed issuance or sale (such exercise price then in effect is referred to as the “Applicable Price”) (the foregoing a “Dilutive Issuance”), then immediately after such Dilutive Issuance, the exercise price then in effect shall be reduced (and in no event increased) to the price per share as determined in accordance with the following formula:

$$EP2 = EP1 \times (A + B) / (A + C)$$

For purposes of the foregoing formula:

A= The total number of shares of common stock with respect to which a common warrant may be exercised.

B= The total number of shares of common stock that would be issued or issuable under the Dilutive Issuance if issued at a per share equal to EP1.

C= The total number of shares of common stock actually issued or issuable under the Dilutive Issuance.

EP1= The exercise price in effect immediately prior to a Dilutive Issuance.

EP2= The exercise price immediately after such Dilutive Issuance; provided, however, that such price shall in no event be less than \$0.01 per share of common stock (as may be adjusted for stock dividends, subdivisions, or combinations in the manner described in Section 2(a) herein, the “Floor Price”);

*provided*, that if such issuance or sale (or deemed issuance or sale) was without consideration, then we shall be deemed to have received the Floor Price for each such share so issued or deemed to be issued. For all purposes of the foregoing (including, without limitation, determining the adjusted Exercise Price and consideration per share under this adjustment provision), the following shall be applicable:

- if, during the Restricted Period, we in any manner grant or sell any options and the lowest price per share (as described in the common warrants) for which one share of common stock is issuable upon the exercise of any such option or upon conversion, exercise or exchange of any convertible securities issuable upon exercise of any such option is less than the Applicable Price, then such share of common stock shall be deemed to be outstanding and to have been issued and sold by us at the time of the granting or sale of such option for such price per share;
- if, during the Restricted Period, we in any manner issue or sell any convertible securities and the lowest price per share (as described in the common warrants) for which one share of common stock is issuable upon the conversion, exercise or exchange thereof is less than the Applicable Price, then such share of common stock shall be deemed to be outstanding and to have been issued and sold by us at the time of the issuance or sale of such convertible securities for such price per share; and

if, during the Restricted Period, the purchase or exercise price provided for in any options, the additional consideration, if any, payable upon the issue, conversion, exercise or exchange of any convertible securities, or the rate at which any convertible securities are convertible into or exercisable or exchangeable for shares of common stock increases or decreases at any time, the exercise price in effect at the time of such increase or decrease shall be adjusted to the exercise price which would have been in effect at such time had such options or convertible securities provided for such increased or decreased purchase price, additional consideration or increased or decreased conversion rate, as the case may be, at the time initially granted, issued or sold.

### ***Adjustment for Stock Splits***

The exercise price and the number of shares of common stock purchasable upon the exercise of the common warrants are subject to adjustment upon the occurrence of specific events, including sales of additional shares of common stock, stock dividends, stock splits, and combinations of our common stock.

### ***Dividends or Distributions***

If we declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of our common stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) at any time after the issuance of the common warrants, then, in each such case, the holders of the common warrants shall be entitled to participate in such distribution to the same extent that the holders would have participated therein if the holders had held the number of shares of common stock acquirable upon complete exercise of the common warrants.

### ***Purchase Rights***

If we grant, issue or sell any shares of our common stock or securities exercisable for, exchangeable for or convertible into our common stock, or rights to purchase stock, common warrants, securities or other property pro rata to the record holders of any class of shares of our common stock, referred to as Purchase Rights, then each holder of the common warrants 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 the common warrants immediately before the record date, 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.

### ***Fundamental Transactions***

In the event of a fundamental transaction, as described in the common warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the consummation of a business combination with another person or group of persons whereby such other person or group acquires greater than 50% of the voting power of the outstanding common stock and preferred stock, the holders of the common warrants will be entitled to receive upon exercise of the common warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the common warrants immediately prior to such fundamental transaction. Additionally, as more fully described in the common warrants, in the event of certain fundamental transactions, the holders of the common warrants may be entitled to receive consideration in an amount equal to the Black Scholes value of the common warrants .

### ***Transferability***

Subject to applicable laws, the common warrants may be offered for sale, sold, transferred or assigned. There is currently no trading market for the common warrants and a trading market is not expected to develop.

### ***Rights as a Stockholder***

Except as otherwise provided in the common warrants or by virtue of a holder's ownership of shares of our common stock, the holders of the common warrants do not have the rights or privileges of holders of our common stock, including any voting rights, unless and until they exercise their common warrants.

### ***Amendments***

The common warrants may be amended with the written consent of the holder of such common warrant and us.

### ***Listing***

There is no established public trading market for the common warrants, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the common warrants on any national securities exchange.

### ***Pre-Funded Warrants***

The following summary of certain terms and provisions of the pre-funded warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the pre-funded warrant, the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of pre-funded warrant for a complete description of the terms and conditions of the pre-funded warrants.

We are offering pre-funded warrants to purchase up to 2,366,862 shares of our common stock.

### ***Duration and Exercise Price***

Each pre-funded warrant offered hereby will have an initial exercise price per share equal to \$0.001. The pre-funded warrants will be immediately exercisable and may be exercised at any time until the pre-funded warrants are exercised in full. The exercise price and number of shares of common stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price.

### ***Exercisability***

Each pre-funded warrant may be exercised, in cash or, if there is no effective registration statement permitting the issuance or resale of the shares issuable upon exercise of the pre-funded warrant, by a cashless exercise at the election of the holder at any time following the date of issuance and from time to time thereafter until the pre-funded warrants are exercised in full. The pre-funded warrants will be exercisable in whole or in part by delivering to the Company a completed instruction form for exercise and complying with the requirements for exercise set forth in the pre-funded warrant. Payment of the exercise price may be made in cash or pursuant to a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the pre-funded warrant.

### ***Cashless Exercise***

At the time a holder exercises its pre-funded warrants, and if there is no effective registration statement permitting the issuance or resale of the shares issuable upon exercise of the pre-funded warrant, in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the pre-funded warrants.

### ***No Fractional Shares***

No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the pre-funded warrants. As to any fraction of a share which the holder would otherwise be entitled to purchase upon such exercise, the number of shares of common stock to be issued shall be rounded up to the nearest whole number.

### ***Exercise Limitation***

In general, a holder will not have the right to exercise any portion of a pre-funded warrant if the holder (together with its Attribution Parties (as defined in the pre-funded warrant)) would beneficially own in excess of 4.99% (or, at the election of the holder, 9.99%), of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrant. However, any holder may increase or decrease such percentage to any other percentage not in excess of 9.99% upon notice to us, provided, that any increase in this limitation will not be effective until 61 days after such notice from the holder to us and such increase or decrease will apply only to the holder providing such notice.

### ***Adjustment for Stock Splits***

The exercise price and the number of shares of common stock purchasable upon the exercise of the pre-funded warrants are subject to adjustment upon the occurrence of specific events, including sales of additional shares of common stock, stock dividends, stock splits, and combinations of our common stock.

### ***Dividends or Distributions***

If we declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of our common stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) at any time after the issuance of the pre-funded warrants, then, in each such case, the holders of the common warrants shall be entitled to participate in such distribution to the same extent that the holders would have participated therein if the holders had held the number of shares of common stock acquirable upon complete exercise of the pre-funded warrants.

### ***Purchase Rights***

If we grant, issue or sell any shares of our common stock or securities exercisable for, exchangeable for or convertible into our common stock, or rights to purchase stock, common warrants, securities or other property pro rata to the record holders of any class of shares of our common stock, referred to as Purchase Rights, then each holder of the pre-funded warrants 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 the pre-funded warrants immediately before the record date, 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.

### ***Fundamental Transactions***

In the event of a fundamental transaction, as described in the pre-funded warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the consummation of a business combination with another person or group of persons whereby such other person or group acquires greater than 50% of the voting power of the outstanding common stock and preferred stock, the holders of the pre-funded warrants will be entitled to receive upon exercise of the pre-funded warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the pre-funded warrants immediately prior to such fundamental transaction.

### ***Transferability***

Subject to applicable laws, a pre-funded warrant may be transferred at the option of the holder upon surrender of the pre-funded warrant to us together with the appropriate instruments of transfer.

### ***Trading Market***

There is no trading market available for the pre-funded warrants on any securities exchange or nationally recognized trading system.

### ***Rights as a Stockholder***

Except as otherwise provided in the pre-funded warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the pre-funded warrants do not have the rights or privileges of holders of our common stock, including any voting rights, unless and until they exercise their pre-funded warrants.

### ***Amendments***

The pre-funded warrants may be amended with the written consent of the holders of a majority of the then outstanding pre-funded warrants and us.

### ***Listing***

We do not intend to apply for listing of the pre-funded warrants on any national securities exchange.

### **Placement Agent Warrants**

The following summary of certain terms and provisions of the Placement Agent Warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the Placement Agent Warrants, the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of Placement Agent Warrant for a complete description of the terms and conditions of the Placement Agent Warrant.

We are offering Placement Agent Warrants to purchase up to 118,343 shares of our common stock.

### ***Duration and Exercise Price***

Each Placement Agent Warrant issued in this offering represents the right to purchase one share of common stock at an assumed initial exercise price of \$2.11 per share (equal to 125% of the assumed combined public offering price per share of common stock and accompanying common warrant to purchase one and a half shares of common stock). Each Placement Agent Warrant may be exercised in cash or, if there is no effective registration statement permitting the issuance or resale of the shares issuable upon exercise of the Placement Agent Warrant, by a cashless exercise six months after issuance and from time to time thereafter through and including the third anniversary of their issuance date.

The Placement Agent Warrants will be exercisable in whole or in part by delivering to the Company a completed instruction form for exercise and complying with the requirements for exercise set forth in the Placement Agent Warrants.

### ***Exercisability***

Each Placement Agent Warrant may be exercised, in cash or, if there is no effective registration statement permitting the issuance or resale of the shares issuable upon exercise of the Placement Agent Warrant, by a cashless exercise at the election of the holder at any time following the six month anniversary of the date of issuance and from time to time thereafter until the Placement Agent Warrants are exercised in full. The Placement Agent Warrants will be exercisable in whole or in part by delivering to the Company a completed instruction form for exercise and complying with the requirements for exercise set forth in the Placement Agent Warrant. Payment of the exercise price may be made in cash or pursuant to a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the Placement Agent Warrant.

### ***Cashless Exercise***

At the time a holder exercises its Placement Agent Warrants, and if there is no effective registration statement permitting the issuance or resale of the shares issuable upon exercise of the Placement Agent Warrants, in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the Placement Agent Warrant.

### ***No Fractional Shares***

No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the Placement Agent Warrants. As to any fraction of a share which the holder would otherwise be entitled to purchase upon such exercise, the number of shares of common stock to be issued shall be rounded up to the nearest whole number.

### ***Exercise Limitation***

In general, a holder will not have the right to exercise any portion of the Placement Agent Warrants if the holder (together with its Attribution Parties (as defined in the Placement Agent Warrant)) would beneficially own in excess of 4.99% (or, at the election of the holder, 9.99%) of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Placement Agent Warrant. However, any holder may increase or decrease such percentage to any other percentage not in excess of 9.99% upon notice to us, provided that any increase in this limitation will not be effective until 61 days after such notice from the holder to us and such increase or decrease will apply only to the holder providing such notice.

### ***Adjustment for Stock Splits***

The exercise price and the number of shares of common stock purchasable upon the exercise of the Placement Agent Warrants are subject to adjustment upon the occurrence of specific events, including sales of additional shares of common stock, stock dividends, stock splits, and combinations of our common stock.

### ***Dividends or Distributions***

If we declare or make any dividend (other than cash) or other distribution of its assets (or rights to acquire its assets) to holders of shares of our common stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction and excluding a stock split) at any time after the issuance of the Placement Agent Warrants, then, in each such case, the holders of the Placement Agent Warrants shall be entitled to participate in such distribution to the same extent that the holders would have participated therein if the holders had held the number of shares of common stock acquirable upon complete exercise of the Placement Agent Warrants.

### ***Purchase Rights***

If we grant, issue or sell any shares of our common stock or securities exercisable for, exchangeable for or convertible into our common stock, or rights to purchase stock, common warrants, securities or other property pro rata to the record holders of any class of shares of our common stock, referred to as Purchase Rights, then each holder of the Placement Agent Warrants 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 the Placement Agent Warrants immediately before the record date, 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.

### ***Fundamental Transactions***

In the event of a fundamental transaction, as described in the Placement Agent Warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the consummation of a business combination with another person or group of persons whereby such other person or group acquires greater than 50% of the voting power of the outstanding common stock and preferred stock, the holders of the Placement Agent Warrants will be entitled to receive upon exercise of the Placement Agent Warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Placement Agent Warrants immediately prior to such fundamental transaction.

### ***Transferability***

Neither the Placement Agent Warrants nor any shares of common stock issuable upon exercise thereof may be sold, transferred, assigned, pledged or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction for a period of six months immediately following the commencement of sales of the offering. Subject to the foregoing, the Placement Agent Warrants are transferable, in whole or in part, upon surrender of the Placement Agent Warrant to the Company and, upon such surrender, the Company will execute and deliver a new warrant to the name of the assignee(s) of the Placement Agent.

### ***Trading Market***

There is no trading market available for the Placement Agent Warrants on any securities exchange or nationally recognized trading system.

### ***Rights as a Stockholder***

Except as otherwise provided in the Placement Agent Warrants or by virtue of a holder's ownership of shares of our common stock, the holders of the Placement Agent Warrants do not have the rights or privileges of holders of our common stock, including any voting rights, unless and until they exercise their Placement Agent Warrants.

### ***Amendments***

The Placement Agent Warrants may be amended with the written consent of the holder of such Placement Agent Warrant and us.

### ***Listing***

We do not intend to apply for listing of the Placement Agent Warrants on any national securities exchange.

## MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR U.S. AND NON-U.S. HOLDERS

The following is a summary of the material U.S. federal income tax consequences of the acquisition, ownership and disposition of our common stock, common warrants and pre-funded warrants, but does not purport to be a complete analysis of all the potential tax considerations relating thereto. Throughout this summary, all references to our common stock are meant to include our pre-funded warrants. This summary is based upon the provisions of the Internal Revenue Code of 1986, as amended (the “Code”), Treasury Regulations promulgated thereunder, administrative rulings and judicial decisions, all as of the date hereof. These authorities may be changed or subject to differing interpretations, possibly with retroactive effect, with the resulting U.S. federal income tax consequences being different from those set forth below. We have not sought and will not seek any ruling from the Internal Revenue Service, or the IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS or a court will agree with such statements and conclusions.

This summary also does not address the tax considerations arising under the laws of any U.S. state or local or any non-U.S. jurisdiction, estate or gift tax, the 3.8% Medicare tax on net investment income or any alternative minimum tax consequences. In addition, this discussion does not address tax considerations applicable to a holder’s particular circumstances or to a holder that may be subject to special tax rules, including, without limitation:

- banks, insurance companies or other financial institutions;
- tax-exempt or government organizations;
- brokers or dealers in securities, commodities or currencies;
- traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
- persons that own, or are deemed to own, more than 5.0% of our capital stock;
- certain U.S. expatriates, citizens or former long-term residents of the United States;
- persons who hold our common stock as a position in a hedging transaction, “straddle,” “conversion transaction,” synthetic security, other integrated investment, or other risk reduction transaction;
- persons who do not hold our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, for investment purposes);
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- pension plans;
- partnerships, or other entities or arrangements treated as partnerships for U.S. federal income tax purposes, or investors in any such entities;
- persons for whom our stock constitutes “qualified small business stock” within the meaning of Section 1202 of the Code;
- integral parts or controlled entities of foreign sovereigns;
- passive foreign investment companies and corporations that accumulate earnings to avoid U.S. federal income tax;
- controlled foreign corporations, or foreign corporations with respect to which there are one or more United States shareholders within the meaning of Treasury Regulation Section 1.367(b)-3(b)(1)(ii);
- accrual method taxpayers that file applicable financial statements as described in Section 451(b) of the Code;
- grantor trusts;
- persons subject to the alternative minimum tax;
- U.S. persons whose “functional currency” is not the U.S. dollar;
- holders of the Placement Agent Warrants; or
- persons that acquire our common stock or common warrants as compensation for services.

In addition, if a partnership, including any entity or arrangement classified as a partnership for U.S. federal income tax purposes, holds our common stock or common warrants, the tax treatment of a partner generally will depend on the status of the partner, the activities of the partnership, and certain determinations made at the partner level. Accordingly, partnerships that hold our common stock or common warrants, and partners in such partnerships, should consult their tax advisors regarding the U.S. federal income tax consequences to them of the purchase, ownership, and disposition of our common stock or common warrants.

You are urged to consult your tax advisor with respect to the application of the U.S. federal income tax laws to your particular situation, as well as any tax consequences of the purchase, ownership and disposition of our common stock or common warrants arising under the U.S. federal estate or gift tax rules or under the laws of any U.S. state or local or any non-U.S. or other taxing jurisdiction or under any applicable tax treaty.

### **Definition of a U.S. Holder**

For purposes of this summary, a “U.S. Holder” is any beneficial owner of our common stock or common warrants that is a “U.S. person,” and is not a partnership, or an entity treated as a partnership or disregarded from its owner, each for U.S. federal income tax purposes. A U.S. person is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation created or organized under the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (1) is subject to the primary supervision of a U.S. court and the control of one or more U.S. persons (within the meaning of Section 7701(a)(30) of the Code), or (2) has a valid election in effect to be treated as a U.S. person for U.S. federal income tax purposes.

For purposes of this summary, a “Non-U.S. Holder” is any beneficial owner of our common stock or common warrants that is not a U.S. Holder or a partnership, or other entity treated as a partnership or disregarded from its owner, each for U.S. federal income tax purposes.

### **Treatment of Pre-Funded Warrants**

Although it is not entirely free from doubt, we believe a pre-funded warrant should be treated as common stock for U.S. federal income tax purposes and a holder of pre-funded warrants should generally be taxed in the same manner as a holder of our common stock, as described below. Accordingly, no gain or loss should be recognized upon the exercise of a pre-funded warrant and, upon exercise, the holding period of a pre-funded warrant should carry over to the common stock received. Similarly, the tax basis of the pre-funded warrant should carry over to the common stock received upon exercise, increased by the exercise price of \$0.001 per share. However, our characterization of a pre-funded warrant is not binding on the IRS, and the IRS may treat our pre-funded warrants as warrants to acquire our common stock. If so, the amount and character of your gain with respect to an investment in our pre-funded warrants could change. Accordingly, each holder should consult his, her or its own tax advisor regarding the risks associated with the acquisition of pre-funded warrants pursuant to this offering (including potential alternative characterizations). The balance of this discussion generally assumes that our characterization described above is respected for U.S. federal income tax purposes.

### **Tax Consequences to U.S. Holder**

#### ***Distributions on Common Stock***

As discussed above under “*Dividend Policy*,” we do not currently expect to make distributions on our common stock. In the event that we do make distributions of cash or other property, distributions paid on common stock, other than certain pro rata distributions of common stock, will be treated as a dividend to the extent paid out of our current or accumulated earnings and profits, if any, and will be includible in income by the U.S. Holder and taxable as ordinary income when received. If a distribution exceeds our current and accumulated earnings and profits, the excess will be first treated as a tax-free return of the U.S. Holder’s investment, up to the U.S. Holder’s tax basis in the common stock. Any remaining excess will be treated as a capital gain. Subject to applicable limitations, dividends paid to certain non-corporate U.S. Holders may be eligible for taxation as “qualified dividend income” and therefore may be taxable at rates applicable to long-term capital gains. U.S. Holders should consult their tax advisers regarding the availability of the reduced tax rate on dividends in their particular circumstances. Dividends received by a corporate U.S. Holder will be eligible for the dividends-received deduction if the U.S. Holder meets certain holding period and other applicable requirements. As our earnings and profits may be unknown at the time of distribution, U.S. Holders should expect to treat a distribution as a dividend even if that distribution would otherwise be treated as a tax-free return of capital or as capital gain under the rules described above.

#### ***Sale or Other Disposition of Common Stock***

For U.S. federal income tax purposes, gain or loss realized on the sale or other disposition of common stock will be capital gain or loss, and will be long-term capital gain or loss if the U.S. Holder held the common stock for more than one year. The amount of the gain or loss will equal the difference between the U.S. Holder’s tax basis in the common stock disposed of and the amount realized on the disposition. Long-term capital gains recognized by non-corporate U.S. Holders will be subject to reduced tax rates.

In the case of a redemption, such redemption generally will be treated as a sale or exchange of the common stock (rather than as a corporate distribution) if the redemption (i) is “substantially disproportionate” with respect to the U.S. Holder, (ii) results in a “complete termination” of the U.S. Holder’s interest or (iii) is “not essentially equivalent to a dividend” with respect to the U.S. Holder. The redemption of our common stock will not be “essentially equivalent to a dividend” if a U.S. Holder’s redemption results in a “meaningful reduction” of the U.S. Holder’s proportionate interest in us. Whether the redemption will result in a meaningful reduction in a U.S. Holder’s proportionate interest will depend on the particular facts and circumstances. However, the IRS has indicated in a published ruling that even a small reduction in the proportionate interest of a small minority stockholder in a publicly held corporation who exercises no control over corporate affairs may constitute such a “meaningful reduction.” A U.S. Holder should consult with its own tax advisors as to the tax consequences of a redemption.

Any such gain or loss recognized on the sale, taxable exchange or other taxable disposition of our common stock, including on a redemption as described above, will be capital gain or loss, and will be long-term capital gain or loss if the U.S. Holder’s holding period for the common stock so disposed of exceeds one year. The amount of gain or loss recognized will generally be equal to the difference between (1) the sum of the amount of cash and the fair market value of any property received in such disposition and (2) the U.S. Holder’s adjusted tax basis in its common stock so disposed of. A U.S. Holder’s adjusted tax basis in its common stock will generally equal the U.S. Holder’s acquisition cost for such common stock, less any prior distributions treated as a return of capital. The deductibility of capital losses is subject to limitations. Long-term capital gains recognized by non-corporate U.S. Holders are generally eligible for reduced rates of tax. If the U.S. Holder’s holding period for the common stock so disposed of is one year or less, any gain on a sale or other taxable disposition of the shares would be subject to short-term capital gain treatment and would be taxed at ordinary income tax rates. The deductibility of capital losses is subject to limitations. Any gain or loss recognized by a U.S. Holder on the sale or exchange of our common stock will generally be treated as U.S. source gain or loss.

#### ***Sale or Other Disposition, Exercise or Expiration of Common Warrants***

A U.S. Holder will recognize gain or loss on the sale or other taxable disposition of common warrants in an amount equal to the difference, if any, between the amount of cash plus the fair market value of any property received and such U.S. Holder’s tax basis in common warrants sold or otherwise disposed of, in each case as determined in U.S. dollars. Gain or loss recognized on such sale or other taxable disposition generally will be a capital gain or loss, which will be long-term capital gain or loss if the common warrant is held for more than one year. The gain or loss will generally be U.S.-source gain or loss for foreign tax credit purposes. Deductions for capital losses are subject to complex limitations under the Code.

A U.S. Holder should not recognize gain or loss on the exercise of common warrants and related receipt of common stock. A U.S. Holder’s initial tax basis in the common stock received on the exercise of a common warrant should be equal to the sum of (i) such U.S. Holder’s initial tax basis in such common warrant plus (ii) the exercise price paid by such U.S. Holder on the exercise of such common warrant.

Upon the lapse or expiration of a warrant, a U.S. Holder will recognize a loss in an amount equal to such U.S. Holder’s tax basis in the warrant. Any such loss generally will be a capital loss and will be long-term capital loss if the warrants are held for more than one year. Deductions for capital losses are subject to complex limitations under the Code.

#### ***Certain Adjustments to the Common Warrants and Pre-funded Warrants***

Under Section 305 of the Code, an adjustment to the number of shares of common stock that will be issued on the exercise of the common warrants or pre-funded warrants, or an adjustment to the exercise price of the common warrants or pre-funded warrants, may be treated as a constructive distribution to a U.S. Holder of the common warrants or pre-funded warrants if, and to the extent that, such adjustment has the effect of increasing such U.S. Holder’s proportionate interest in our earnings and profits or our assets, depending on the circumstances of such adjustment (for example, if such adjustment is to compensate for a distribution of cash or property to the shareholders). Adjustments to the exercise price of the common warrants or pre-funded warrants made pursuant to a bona fide reasonable adjustment formula that has the effect of preventing dilution of the interest of the holder of the common warrants or pre-funded warrants should generally not be considered to result in a constructive distribution. Any such constructive distribution would be taxable whether or not there is an actual distribution of cash or other property (see more detailed discussion of the rules applicable to distributions we make under “*Distributions on Common Stock*” above).

## Tax Consequences to Non-U.S. Holders

### Distributions

As discussed in the section entitled “*Dividend Policy*,” we do not anticipate paying any dividends on our common stock in the foreseeable future. If we make distributions on our common stock, those payments will constitute dividends for U.S. federal income tax purposes to the extent we have current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed both our current and our accumulated earnings and profits, they will constitute a return of capital and will first reduce a Non-U.S. Holder’s basis in our common stock, as applicable, but not below zero. Any excess will be treated as capital gain and will be treated as described below under the “—*Gain on Sale or Other Disposition of Common Stock*” section. Any such distributions would be subject to the discussions below regarding back-up withholding and the Foreign Account Tax Compliance Act, or FATCA.

Subject to the discussion below on effectively connected income, any dividend paid to a Non-U.S. Holder generally will be subject to U.S. withholding tax either at a rate of 30% of the gross amount of the dividend or such lower rate as may be specified by an applicable income tax treaty between the U.S. and such holder’s country of residence. To receive a reduced treaty rate, a Non-U.S. Holder must provide us or our agent with an IRS Form W-8BEN or W-8BEN-E (generally including a U.S. taxpayer identification number), or another appropriate version of IRS Form W-8 (or a successor form), which must be updated periodically, and which, in each case, must certify qualification for the reduced treaty rate. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

Dividends paid to a Non-U.S. Holder that are effectively connected with the Non-U.S. Holder’s conduct of a trade or business within the United States and that are not eligible for relief from U.S. (net basis) income tax under an applicable income tax treaty, generally are exempt from the (gross basis) withholding tax described above. To obtain this exemption from withholding tax, the Non-U.S. Holder must provide the applicable withholding agent with an IRS Form W-8ECI or successor form or other applicable IRS Form W-8 certifying that the dividends are effectively connected with the Non-U.S. Holder’s conduct of a trade or business within the United States. Such effectively connected dividends, if not eligible for relief under a tax treaty, would not be subject to a withholding tax, but would be taxed at the same rates applicable to U.S. persons, net of certain deductions and credits and if, in addition, the Non-U.S. Holder is a corporation, may also be subject to a branch profits tax at a rate of 30% (or such lower rate as may be specified by an applicable income tax treaty).

If you are eligible for a reduced rate of withholding tax pursuant to a tax treaty, you may be able to obtain a refund of any excess amounts withheld if you timely file an appropriate claim for refund with the IRS.

### Gain on Sale or Other Disposition of Common Stock and Common Warrants

Subject to the discussion below regarding backup withholding and FATCA, a Non-U.S. Holder generally will not be required to pay U.S. federal income tax on any gain realized upon the sale or other disposition of our common stock or common warrants unless:

- the gain is effectively connected with the Non-U.S. Holder’s conduct of a trade or business within the United States and not eligible for relief under an applicable income tax treaty, in which case the Non-U.S. Holder will be required to pay tax on the net gain derived from the sale under regular U.S. federal income tax rates applicable to U.S. persons, and for a Non-U.S. Holder that is a corporation, such Non-U.S. Holder may be subject to the branch profits tax at a 30% rate (or such lower rate as may be specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items;
- the Non-U.S. Holder is an individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met, in which case the Non-U.S. Holder will be required to pay a flat 30% tax on the gain derived from the sale, which tax may be offset by U.S. source capital losses (even though the Non-U.S. Holder is not considered a resident of the United States) (subject to applicable income tax or other treaties); or

- we are a “U.S. real property holding corporation” for U.S. federal income tax purposes, or a USRPHC, at any time within the shorter of the five-year period preceding the disposition or the Non-U.S. Holder’s holding period for our common stock. We believe we are not currently and do not anticipate becoming a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our United States real property interests relative to the fair market value of our other business assets, there can be no assurance that we will not become a USRPHC in the future. Even if we become a USRPHC, however, gain arising from the sale or other taxable disposition by a Non-U.S. Holder of our common stock will not be subject to United States federal income tax if (a) shares of our common stock are “regularly traded,” as defined by applicable Treasury Regulations, on an established securities market, such as Nasdaq, and (b) the Non-U.S. Holder owns or owned, actually and constructively, 5% or less of the shares of our common stock throughout the five-year period ending on the date of the sale or exchange. If the foregoing exception does not apply, such Non-U.S. Holder’s proceeds received on the disposition of shares will generally be subject to withholding at a rate of 15% and such Non-U.S. Holder will generally be taxed on any gain in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply. Non-U.S. Holders of pre-funded warrants should consult their tax advisors regarding the application of these rules with respect to the pre-funded warrants (which are not expected to be “regularly traded” on an established securities market).

### ***Possible Constructive Distributions***

Non-U.S. Holders will generally be taxed on constructive distribution as described above under “*Certain Adjustments to the Common Warrants and Pre-funded Warrants.*” An adjustment which has the effect of preventing dilution generally should not be a taxable event. Nevertheless, a Non-U.S. Holder of common warrants or pre-funded warrants would be treated as receiving a constructive distribution from us if, for example, the adjustment increases the holder’s proportionate interest in our assets or earnings and profits (e.g., through an increase in the number of shares of common stock that would be obtained upon exercise) as a result of a distribution of cash to the holders of shares of our common stock which is taxable to such holders as a distribution. A Non-U.S. Holder would be subject to U.S. federal income tax withholding as described above under “*Distributions*” under that section in the same manner as if such Non-U.S. Holder received a cash distribution from us on common stock equal to the fair market value of such increased interest.

### **Information Reporting and Backup Withholding**

Information returns may be filed with the IRS in connection with distributions on common stock, and the proceeds of a sale or other disposition of common stock or common warrants. A non-exempt U.S. Holder may be subject to U.S. backup withholding on these payments if it fails to provide its taxpayer identification number to the withholding agent and comply with certification procedures or otherwise establish an exemption from backup withholding.

A Non-U.S. Holder may be subject to U.S. information reporting and backup withholding on these payments unless the Non-U.S. Holder complies with certification procedures to establish that it is not a U.S. person (within the meaning of the Code). The certification requirements generally will be satisfied if the Non-U.S. Holder provides the applicable withholding agent with a statement on the applicable IRS Form (or a suitable substitute or successor form), together with all appropriate attachments, signed under penalties of perjury, stating, among other things, that such Non-U.S. Holder is not a U.S. person. Applicable Treasury Regulations provide alternative methods for satisfying this requirement. In addition, the amount of distributions on common stock paid to a Non-U.S. Holder, and the amount of any U.S. federal tax withheld therefrom, must be reported annually to the IRS and the holder. This information may be made available by the IRS under the provisions of an applicable tax treaty or agreement to the tax authorities of the country in which the Non-U.S. Holder resides.

Payment of the proceeds of the sale or other disposition of common stock or common warrants to or through a non-U.S. office of a U.S. broker or of a non-U.S. broker with certain specified U.S. connections generally will be subject to information reporting requirements, but not backup withholding, unless the Non-U.S. Holder certifies under penalties of perjury that it is not a U.S. person or an exemption otherwise applies. Payments of the proceeds of a sale or other disposition of common stock or common warrants to or through a U.S. office of a broker generally will be subject to information reporting and backup withholding, unless the Non-U.S. Holder certifies under penalties of perjury that it is not a U.S. person or otherwise establishes an exemption.

Backup withholding is not an additional tax. The amount of any backup withholding from a payment generally will be allowed as a credit against the holder's U.S. federal income tax liability and may entitle the holder to a refund, provided that the required information is timely furnished to the IRS.

### **Foreign Accounts**

The Code generally imposes a U.S. federal withholding tax of 30% on dividends and, subject to the discussion below regarding proposed regulations issued by the U.S. Treasury Department, the gross proceeds of a disposition of securities paid to a "foreign financial institution" (as specifically defined for this purpose), unless such institution enters into an agreement with the U.S. government to, among other things, withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or otherwise qualifies for an exemption from these rules. A U.S. federal withholding tax of 30% also applies to dividends and, subject to the discussion below regarding proposed regulations issued by the U.S. Treasury Department, will apply to the gross proceeds of a disposition of securities paid to a non-financial foreign entity (as defined in the Code), unless such entity either provides the withholding agent with a certification that it does not have any substantial direct or indirect "United States owners" (as defined in the Code) or provides information regarding each substantial United States owners of the entity, or otherwise qualifies for an exemption from these rules.

Under certain circumstances, a Non-U.S. Holder might be eligible for refunds or credits of such taxes. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in the paragraph above.

The U.S. Treasury Department released proposed regulations which, if finalized in their present form, would eliminate the federal withholding tax of 30% applicable to the gross proceeds of a sale or other disposition of our common stock or common warrants. In its preamble to such proposed regulations, the U.S. Treasury Department stated that taxpayers may generally rely on the proposed regulations until final regulations are issued. Prospective investors should consult their own tax advisors regarding the possible impact of these rules on their investment in our common stock or common warrants, and the possible impact of these rules and the proposed regulations on the entities through which they hold our common stock or common warrants, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of this 30% withholding tax.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS TAX ADVISOR REGARDING THE PARTICULAR U.S. FEDERAL, STATE AND LOCAL AND NON-U.S. TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR SECURITIES, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAWS. PROSPECTIVE INVESTORS SHOULD ALSO CONSULT WITH THEIR TAX ADVISORS WITH RESPECT TO SUCH CHANGES IN U.S. TAX LAW AS WELL AS POTENTIAL CONFORMING CHANGES IN STATE TAX LAWS.

## PLAN OF DISTRIBUTION

Pursuant to a placement agency agreement, dated as of [ ], 2026 (the “Placement Agency Agreement”), we have engaged Joseph Gunnar & Co., LLC (the “Placement Agent”) to act as our exclusive placement agent to solicit offers to purchase the securities offered by this prospectus on a reasonable best efforts basis. The Placement Agent is not purchasing or selling any securities, nor are they required to arrange for the purchase and sale of any specific number or dollar amount of securities, other than to use their “reasonable best efforts” to arrange for the sale of the securities by us. Therefore, we may not sell the entire amount of securities being offered.

The terms of this offering are subject to market conditions and negotiations between us, the Placement Agent and prospective investors. The Placement Agent will have no authority to bind us by virtue of the Placement Agency Agreement. This is a best-efforts offering and there is no minimum amount of proceeds that is a condition to closing of this offering. Investors purchasing securities offered hereby will have the option to execute a securities purchase agreement with us. In addition to rights and remedies available to all purchasers in this offering under federal securities and state law, the purchasers which enter into a securities purchase agreement will also be able to bring claims of breach of contract against us. The ability to pursue a claim for breach of contract is material to larger purchasers in this offering as a means to enforce the following covenants uniquely available to them under the securities purchase agreement: (i) a covenant to not enter into variable rate financings for a period of up to the earlier of six months following the date of the last closing of a Tranche of this offering or the date as of which purchasers no longer the securities acquired under such securities purchase agreement, subject to certain exceptions; and (ii) a covenant to not enter into any equity financings until the earlier of the ninetieth (90<sup>th</sup>) day after last closing of a Tranche of this offering and the date upon which all pre-funded warrants and common warrants have been exercised, subject to certain exceptions. The Placement Agent may engage one or more sub-agents or selected dealers in connection with the offering.

The nature of the representations, warranties and covenants in the securities purchase agreements shall include, among others:

- standard issuer representations and warranties of the Company on matters such as organization, qualification, authorization, no conflict, no governmental filings required, current in SEC filings, no litigation (except as set forth herein), labor or other compliance issues, environmental, regulatory certificates, authorizations and permits, intellectual property and title matters and compliance with various laws such as the Foreign Corrupt Practices Act; and
- covenants regarding matters such as registration of warrant shares, no integration with other offerings, filing of a Form 8-K to disclose entering into these securities purchase agreements, no shareholder rights plans, no material nonpublic information, use of proceeds, indemnification of purchasers, reservation and listing of common stock issued in this offering, no subsequent equity sales for ninety (90) days, subject to certain exceptions, and no Variable Rate Transactions (as defined in the securities purchase agreement) until the earlier of ninety (90) days from the date of the securities purchase agreement and the date when purchasers no longer hold the securities acquired in connection with this offering, subject to certain exceptions.

The Placement Agency Agreement provides that the Placement Agent’s obligations are subject to conditions contained in the Placement Agency Agreement.

Delivery of the securities offered hereby in the Initial Tranche is expected to occur on or about [ ], 2026, subject to satisfaction of certain customary closing conditions. Delivery of the securities offered hereby in the Second Tranche would, subject to the satisfaction of certain conditions and customary closing conditions, be made on the Second Tranche Closing Date.

### Fees and Expenses

The following table shows the public offering price per share of Common Stock and common warrant, and per pre-funded warrant and common warrant, placement agent fees payable by us, and proceeds before expenses to us:

	Per Share and Accompanying Common Warrant	Per Pre- Funded Warrant and Accompanying Common Warrant	Total
Public offering price	\$	\$	\$
Placement Agent fees			
Proceeds, before expenses, to us <sup>(1)</sup>	\$	\$	\$

(1) The amount of the offering proceeds to us presented in this table does not give effect to the exercise, if any, of the common warrants or the pre-funded warrants.

We have agreed to pay the Placement Agent a total cash fee equal to up to seven and a half percent (7.5%) of the aggregate gross proceeds raised in the offering. We have also agreed to reimburse the Placement Agent, subject to the terms of the Placement Agent Agreement, for certain reasonable accountable out-of-pocket expenses incurred relating to the offering, up to a maximum of \$60,000, comprised of (i) up to \$30,000 relating to the fees and expenses of the Placement Agent's counsel if the offering closes, (ii) \$15,000 related to the fees, expenses and disbursements relating to the background checks of the Company's officers, directors and entities, (iii) up to \$5,000 related to the Placement Agent's actual accountable, reasonable and documented "road show" expenses for the offering, and (iv) \$5,000 related to reasonable fees and disbursements of "blue sky" counsel upon commencement of "blue sky" work by such counsel and an additional \$5,000 at the closing of the offering, unless otherwise agreed. We estimate the total offering expenses of this offering that will be payable by us, excluding the Placement Agent fees and expenses, will be approximately \$0.2 million.

### **Placement Agent Warrants**

In addition, we have agreed to issue warrants (the "Placement Agent Warrants") to the Placement Agent or its designees to purchase up to 118,343 shares of our common stock (representing five percent (5%) of the shares of common stock and/or pre-funded warrants sold to investors introduced by the Placement Agent in this offering). The Placement Agent Warrants will be exercisable at any time, and from time to time, in whole or in part, commencing from the date six (6) months from the date of issuance and expiring three (3) years from their issue date, at an assumed exercise price of \$2.11 (representing 125% of the assumed public offering price per share of common stock and accompanying common warrant to purchase one and a half shares of common stock). In addition, the Placement Agent Warrants provide for certain demand and piggyback registration rights, including one demand registration right in accordance with Rule 5110(g)(8)(b) and unlimited piggyback registration rights for a period of five (5) years from the commencement of sales of the offering. The demand registration rights and piggyback registration rights provided will terminate five years from the commencement of the sales of securities to the public in compliance with FINRA Rule 5110(g)(8)(c) and (d), respectively. Furthermore, the Placement Agent Warrants must not be sold, transferred, assigned, pledged or hypothecated, or be the subject of any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of the securities for a period of 180 days beginning on the date of Closing in accordance with FINRA Rule 5110(e)(1). We will bear all fees and expenses attendant to registering the securities issuable on exercise of the Placement Agent Warrants other than underwriting commissions incurred and payable by the holders. The Placement Agent Warrants and the common stock issuable upon exercise thereof are being registered on the registration statement of which this prospectus is a part. The form of the Placement Agent Warrant has been included as an exhibit to this registration statement of which this prospectus forms a part.

### **Tail**

In the event that any investors that were contacted by the Placement Agent in connection with this offering (the "Tail Parties") provide any capital to us in a public or private offering or other financing or capital-raising transaction of any kind (each, a "Tail Financing") within six (6) months following the closing of this offering, provided that any Tail Parties who participate in the offering shall be twelve (12) months following the closing of this offering, we shall pay the Placement Agent the cash and warrant compensation provided above on the gross proceeds raised in such Tail Financing from such investors.

### **Participation Right**

If the Company does not elect to extend the engagement of the Placement Agent or otherwise elects to pursue an alternative financing other than this offering, upon each and every public and private equity-linked or convertible debt offering, including our common stock or similar forms of our capital stock, as well as securities that may be convertible into or exercisable or exchangeable for our capital stock (including convertible and non-convertible debt), by the Company, any successor to the Company, or any of our subsidiaries (each a "Subsequent Financing"), the Placement Agent will have the irrevocable right, but not the obligation, to participate in such Subsequent Financing as the investment banker, co-manager, co-placement agent, sales agent, advisor, or otherwise, whichever is applicable, for at least twenty-five percent (25%) of the total economics of the Subsequent Financing and on the same terms, conditions and price provided for in the Subsequent Financing ("Participation Right"). The Company agreed to provide the Placement Agent with reasonable written notice of its intention to effect a Subsequent Financing and the Placement Agent has three (3) days from the receipt of such notice to respond to the Company with its election regarding its Participation Right with respect to a Subsequent Financing. If the Placement Agent fails to exercise its Participation Right within such period, such failure will be deemed a waiver of the Participation Right with respect to the Subsequent Financing that is the subject of such notice. The Participation Right expires on August 17, 2026.

## **Determination of Offering Price**

The public offering price per share of common stock and/or pre-funded warrant and accompanying common warrant that we are offering and the exercise prices and other terms of the pre-funded warrants and common warrants were negotiated between us and the investors, in consultation with the Placement Agent based on the trading of our common stock prior to this offering, among other things. Other factors considered in determining the public offering prices of the securities we are offering and the exercise prices and other terms of the pre-funded warrants and common warrants include the history and prospects of our Company, the stage of development of our business, our business plans for the future and the extent to which they have been implemented, an assessment of our management, general conditions of the securities markets at the time of the offering and such other factors as were deemed relevant.

## **Lock-up Agreements**

We, each of our executive officers and directors and our 10% or greater stockholders have agreed with the Placement Agent to be subject to a lock-up period of ninety (90) days following the closing of this offering. This means that, during the applicable lock-up period, we and such persons may not offer for sale, contract to sell, or sell any shares of our common stock or any securities convertible into, or exercisable or exchangeable for, shares of our common stock, subject to certain customary exceptions. The Placement Agent may, in its sole discretion and without notice, waive the terms of any of these lock-up agreements. In addition, we have agreed to not issue any securities that are subject to a price reset based on the trading prices of our common stock or upon a specified or contingent event in the future or enter into any agreement to issue securities at a future determined price for a period of ninety (90) days following the closing date of this offering, subject to certain exceptions. The Placement Agent may waive this prohibition in its sole discretion and without notice.

## **Transfer Agent and Registrar and Warrant Agent**

The transfer agent for our common stock is Continental Stock Transfer & Trust. We expect to act as the warrant agent for the warrants issued in this offering.

## **Nasdaq Listing**

Our common stock is currently listed on Nasdaq under the symbol "VIVS". On March 26, 2026, the closing price per share of our common stock was \$1.69.

## **Indemnification**

We have agreed to indemnify the Placement Agent against certain liabilities, including certain liabilities arising under the Securities Act and liabilities arising from breaches of representations and warranties contained in our engagement letter with the Placement Agent. We have also agreed to contribute to payments that the Placement Agent may be required to make for these liabilities.

In addition, we will indemnify the purchasers of securities in this offering against liabilities arising out of or relating to (i) any breach of any of the representations, warranties, covenants or agreements made by us in the securities purchase agreement or related documents or (ii) any action instituted against a purchaser by a third party (other than a third party who is affiliated with such purchaser) with respect to the securities purchase agreement or related documents and the transactions contemplated thereby, subject to certain exceptions.

## **Regulation M**

The Placement Agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the sale of our securities offered hereby by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. The Placement Agent will be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of our securities by the Placement Agent. Under these rules and regulations, the Placement Agent may not (i) engage in any stabilization activity in connection with our securities; and (ii) bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until they have completed their participation in the distribution.

## **Other Relationships**

The Placement Agent and its affiliates may in the future engage in investment banking transactions and other commercial dealings in the ordinary course of business with us or our affiliates. The Placement Agent may in the future receive customary fees and commissions for these transactions. However, except as disclosed in this prospectus, we have no present arrangements with the placement agent for any further services.

## **Electronic Distribution**

A prospectus in electronic format may be made available on a website maintained by the Placement Agent and the Placement Agent may distribute prospectuses electronically. Other than the prospectus in electronic format, the information on these websites is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or the Placement Agent and should not be relied upon by investors.

## LEGAL MATTERS

The validity of the securities being offered by this prospectus will be passed upon for us by Paul Hastings LLP, Palo Alto, California. The Placement Agent is being represented by Pryor Cashman LLP, New York, New York, in connection with this offering.

## EXPERTS

The Company's consolidated financial statements as of and for the two years ended March 31, 2025, incorporated by reference in this prospectus have been so included in reliance on the report of Rosenberg Rich Baker Berman, P.A., an independent registered public accounting firm, given upon the authority of such firm as experts in accounting and auditing.

## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The documents incorporated by reference into this prospectus contain important information that you should read about us.

The following documents are incorporated by reference into this prospectus:

- our Annual Report on [Form 10-K](#) for the year ended March 31, 2025 filed with the SEC on June 5, 2025, as amended by Amendment No. 1 on [Form 10-K/A](#), filed with the SEC on July 29, 2025;
- Our Quarterly Report on Form 10-Q for the quarterly periods ended June 30, 2025, September 30, 2025 and December 31, 2025, filed with the SEC on [August 12, 2025](#), [November 6, 2025](#) and [February 11, 2026](#);
- Our Current Reports on Form 8-K filed with the SEC on [April 2, 2025](#) (other than Items 2.02 and 7.01 and Exhibit 99.1 thereto), [April 24, 2025](#) (other than Item 7.01 and Exhibit 99.1 thereto), [May 6, 2025](#), [August 14, 2025](#) (other than Item 7.01 and Exhibit 99.1 thereto) and [December 18, 2025](#); and
- The description of our common stock set forth in our Registration Statement on [Form 8-A](#) (File No. 001-35996), filed with the SEC on July 26, 2016, including any amendments or reports filed for the purpose of updating such description, including the description of our common stock included as [Exhibit 4.2](#) to our Annual Report on [Form 10-K](#) for the fiscal year ended March 31, 2025, filed with the SEC on June 5, 2025, as amended by Amendment No. 1 on [Form 10-K/A](#), filed with the SEC on July 29, 2025.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of such registration statement, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus and such future filings and will become a part of this prospectus from the respective dates that such documents are filed with the SEC. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes hereof or of the related prospectus supplement to the extent that a statement contained herein or in any other subsequently filed document which is also incorporated or deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may obtain any of the documents incorporated by reference in this prospectus from the SEC through the SEC’s website at the address provided above. Documents incorporated by reference are also available from us, without charge. You may obtain documents incorporated by reference in this prospectus by requesting them in writing or by telephone at the following address or phone number:

VivoSim Labs, Inc.  
11555 Sorrento Valley Road, Suite 100  
San Diego, CA 92121  
Attn: Corporate Secretary  
Phone: (858) 224-1000

## WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the securities being offered under this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities being offered under this prospectus, we refer you to the registration statement of which this prospectus is a part and the exhibits filed as a part of the registration statement. Statements contained in this prospectus as to the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit.

The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including VivoSim Labs, Inc. The SEC's Internet site can be found at <http://www.sec.gov>. You may also request a copy of these filings, at no cost, by writing us at 11555 Sorrento Valley Road, Suite 100, San Diego, CA 92121 or telephoning us at (858) 224-1400.

We are subject to the information and reporting requirements of the Exchange Act and, in accordance with this law, file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information are available at the website of the SEC referred to above. We also maintain a website at [www.vivosim.ai](http://www.vivosim.ai). You may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on or connected to our website is not a part of, and is not incorporated into, this prospectus and the inclusion of our website address in this prospectus is an inactive textual reference only.

## DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers, and persons controlling us pursuant to the provisions described in Item 14 of the registration statement of which this prospectus is a part or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable. In the event that a claim for indemnification against such liabilities (other than our payment of expenses incurred or paid by our directors, officers, or controlling persons in the successful defense of any action, suit, or proceeding) is asserted by our directors, officers, or controlling persons in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by us is against public policy as expressed in the Securities Act and will be governed by the final adjudication of the issue.



**Up to 2,366,86 shares of Common Stock (or Pre-Funded Warrants to Purchase up to 2,366,862 Shares of Common Stock in lieu of Common Stock)  
Common Warrants to Purchase up to 3,550,293 Shares of Common Stock  
Placement Agent Warrants to Purchase up to 118,343 Shares of Common Stock  
Up to 2,366,862 Shares of Common Stock Underlying the Pre-Funded Warrants  
Up to 8,875,733 Shares of Common Stock Underlying the Common Warrants  
Up to 118,343 Shares of Common Stock Underlying the Placement Agent Warrants**

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**PROSPECTUS**

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Placement Agent:

**Joseph Gunnar & Co., LLC**

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[        ], 2026

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## PART II

### INFORMATION NOT REQUIRED IN THE PROSPECTUS

#### *Item 13. Other Expenses of Issuance and Distribution.*

The following table sets forth an estimate of the fees and expenses relating to the issuance and distribution of the securities being registered hereby, other than Placement Agent fees, all of which shall be borne by VivoSim Labs, Inc. (the “Registrant”). All of such fees and expenses, except for the SEC registration fee, are estimates:

SEC registration fee	\$	2,659
FINRA filing fee	\$	1,100
Legal fees and expenses	\$	150,000
Printing fees and expenses	\$	10,000
Accounting fees and expenses	\$	35,000
Transfer agent fees and expenses	\$	5,000
Miscellaneous fees and expenses	\$	80,000
Total	\$	<u>283,759</u>

#### *Item 14. Indemnification of Directors and Officers.*

Section 102 of the General Corporation Law of the State of Delaware (the “DGCL”) permits a corporation to eliminate or limit the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty to the corporation or its stockholders, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase or redemption in violation of the DGCL or derived an improper personal benefit. The Registrant’s certificate of incorporation, as amended, provides that no director of the Registrant shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he or she was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to judgments, fines and amounts paid in settlement in connection with such action, suit or proceeding or with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

The Registrant's amended and restated bylaws provide that the Registrant will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of the Registrant) by reason of the fact that he or she is or was a director or officer of the Registrant, or is or was serving, at the Registrant's request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), against expenses (including, attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the Registrant's best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. The Registrant's bylaws, as amended, also provide that the Registrant will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of the Registrant to procure a judgment in the Registrant's favor by reason of the fact that the Indemnitee is or was, a director or officer, or is or was serving, or has agreed to serve, at the Registrant's request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including, attorneys' fees) actually and reasonably incurred by such Indemnitee in connection with the defense or settlement of such action or suit, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the Registrant's best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the Registrant, unless, and only to the extent, that the Court of Chancery or the court in which such action or suit was brought determines, despite the adjudication of liability but in view of all the circumstances, he or she is entitled to indemnification of such expenses which the Court of Chancery or such other court shall deem proper. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified against expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

The Registrant has entered into indemnification agreements with each of its directors and executive officers that may be broader than the specific indemnification provisions contained in the DGCL. These indemnification agreements require the Registrant, among other things, to indemnify its directors and executive officers against liabilities that may arise by reason of their status or service. These indemnification agreements also require the Registrant to advance all expenses incurred by the directors and executive officers in investigating or defending any such action, suit or proceeding, subject to certain exceptions.

The Registrant's amended and restated bylaws provide that the Registrant may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Registrant or is or was serving at the request of the Registrant as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her in any such capacity, or arising out of his or her status as such, whether or not the Registrant would have the power to indemnify such person against such liability under the DGCL. The Registrant has obtained insurance under which, subject to the limitations of the insurance policies, coverage is provided to the Registrant's directors and executive officers against loss arising from claims made by reason of breach of fiduciary duty or other wrongful acts as a director or executive officer, including claims relating to public securities matters, and to the Registrant with respect to payments that may be made by the Registrant to these directors and executive officers pursuant to the Registrant's indemnification obligations or otherwise as a matter of law.

See also the undertakings set out in response to Item 17 herein.

***Item 15. Recent Sales of Unregistered Securities.***

Since March 1, 2023, the Registrant has issued the following securities that were not registered under the Securities Act:

- (1) On December 6, 2023, the Registrant issued 5,482 unregistered shares of common stock to a marketing firm as consideration for services pursuant to a marketing agreement.

The issuance of the shares of common stock was not registered under the Securities Act in reliance upon the exemption from registration provided by Section 4(a)(2) of the Securities Act promulgated by the SEC, and in reliance on similar exemptions under applicable state laws. The marketing firm represented that it was an accredited investor and was acquiring the shares of common stock for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and that it could bear the risks of the investments and could hold the securities for an indefinite period of time.

**Item 16. Exhibits and Financial Statement Schedules.**

(a) Exhibits

<b>Exhibit No.</b>	<b>Description</b>
1.1*	<a href="#">Form of Placement Agency Agreement.</a>
2.1#	<a href="#">Asset Purchase Agreement, dated February 23, 2025, by and between the Company, Eli Lilly and Company and for certain sections therein, Organovo, Inc. (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed by the Company with the SEC on February 25, 2025).</a>
3.1	<a href="#">Certificate of Incorporation of Organovo Holdings, Inc. (Delaware) (incorporated by reference from Exhibit 3.1 to the Company's Current Report on Form 8-K, as filed with the SEC on February 3, 2012).</a>
3.2	<a href="#">Certificate of Amendment of Certificate of Incorporation of Organovo Holdings, Inc. (incorporated by reference from Exhibit 3.1 to the Company's Current Report on Form 8-K, as filed with the SEC on July 27, 2018).</a>
3.3	<a href="#">Certificate of Second Amendment of Certificate of Incorporation of Organovo Holdings, Inc. (incorporated by reference from Exhibit 3.1 to the Company's Current Report on Form 8-K as filed with the SEC on August 17, 2020).</a>
3.4	<a href="#">Certificate of Third Amendment of Certificate of Incorporation (incorporated by reference from Exhibit 3.1 to the Company's Current Report on Form 8-K as filed with the SEC on March 21, 2025).</a>
3.5	<a href="#">Certificate of Fourth Amendment of Certificate of Incorporation (incorporated by reference from Exhibit 3.1 to the Company's Current Report on Form 8-K as filed with the SEC on April 24, 2025).</a>
3.4	<a href="#">Amended and Restated Bylaws (incorporated by reference from Exhibit 3.2 to the Company's Current Report on Form 8-K as filed with the SEC on April 24, 2025).</a>
4.1	<a href="#">Description of Securities (incorporated by reference to Exhibit 4.2 to the Company's Annual Report on Form 10-K, as filed with the SEC on June 5, 2025).</a>
4.2	<a href="#">Form of Common Warrant (incorporated by reference from Exhibit 4.1 to the Company's Current Report on Form 8-K, as filed with the SEC on May 13, 2024).</a>
4.3*	<a href="#">Form of Pre-Funded Warrant.</a>
4.4*	<a href="#">Form of Common Warrant.</a>
4.5*	<a href="#">Form of Placement Agent Warrant.</a>
5.1*	<a href="#">Opinion of Paul Hastings LLP.</a>
10.1+	<a href="#">VivoSim Labs, Inc. Amended and Restated 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Annual Report as filed with the SEC on June 5, 2025).</a>
10.2+	<a href="#">Form of Stock Option Award Agreement under the 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.16 to the Company's Current Report on Form 8-K, as filed with the SEC on February 13, 2012).</a>
10.3+	<a href="#">Form of Non-Employee Director Stock Option Award Agreement under the 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.35 to the Company's Annual Report on Form 10-K, as filed with the SEC on June 9, 2015).</a>
10.4+	<a href="#">Form of Executive Stock Option Award Agreement under the 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.36 to the Company's Annual Report on Form 10-K, as filed with the SEC on June 9, 2015).</a>
10.5+	<a href="#">Form of Indemnification Agreement (incorporated by reference from Exhibit 10.17 to the Company's Current Report on Form 8-K, as filed with the SEC on February 13, 2012).</a>

Exhibit No.	Description
10.6#	<a href="#"><u>License Agreement dated as of March 24, 2009, by and between Organovo, Inc. and the Curators of the University of Missouri (incorporated by reference to Exhibit 10.6 to the Company's Annual Report as filed with the SEC on June 5, 2025).</u></a>
10.7#	<a href="#"><u>License Agreement dated as of March 12, 2010 by and between the Company and the Curators of the University of Missouri (incorporated by reference to Exhibit 10.7 to the Company's Annual Report as filed with the SEC on June 5, 2025).</u></a>
10.8+	<a href="#"><u>Severance and Change in Control Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 9, 2015).</u></a>
10.9+	<a href="#"><u>Amendment No.1 to Severance and Change in Control Plan, dated May 19, 2020 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on May 20, 2020).</u></a>
10.10+	<a href="#"><u>Form of Severance and Change in Control Plan Participation Agreement (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 9, 2015).</u></a>
10.11+	<a href="#"><u>Form of Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement (Retention Form) under the 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on August 4, 2016).</u></a>
10.12+	<a href="#"><u>Form of Employee Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement under the 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on August 4, 2016).</u></a>
10.13+	<a href="#"><u>Form of Non-Employee Director Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement under the 2012 Equity Incentive Plan (incorporated by reference from Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on August 4, 2016).</u></a>
10.14+	<a href="#"><u>Consulting Agreement, dated September 15, 2020, by and between Organovo and Multi Dimensional Bio Insight LLC. (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 5, 2020).</u></a>
10.15+	<a href="#"><u>Consulting Agreement, dated August 25, 2020, by and between Organovo and Danforth Advisors (incorporated by reference from Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q, as filed with the SEC on November 5, 2020).</u></a>
10.16+	<a href="#"><u>Amendment No. 5 dated October 4, 2021 to Consulting Agreement dated August 25, 2021 by and between Company and Danforth Advisors LLC (incorporated by reference from Exhibit 10.3 to the Company's Current Report on Form 8-K, as filed with the SEC on October 6, 2021).</u></a>
10.17+	<a href="#"><u>Amendment No. 6, dated December 30, 2024, to Consulting Agreement, dated August 25, 2020, by and between Organovo, Inc. and Danforth Advisors, LLC (incorporated by reference from Exhibit 10.2 to the Company's Current Report on Form 8-K, as filed with the SEC on December 31, 2024).</u></a>
10.18	<a href="#"><u>Lease Agreement dated November 23, 2020, between VivoSim Labs, Inc. and San Diego Inspire 1, LLC (Permanent Lease Agreement 176640186.8) (incorporated by reference from Exhibit 10.2 to the Company's Current Report on Form 8-K, as filed with the SEC on November 25, 2020).</u></a>
10.19	<a href="#"><u>Amended and Restated Lease Agreement dated November 23, 2020, between Organovo, Inc., as Tenant, and San Diego Inspire 2, LLC, as Landlord, as amended by First Amendment to Amended &amp; Restated Lease, dated November 17, 2021, between San Diego Inspire 2, LLC, as Landlord, and Organovo, Inc., as Tenant (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on November 19, 2021).</u></a>
10.20#	<a href="#"><u>Intercompany Agreement, dated December 28, 2020, by and among VivoSim Labs, Inc., Organovo, Inc. and Viscient Biosciences, Inc. (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on December 31, 2020).</u></a>

Exhibit No.	Description
10.21	<a href="#">Sales Agreement, dated March 16, 2018, by and among VivoSim Labs, Inc., H.C. Wainwright &amp; Co., LLC and JonesTrading Institutional Services LLC. (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K, as filed with the SEC on March 16, 2018).</a>
10.22+	<a href="#">VivoSim Labs, Inc. Amended and Restated 2021 Inducement Equity Incentive Plan (incorporated by reference to Exhibit 10.22 to the Company's Annual Report as filed with the SEC on June 5, 2025).</a>
10.23+	<a href="#">Form of Stock Option Agreement under the VivoSim Labs, Inc. 2021 Inducement Equity Incentive Plan (incorporated by reference to Exhibit 10.23 to the Company's Annual Report as filed with the SEC on June 5, 2025).</a>
10.24+	<a href="#">Form of Restricted Stock Unit Agreement under the VivoSim Labs, Inc. 2021 Inducement Equity Incentive Plan (incorporated by reference to Exhibit 10.24 to the Company's Annual Report as filed with the SEC on June 5, 2025).</a>
10.25	<a href="#">Settlement and Patent License Agreement, dated February 22, 2022, by and between Organovo, Inc. and BICO Group AB (incorporated by reference to Exhibit 10.34 to the Company's Annual Report on Form 10-K, as filed with the SEC on June 10, 2022).</a>
10.26+	<a href="#">VivoSim Labs, Inc. Amended and Restated 2022 Equity Incentive Plan (incorporated by reference to Exhibit 10.26 to the Company's Annual Report as filed with the SEC on June 5, 2025).</a>
10.27+	<a href="#">Form of Global Stock Option Award Agreement under the VivoSim Labs, Inc. Amended and Restated 2022 Equity Incentive Plan (incorporated by reference to Exhibit 10.27 to the Company's Annual Report as filed with the SEC on June 5, 2025).</a>
10.28+	<a href="#">Form of Global Restricted Stock Unit Award Agreement under the VivoSim Labs, Inc. Amended and Restated 2022 Equity Incentive Plan (incorporated by reference to Exhibit 10.28 to the Company's Annual Report as filed with the SEC on June 5, 2025).</a>
10.29+	<a href="#">VivoSim Labs, Inc. Amended and Restated 2023 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.29 to the Company's Annual Report as filed with the SEC on June 5, 2025).</a>
10.30*	<a href="#">Form of Securities Purchase Agreement.</a>
21.1	<a href="#">Subsidiaries of VivoSim Labs, Inc. (incorporated by reference to Exhibit 21.1 to the Company's Annual Report as filed with the SEC on June 5, 2025).</a>
23.1*	<a href="#">Consent of Independent Registered Public Accounting Firm.</a>
24.1*	<a href="#">Power of Attorney (included on signature page hereto).</a>
101.INS*	Inline XBRL Instance Document
101.SCH*	Inline XBRL Taxonomy Extension Schema With Embedded Linkbase Documents.
104*	Cover Page Interactive Data File (embedded within the Inline XBRL document)
107*	<a href="#">Filing Fee Table.</a>

\* Filed herewith.

+ Designates management contracts and compensation plans.

# Certain identified information has been omitted pursuant to Item 601(b)(10) of Regulation S-K because such information is both (i) not material and (ii) would likely cause competitive harm to the Registrant if publicly disclosed. The Registrant hereby undertakes to furnish supplemental copies of the unredacted exhibit upon request by the Securities and Exchange Commission.

## Item 17. Undertakings

The undersigned Registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
  - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
  - (ii) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high and of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission (the "Commission") pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
  - (iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

*provided, however*, that paragraphs (1)(i), (1)(ii) and (1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
  - (i) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
  - (ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
  - (iii) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
  - (iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

The undersigned registrant hereby undertakes:

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Act and is therefore unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

For purposes of determining any liability under the Securities Act of 1933, as amended, the information omitted from a form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933, as amended, shall be deemed to be part of this registration statement as of the time it was declared effective.

For the purpose of determining any liability under the Securities Act of 1933, as amended, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on March 27, 2026.

### VIVOSIM LABS, INC.

By: /s/ Keith Murphy  
Keith Murphy  
Executive Chairman

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Keith Murphy and Norman Staskey, and each or any one of them, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments and any related registration statements filed pursuant to Rule 462 and otherwise) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Keith Murphy</u> Keith Murphy	Executive Chairman (Principal Executive Officer)	March 27, 2026
<u>/s/ Norman Staskey</u> Norman Staskey	Chief Financial Officer (Principal Financial and Principal Accounting Officer)	March 27, 2026
<u>/s/ Adam Stern</u> Adam Stern	Director	March 27, 2026
<u>/s/ Douglas Cohen</u> Douglas Cohen	Director	March 27, 2026
<u>/s/ David Gobel</u> David Gobel	Director	March 27, 2026
<u>/s/ Alison Milhous</u> Alison Milhous	Director	March 27, 2026

## PLACEMENT AGENCY AGREEMENT

March [ ], 2026

VivoSim Labs, Inc.  
11555 Sorrento Valley Road, Suite 100  
San Diego, California 92121  
Attention: Keith Murphy, Executive Chairman

Dear Mr. Murphy:

Subject to the terms and conditions herein (this "Agreement"), and the satisfaction (or waiver) of the conditions set forth in the Purchase Agreement (defined below), VivoSim Labs, Inc., a Delaware corporation (the "Company"), hereby agrees to issue and sell, and the Purchasers, severally and not jointly, agree to purchase, up to an aggregate of \$4,000,000 of registered securities of the Company, including [ ] shares (the "Shares") of the Company's common stock, \$0.001 par value per share (the "Common Stock") or prefunded common stock purchase warrants in lieu thereof, each to purchase one share of Common Stock (the "Prefunded Warrants"), and [ ] common warrants, each to purchase one share of Common Stock (the "Common Warrants"), and the shares of Common Stock underlying the Prefunded Warrants and the Common Warrants, the "Warrant Shares", and collectively with the Shares, the Prefunded Warrants, the Common Warrants and the Warrant Shares, the "Securities") directly to various investors (each, an "Investor" and, collectively, the "Investors") through Joseph Gunnar & Co., LLC (the "Placement Agent") scheduled as follows: (i) the initial sale and purchase (the "Initial Closing" and the date thereof, the "Initial Closing Date") of an aggregate of \$3,000,000 of Shares (or Pre-Funded Warrants in lieu of Shares) and Common Warrants shall take place as soon as practicable, but no later than the Business Day following the satisfaction of all of the closing conditions set forth in Section 2.3 of the Purchase Agreement applicable to the Initial Closing (other than those to be satisfied at the Initial Closing, but subject to the satisfaction or waiver of such closing conditions); and (ii) the additional sale and purchase (the "Additional Closing") of \$1,000,000 of Shares (or Pre-Funded Warrants in lieu of Shares) and Common Warrants, subject to the satisfaction or waiver of all the closing conditions set forth in Section 2.3 of the Purchase Agreement applicable to the Additional Closing, shall take place on the thirtieth (30<sup>th</sup>) day following the Initial Closing (the "Additional Closing Date"). Each of the Initial Closing and the Additional Closing is referred to as a "Closing", and the date of such Closing, a "Closing Date". The documents executed and delivered by the Company and the Investors in connection with the Offering (as defined below), including, without limitation, a securities purchase agreement (the "Purchase Agreement"), shall be collectively referred to herein as the "Transaction Documents." The purchase price to the Investors is \$[ ] per Share (the "Per Share Purchase Price"), provided that the purchase price per Prefunded Warrant shall be the Per Share Purchase Price minus \$0.001. The exercise price to the Investors for each share of Common Stock issuable upon exercise of the Prefunded Warrants is \$0.001, and the exercise price to the Investors for each share of Common Stock issuable upon exercise of the Common Warrants is \$[ ]. The Placement Agent may retain other brokers or dealers to act as sub-agents or selected-dealers on its behalf in connection with the Offering. Capitalized terms used herein and not otherwise defined shall have the meanings set forth for them in the Purchase Agreement.

The Company hereby confirms its agreement with the Placement Agent as follows:

**Section 1. Agreement to Act as Placement Agent.**

(a) On the basis of the representations, warranties and agreements of the Company herein contained, and subject to all the terms and conditions of this Agreement, the Placement Agent shall be the exclusive placement agent in connection with the offering and sale by the Company of the Securities pursuant to the Company's registration statement on Form S-1 (File No. 333-    ) (the "Registration Statement"), with the terms of such offering (the "Offering") to be subject to market conditions and negotiations between the Company, the Placement Agent and the prospective Investors. The Placement Agent will act on a reasonable best efforts basis and the Company agrees and acknowledges that there is no guarantee of the successful placement of the Securities, or any portion thereof, in the prospective Offering. Under no circumstances will the Placement Agent or any of its "Affiliates" (as defined below) be obligated to underwrite or purchase any of the Securities for its own account or otherwise provide any financing. The Placement Agent shall act solely as the Company's agent and not as principal. The Placement Agent shall have no authority to bind the Company with respect to any prospective offer to purchase Securities and the Company shall have the sole right to accept offers to purchase Securities and may reject any such offer, in whole or in part. Subject to the terms and conditions hereof, payment of the purchase price for, and delivery of, the Securities shall be made at a Closing. Pursuant to the terms of the Purchase Agreement, a Closing shall occur via "Delivery Versus Payment", i.e., on a Closing Date, the Company shall issue the Shares directly to the account designated by the Placement Agent and, upon receipt of such Shares, the Placement Agent shall electronically deliver such Shares to the applicable Investor and payment of the purchase price of the Securities shall be made by the Placement Agent (or its clearing firm) by wire transfer to the Company. The Warrants shall be delivered to the Investors by the Placement Agent, or as directed by the Placement Agent, in certificated form. As compensation for services rendered, and provided that any of the Securities are sold to the Investors in the Offering, on a Closing Date, the Company shall pay to the Placement Agent the fees and expenses set forth below:

(i) A cash fee equal to 7.5% of the gross proceeds received by the Company from the sale of the Securities at each Closing.

(ii) Such number of Common Stock purchase warrants (the "Placement Agent Warrants") to the Placement Agent or its designees at each Closing to purchase shares of Common Stock up to 5.0% of the aggregate number of Shares and Prefunded Warrants sold in the Offering. The Placement Agent Warrants shall have an exercise price of 125% of the public offering price per share, will be exercisable six months after the applicable Closing Date in which they are issued, have an expiration date of three (3) years from the applicable date of issuance and will have registration rights (including a one-time demand registration right and unlimited piggyback rights for a period of five years from their issuance date) and customary anti-dilution provisions for certain corporate actions (i.e. stock dividends and splits and recapitalizations). The Placement Agent Warrants shall not be transferable for 180 days from the date of the Closing except as permitted by the Financial Industry Regulatory Authority ("FINRA") Rule 5110(e)(2).

(iii) The Company also agrees, subject to Section 6 herein, to reimburse Placement Agent's documented expenses up to a maximum of \$60,000 comprised of (i) up to \$30,000 relating to the fees and expenses of the Placement Agent's Counsel (as defined below) if the Offering closes; (ii) \$15,000 relating to the fees, expenses and disbursements relating to the background checks of the Company's officers, directors and entities, (iii) up to \$5,000 relating to the Placement Agent's actual accountable, reasonable and documented "road show" expenses for the Offering, and (iv) \$5,000 reasonable fees and disbursements of "blue sky" counsel upon commencement of "blue sky" work by such counsel and an additional \$5,000 at the Initial Closing, unless otherwise agreed by the Company and the Placement Agent, payable immediately upon the Initial Closing.

(b) Unless the Company terminates the Engagement Letter for "Cause" (as defined therein, if the Company subsequently completes any public or private financing, at any time during the six (6) months after the Initial Closing Date, with any investors introduced by the Placement Agent in connection with the Offering (the "Tail Parties"), then the Placement Agent shall be entitled to receive the compensation set forth in this Section 1(a) (the "Tail") in connection with any such investor(s) contacted by the Placement Agent regarding the Offering, provided that the Tail for investors who participate in the Offering shall be twelve (12) months. The Placement Agent shall provide a list of the Tail Parties to the Company, which list shall be delivered to the Company within ten (10) days from the Initial Closing Date, and shall make available to the Company reasonable supporting materials upon request by the Company.

(c) Until the date that is the six (6) month anniversary of the Engagement Agreement (as defined below), and provided that the Placement Agent is processing the Offering in good faith and on commercially typical terms and timelines and the Company does not elect to extend the Engagement Period (as defined in the Engagement Agreement) or otherwise elects to pursue an alternative financing other than the Offering, upon each and every public and private equity and equity-linked or convertible debt offering by the Company, any successor to the Company, or any Subsidiary of the Company (each a "Subsequent Financing"), the Placement Agent shall have the irrevocable right, but not the obligation, to participate in such Subsequent Financing as investment banker, co-manager, co-placement agent, sales agent, advisor, or otherwise, whichever applicable, for at least twenty-five percent (25%) of the total economics of the Subsequent Financing on the same terms, conditions and price provided for in the Subsequent Financing ("Participation Right"). The Company agrees to provide the Placement Agent with reasonable written notice of its intention to effect a Subsequent Financing which such notice shall include all of the terms, structure, sizing and conditions of such Subsequent Financing, including, but not limited to, all key metrics that the Placement Agent would reasonably require to make an informed decision regarding its Participation Right (each a "Subsequent Financings Notice"). The Placement Agent shall have three (3) days from the receipt of a Subsequent Financing Notice to respond to the Company with its election regarding its Participation Right with respect to a Subsequent Financing. The failure of the Placement Agent to exercise its Participation Right within such period shall be deemed a waiver of its Participation Right with respect to the Subsequent Financing that is the subject of such Subsequent Financing Notice.

(d) The term of the Placement Agent's exclusive engagement will be as set forth in the Engagement Agreement (as defined below). Notwithstanding anything to the contrary contained herein, the provisions concerning confidentiality, indemnification and contribution contained herein and the Company's obligations contained in the indemnification provisions will survive any expiration or termination of this Agreement, and the Company's obligation to pay fees actually earned and payable and to reimburse expenses actually incurred and reimbursable pursuant to Section 1 hereof and which are permitted to be reimbursed under Financial Industry Regulatory Authority ("FINRA") Rule 5110(g)(4)(A), will survive any expiration or termination of this Agreement. Nothing in this Agreement shall be construed to limit the ability of the Placement Agent or its Affiliates to pursue, investigate, analyze, invest in, or engage in investment banking, financial advisory or any other business relationship with Persons (as defined below) other than the Company. As used herein (i) "Persons" 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 and (ii) "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 of 1933, as amended (the "Securities Act").

**Section 2. Representations, Warranties and Covenants of the Company.** The Company hereby represents, warrants and covenants to the Placement Agent as of the date hereof, and as of each Closing Date, as applicable, as follows:

(a) Certificates. Any certificate signed by an officer of the Company and delivered to the Placement Agent or to counsel for the Placement Agent shall be deemed to be a representation and warranty by the Company to the Placement Agent as to the matters set forth therein.

(b) Reliance. The Company acknowledges that the Placement Agent will rely upon the accuracy and truthfulness of the foregoing representations and warranties and hereby consents to such reliance.

(c) Forward-Looking Statements. No forward-looking statements (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) contained in the Pricing Prospectus have been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(d) Statistical or Market-Related Data. Any statistical, industry-related and market-related data included or incorporated by reference in the Pricing Prospectus, are based on or derived from sources that the Company reasonably and in good faith believes to be reliable and accurate, and such data agree with the sources from which they are derived.

(e) FINRA Affiliations. There are no affiliates with any FINRA member firm that is participating in the Offering among the Company's executive officers, directors, or to the knowledge of the Company, any ten percent (10%) or greater stockholder of the Company.

(f) Representations and Warranties Incorporated by Reference. Each of the representations and warranties (together with any related disclosure schedules thereto) made to the Investors in the Purchase Agreement is hereby incorporated herein by reference (as though fully restated herein) and is hereby made to, and in favor of, the Placement Agent.

**Section 3. Delivery and Payment.** Each Closing, as applicable, shall occur at the offices of Pryor Cashman LLP, 7 Times Square, New York, New York 10036 ("Placement Agent's Counsel") (or at such other place as shall be agreed upon by the Placement Agent and the Company). Subject to the terms and conditions hereof, at each Closing payment of the purchase price for the Securities sold on such Closing Date shall be made by Federal Funds wire transfer, against delivery of such Securities, and such Securities shall be registered in such name or names and shall be in such denominations, as the Placement Agent may request at least one business day before the time of purchase (as defined below).

Deliveries of the documents with respect to the purchase of the Securities, if any, shall be made at the offices of Placement Agent's Counsel. All actions taken at a Closing shall be deemed to have occurred simultaneously.

**Section 4. Covenants and Agreements of the Company.** The Company further covenants and agrees with the Placement Agent as follows:

(a) Registration Statement Matters. The Company will advise the Placement Agent promptly after it receives notice thereof of the time when any amendment to the Registration Statement has been filed or becomes effective or any supplement to the Prospectus has been filed and will furnish the Placement Agent with copies thereof. The Company will file promptly all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Section 13(a), 14 or 15(d) of the Exchange Act subsequent to the date of any Prospectus and for so long as the delivery of a prospectus is required in connection with the Offering. The Company will advise the Placement Agent, promptly after it receives notice thereof (i) of any request by the Commission to amend the Registration Statement or to amend or supplement any Prospectus or for additional information, (ii) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto or any order directed at any document incorporated by reference therein (the "Incorporated Documents"), if any, or any amendment or supplement thereto or any order preventing or suspending the use of the Preliminary Prospectus or the Prospectus or any prospectus supplement or any amendment or supplement thereto or any post-effective amendment to the Registration Statement, of the suspension of the qualification of the Securities for offering or sale in any jurisdiction, of the institution or threatened institution of any proceeding for any such purpose, or of any request by the Commission for the amending or supplementing of the Registration Statement or a Prospectus or for additional information, (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) of the mailing and delivery to the Commission for filing 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(a) that, in the judgment of the Company, makes any statement of a material fact made in the Registration Statement or the Prospectus untrue or that requires the making of any changes in the Registration Statement or the Prospectus in order to make the statements therein, in light of the circumstances under which they were made, not misleading. The Company shall use its best efforts to prevent the issuance of any such stop order or prevention or suspension of such use. If the Commission shall enter any such stop order or order or notice of prevention or suspension at any time, the Company will use its best efforts to obtain the lifting of such order as soon as practicable, or will file a new registration statement and use its best efforts to have such new registration statement declared effective as soon as practicable. Additionally, the Company agrees that it shall comply with the provisions of Rules 424(b), 430A, 430B and 430C, as applicable, under the Securities Act, including with respect to the timely filing of documents thereunder, and will use its reasonable efforts to confirm that any filings made by the Company under such Rule 424(b) are received in a timely manner by the Commission.

(b) Blue Sky Compliance. The Company will cooperate with the Placement Agent and the Investors in endeavoring to qualify the Securities for sale under the securities laws of such jurisdictions (United States and foreign) as the Placement Agent and the Investors may reasonably request and will make such applications, file such documents, and furnish such information as may be reasonably required for that purpose, provided the Company shall not be required to (i) qualify as a foreign corporation, (ii) file a general consent to service of process in any jurisdiction where it is not now so qualified or required to file such a consent or (iii) subject itself to taxation in any such jurisdiction if it is not otherwise so subject, and provided further that the Company shall not be required to produce any new disclosure document. The Company will, from time to time, prepare and file such statements, reports and other documents as are or may be required to continue such qualifications in effect for so long a period as the Placement Agent may reasonably request for distribution of the Securities. The Company will advise the Placement Agent promptly of the suspension of the qualification or registration of (or any such exemption relating to) the Securities for offering, sale or trading in any jurisdiction or any initiation or threat of any proceeding for any such purpose, and in the event of the issuance of any order suspending such qualification, registration or exemption, the Company shall use its best efforts to obtain the withdrawal thereof as soon as practicable.

(c) Amendments and Supplements to a Prospectus and Other Matters. The Company will comply with the Securities Act and the Exchange Act, and the rules and regulations of the Commission thereunder, so as to permit the completion of the distribution of the Securities as contemplated in this Agreement, the Incorporated Documents and any Prospectus. If during the period in which a prospectus is required by law to be delivered in connection with the distribution of Securities contemplated by the Incorporated Documents or any Prospectus (the "Prospectus Delivery Period"), any event shall occur as a result of which, in the judgment of the Company or in the reasonable opinion of the Placement Agent or counsel for the Placement Agent, it becomes necessary to amend or supplement the Incorporated Documents or any Prospectus in order to make the statements therein, in the light of the circumstances under which they were made, as the case may be, not misleading, or if it is necessary at any time to amend or supplement the Incorporated Documents or any Prospectus or to file under the Exchange Act any Incorporated Document to comply with any law, the Company will promptly prepare and file with the Commission, and furnish at its own expense to the Placement Agent and to dealers, an appropriate amendment to the Registration Statement or supplement to the Registration Statement, the Incorporated Documents or any Prospectus that is necessary in order to make the statements in the Incorporated Documents and any Prospectus as so amended or supplemented, in the light of the circumstances under which they were made, as the case may be, not misleading, or so that the Registration Statement, the Incorporated Documents or any Prospectus, as so amended or supplemented, will comply with law. Before amending the Registration Statement or supplementing the Incorporated Documents or any Prospectus in connection with the Offering, the Company will furnish the Placement Agent with a copy of such proposed amendment or supplement and will not file any such amendment or supplement to which the Placement Agent reasonably objects.

(d) Copies of any Amendments and Supplements to a Prospectus. The Company will furnish the Placement Agent, without charge, during the period beginning on the date hereof and ending on the later of the last Closing Date of the Offering, as many copies of any Prospectus or prospectus supplement and any amendments and supplements thereto, as the Placement Agent may reasonably request.

(e) Free Writing Prospectus. The Company covenants that it will not, unless it obtains the prior written consent of the Placement Agent, make any offer relating to the Securities that would constitute a “free writing prospectus” (as defined in Rule 405 of the Securities Act) required to be filed by the Company with the Commission or retained by the Company under Rule 433 of the Securities Act. In the event that the Placement Agent expressly consents in writing to any such free writing prospectus (a “Permitted Free Writing Prospectus”), the Company covenants that it shall comply with the requirements of Rules 164 and 433 of the Securities Act applicable to such Permitted Free Writing Prospectus, including in respect of timely filing with the Commission, legending and record keeping.

(f) Transfer Agent. The Company will maintain, at its expense, a registrar and transfer agent for the Common Stock.

(g) Earnings Statement. As soon as practicable and in accordance with applicable requirements under the Securities Act, but in any event not later than 18 months after the last Closing Date, the Company will make generally available to its security holders and to the Placement Agent an earnings statement, covering a period of at least 12 consecutive months beginning after the last Closing Date, that satisfies the provisions of Section 11(a) and Rule 158 under the Securities Act.

(h) Periodic Reporting Obligations. During the Prospectus Delivery Period, the Company will duly file, on a timely basis, with the Commission and the Trading Market (as defined in the Purchase Agreement) all reports and documents required to be filed under the Exchange Act within the time periods and in the manner required by the Exchange Act.

(i) Additional Documents. The Company will enter into any subscription, purchase or other customary agreements as the Placement Agent or the Investors reasonably deem necessary or appropriate to consummate the Offering, all of which will be in form and substance reasonably acceptable to the Placement Agent and the Investors. The Company agrees that the Placement Agent may rely upon, and each is a third party beneficiary of, the representations and warranties, and applicable covenants, set forth in any such purchase, subscription or other agreement with Investors in the Offering.

(j) No Manipulation of Price. Neither the Company, nor, to its knowledge, any of its employees, directors or shareholders, 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.

(k) Acknowledgment. The Company acknowledges that any advice given by the Placement Agent to the Company is solely for the benefit and use of the Board of Directors of the Company and may not be used, reproduced, disseminated, quoted or referred to, without the Placement Agent’s prior written consent.

(l) Announcement of Offering. The Company acknowledges and agrees that the Placement Agent may, subsequent to a Closing, make public its involvement with the Offering.

(m) Reliance on Others. The Company confirms that it will rely on its own counsel and accountants for legal and accounting advice.

(n) Research Matters. By entering into this Agreement, the Placement Agent does not provide any promise, either explicitly or implicitly, of favorable or continued research coverage of the Company and the Company hereby acknowledges and agrees that the Placement Agent’s selection as a placement agent for the Offering was in no way conditioned, explicitly or implicitly, on the Placement Agent providing favorable or any research coverage of the Company. In accordance with FINRA Rule 2241(b)(2), the parties acknowledge and agree that the Placement Agent has not directly or indirectly offered favorable research, a specific rating or a specific price target, or threatened to change research, a rating or a price target, to the Company or inducement for the receipt of business or compensation. The Company hereby waives and releases, to the fullest extent permitted by law, any claims that the Company may have against the Placement Agent 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 the Placement Agent’s investment banking divisions. The Company acknowledges that the Placement Agent 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 their customers and hold long or short position in debt or equity securities of the Company.

(o) Subsequent Equity Sales.

(i) The Company agrees that for the period commencing on the date hereof and ending on the earlier of the ninetieth (90th) day after the most recent Closing Date and the date upon which all Warrants have been exercised (the "Restricted Period"), the Company shall not (i) directly or indirectly issue, offer, sell, grant any option, restricted stock unit or right to purchase, or otherwise dispose of (or announce any issuance, offer, sale, grant of any option or right to purchase or other disposition of) any shares of Common Stock or any Common Stock Equivalents or (ii) file any new registration statement or amendment or supplement thereto, other than the Prospectus, amendments or supplements to registration statements filed prior to the date hereof, or registration statements on Form S-8 in connection with any employee benefit plan or Approved Stock Plan, or a confidential draft registration statement on Form S-1 or Form S-3. Notwithstanding the foregoing, this Section 4(o) shall not apply in respect of the issuance of (collectively, the "Exempt Issuances") (A) shares of Common Stock or standard options to purchase or restricted stock units to acquire Common Stock to directors, officers, employees or consultants of the Company in their capacity as such pursuant to an Approved Stock Plan; (B) shares of Common Stock issued upon the conversion, exercise or exchange of Convertible Securities (other than standard equity awards to purchase Common Stock issued pursuant to an Approved Stock Plan that are covered by clause (A) above) issued prior to the date hereof, provided that the conversion, exercise, exchange or other method of issuance (as the case may be) of any such Convertible Security is made solely pursuant to the conversion, exercise, exchange or other method of issuance (as the case may be) provisions of such Convertible Security that were in effect on the date immediately prior to the date of this Agreement, the conversion, exercise or issuance price of any such Convertible Securities (other than standard equity awards to purchase Common Stock issued pursuant to an Approved Stock Plan that are covered by clause (A) above) is not lowered, none of such Convertible Securities (other than standard equity awards to purchase Common Stock issued pursuant to an Approved Stock Plan that are covered by clause (A) above) are amended to increase the number of shares issuable thereunder and none of the terms or conditions of any such Convertible Securities (other than standard equity awards to purchase Common Stock issued pursuant to an Approved Stock Plan that are covered by clause (A) above) are otherwise materially changed in any manner that adversely affects any Purchaser; (C) the Shares and the Warrant Shares, and (D) Common Stock or Convertible Securities issued in connection with acquisitions or any licensing, commercialization, joint venture, technology transfer, acquisition, development collaboration or other strategic transactions or institutional investments or partnerships; and shall not apply to the filing of any amendments or supplements to any existing resale registration statements contained in the Public Reports.

(ii) From the date hereof until the earlier of six (6) months from the most recent Closing Date and the date as of which the Purchasers no longer hold Securities, acquired pursuant to the Purchase Agreement the Company shall be prohibited from entering into or agreeing to enter into a Variable Rate Transaction. “Variable Rate Transaction” means a transaction in which the Company (i) issues or sells any debt or equity securities that are convertible into, exchangeable or exercisable for, or include the right to receive, additional shares of Common Stock either (A) at a conversion price, exercise price or exchange rate or other price that is based upon, and/or varies with, the trading prices of or quotations for the shares of Common Stock at any time after the initial issuance of such debt or equity securities or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such debt or equity security or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Stock or (ii) enters into, or effects a transaction under, any agreement, including, but not limited to, an equity line of credit or an “at the market offering”, whereby the Company may issue securities at a future determined price, regardless of whether shares pursuant to such agreement have actually been issued and regardless of whether such agreement is subsequently canceled; provided that Exempt Issuances as provided in Section 4(o)(i) above shall not be considered Variable Rate Transactions. Any Purchaser shall be entitled to obtain injunctive relief against the Company to preclude any such issuance, which remedy shall be in addition to any right to collect damages.

(p) Lock-Up Agreements. The Company shall not amend, modify, waive or terminate any provision of any of the Lock-Up Agreements except to extend the term of the lock-up period and shall enforce the provisions of each Lock-Up Agreement in accordance with its terms. If any party to a Lock-Up Agreement breaches any provision of a Lock-Up Agreement, the Company shall promptly use its best efforts to seek specific performance of the terms of such Lock-Up Agreement.

(q) FINRA. The Company shall advise the Placement Agent (who shall make an appropriate filing with FINRA) if it is aware that any officer, director, 10% 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 60-day period after the Effective Date.

**Section 5. Conditions of the Obligations of the Placement Agent.** The obligations of the Placement Agent hereunder shall be subject to the accuracy of the representations and warranties on the part of the Company set forth in Section 2 hereof, in each case as of the date hereof and as of each Closing Date, as applicable, as though then made, to the timely performance by the Company of its covenants and other obligations hereunder on and as of such dates, and to each of the following additional conditions:

(a) Accountants' Comfort Letter. On the date hereof, the Placement Agent shall have received, and the Company shall have caused to be delivered to the Placement Agent, a letter from Rosenberg Rich Baker Berman, P.A. (the independent registered public accounting firm of the Company), addressed to the Placement Agent, dated as of the date hereof, in form and substance satisfactory to the Placement Agent. The letter shall not disclose any change in the condition (financial or other), earnings, operations, business or prospects of the Company from that set forth in any Incorporated Documents or the applicable Prospectus or prospectus supplement, which, in the Placement Agent's reasonable judgment, is material and adverse and that makes it, in the Placement Agent's reasonable judgment, impracticable or inadvisable to proceed with the Offering of the Securities as contemplated by such Prospectus.

(b) Compliance with Registration Requirements; No Stop Order; No Objection from FINRA. Each Prospectus (in accordance with Rule 424(b)) and "free writing prospectus" (as defined in Rule 405 of the Securities Act), if any, shall have been duly filed with the Commission, as appropriate; no stop order suspending the effectiveness of the Registration Statement or any part thereof shall have been issued and no proceeding for that purpose shall have been initiated or threatened by the Commission; no order preventing or suspending the use of any Prospectus shall have been issued and no proceeding for that purpose shall have been initiated or threatened by the Commission; no order having the effect of ceasing or suspending the distribution of the Securities or any other securities of the Company shall have been issued by any securities commission, securities regulatory authority or stock exchange and no proceedings for that purpose shall have been instituted or shall be pending or, to the knowledge of the Company, contemplated by any securities commission, securities regulatory authority or stock exchange; all requests for additional information on the part of the Commission shall have been complied with; and the FINRA shall have raised no objection to the fairness and reasonableness of the placement terms and arrangements.

(c) Corporate Proceedings. All corporate proceedings and other legal matters in connection with this Agreement, the Registration Statement and each Prospectus, and the registration, sale and delivery of the Securities, shall have been completed or resolved in a manner reasonably satisfactory to the Placement Agent's Counsel, and such counsel shall have been furnished with such papers and information as it may reasonably have requested to enable such counsel to pass upon the matters referred to in this Section 5.

(d) No Material Adverse Change. Subsequent to the execution and delivery of this Agreement and prior to each Closing Date, as applicable, in the Placement Agent's reasonable judgment after consultation with the Company, there shall not have occurred any Material Adverse Effect or any material adverse change or development involving a prospective material adverse change in the condition 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 and Prospectus ("Material Adverse Change").

(e) Opinion of Company Counsel for the Company. The Placement Agent shall have received on each Closing Date, as applicable, the favorable opinion of Company Counsel, Paul Hastings LLP, dated as of such Closing Date, including, without limitation, a negative assurance letter addressed to the Placement Agent and in form and substance reasonably satisfactory to the Placement Agent.

(f) Officers' Certificate. The Placement Agent shall have received on each Closing Date a certificate of the Company, dated as of such Closing Date, signed by the Chief Executive Officer and Chief Financial Officer of the Company, to the effect that, and the Placement Agent shall be satisfied that, the signers of such certificate have reviewed the Registration Statement, the Incorporated Documents, the Prospectus, and this Agreement and to the further effect that:

(i) The representations and warranties of the Company in this Agreement are true and correct, as if made on and as of such Closing Date, and the Company has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to such Closing Date;

(ii) No stop order suspending the effectiveness of the Registration Statement or the use of the Prospectus has been issued and no proceedings for that purpose have been instituted or are pending or, to the Company's knowledge, threatened under the Securities Act; no order having the effect of ceasing or suspending the distribution of the Securities or any other securities of the Company has been issued by any securities commission, securities regulatory authority or stock exchange in the United States and no proceedings for that purpose have been instituted or are pending or, to the knowledge of the Company, contemplated by any securities commission, securities regulatory authority or stock exchange in the United States;

(iii) When the Registration Statement became effective, at the time of sale, and at all times subsequent thereto up to the delivery of such certificate, the Registration Statement and the Incorporated Documents, if any, when such documents became effective or were filed with the Commission, and any Prospectus, contained all material information required to be included therein by the Securities Act and the Exchange Act and the applicable rules and regulations of the Commission thereunder, as the case may be, and in all material respects conformed to the requirements of the Securities Act and the Exchange Act and the applicable rules and regulations of the Commission thereunder, as the case may be, and the Registration Statement and the Incorporated Documents, if any, and any Prospectus, did not and do not include 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, in the light of the circumstances under which they were made, not misleading (provided, however, that the preceding representations and warranties contained in this paragraph (iii) shall not apply to any statements or omissions made in reliance upon and in conformity with information furnished in writing to the Company by the Placement Agent expressly for use therein) and, since the effective date of the Registration Statement, there has occurred no event required by the Securities Act and the rules and regulations of the Commission thereunder to be set forth in the Incorporated Documents which has not been so set forth; and

(iv) Subsequent to the respective dates as of which information is given in the Registration Statement, the Incorporated Documents and any Prospectus, there has not been: (a) any Material Adverse Change; (b) any transaction that is material to the Company and the Subsidiaries taken as a whole, except transactions entered into in the ordinary course of business; (c) any obligation, direct or contingent, that is material to the Company and the Subsidiaries taken as a whole, incurred by the Company or any Subsidiary, except obligations incurred in the ordinary course of business; (d) any material change in the capital stock (except changes thereto resulting from the exercise of outstanding stock options or warrants, or outstanding indebtedness of the Company or any Subsidiary); (e) any dividend or distribution of any kind declared, paid or made on the capital stock of the Company; or (f) any loss or damage (whether or not insured) to the property of the Company or any Subsidiary which has been sustained or will have been sustained which has a Material Adverse Effect.

(g) Bring-down Comfort Letter. On each Closing Date, the Placement Agent shall have received from Rosenberg Rich Baker Berman, P.A. (the independent registered public accounting firm of the Company), a letter dated as of such Closing Date, in form and substance satisfactory to the Placement Agent, to the effect that they reaffirm the statements made in the letter furnished pursuant to subsection (a) of this Section 5, except that the specified date referred to therein for the carrying out of procedures shall be no more than three business days prior to such Closing Date.

(h) Lock-Up Agreements. On the date hereof, the Placement Agent shall have received the executed lock-up agreement from each of the Company's directors and executive officers and 10% and greater stockholders of the Company as of the date hereof.

(i) Stock Exchange Listing. The Common Stock shall be registered under the Exchange Act and shall be listed on the Trading Market, and the Company shall not have taken any action designed to terminate, or likely to have the effect of terminating, the registration of the Common Stock under the Exchange Act or delisting or suspending from trading the Common Stock from the Trading Market, nor shall the Company have received any information suggesting that the Commission or the Trading Market is contemplating terminating such registration or listing.

(j) Additional Documents. On or before each Closing Date, as applicable, the Placement Agent and Placement Agent's Counsel shall have received such information and documents as they may reasonably require for the purposes of enabling them to pass upon the issuance and sale of the Securities as contemplated herein, or in order to evidence the accuracy of any of the representations and warranties, or the satisfaction of any of the conditions or agreements, herein contained.

If any condition specified in this Section 5 is not satisfied when and as required to be satisfied, this Agreement may be terminated by the Placement Agent by notice to the Company at any time on or prior to a Closing Date, as applicable, which termination shall be without liability on the part of any party to any other party, except that Section 6 (Payment of Expenses), Section 7 (Indemnification and Contribution) and Section 8 (Representations and Indemnities to Survive Delivery) shall at all times be effective and shall survive such termination.

**Section 6. Payment of Expenses.** The Company agrees to pay all costs, fees and expenses incurred by the Company in connection with the performance of its obligations hereunder and in connection with the transactions contemplated hereby, including, without limitation: (i) all expenses incident to the issuance, delivery and qualification of the Securities (including all printing and engraving costs); (ii) all fees and expenses of the registrar and transfer agent of the Common Stock; (iii) all necessary issue, transfer and other stamp taxes in connection with the issuance and sale of the Securities; (iv) all fees and expenses of the Company's counsel, independent public or certified public accountants and other advisors; (v) all costs and expenses incurred in connection with the preparation, printing, filing, shipping and distribution of the Registration Statement (including financial statements, exhibits, schedules, consents and certificates of experts), the Preliminary Prospectus, the Prospectus and each prospectus supplement, if any, and all amendments and supplements thereto, and this Agreement; (vi) all filing fees, disbursements, reasonable attorneys' fees and expenses incurred by the Company or the Placement Agent in connection with qualifying or registering (or obtaining exemptions from the qualification or registration of) all or any part of the Securities for offer and sale under the state securities or blue sky laws or the securities laws of any other country, and, if requested by the Placement Agent, preparing and printing a "Blue Sky Survey," an "International Blue Sky Survey" or other memorandum, and any supplements thereto, advising the Placement Agent of such qualifications, registrations and exemptions, it being agreed that such fees and expenses will be limited to \$5,000 to such counsel upon commencement of "blue sky" work and an additional \$5,000 to such counsel at Closing; (vii) if applicable, the filing fees incident to the review and approval by the FINRA of the Placement Agent's participation in the offering and distribution of the Securities; (viii) the fees and expenses associated with including the Shares and Warrant Shares on the Trading Market, including any fees charged by The Depository Trust Company for new securities; (ix) all costs and expenses incident to the travel and accommodation of the Company's and the Placement Agent's employees on the "roadshow," if any, *provided that* the aggregate expense reimbursement payable to the Placement Agent is subject to a cap of \$5,000; (x) all fees, expenses and disbursements relating to background checks of the Company's officers, directors and entities in an amount not to exceed \$15,000 in the aggregate; and (xi) all other fees, costs and expenses referred to in Section 7 of the Engagement Agreement and Part II of the Registration Statement.

**Section 7. Indemnification and Contribution.**

(a) The Company agrees to indemnify and hold harmless the Placement Agent its affiliates and each person controlling the Placement Agent (within the meaning of Section 15 of the Securities Act), and the directors, officers, agents and employees of the Placement Agent its affiliates and each such controlling person (the Placement Agent, and each such entity or person, an "Indemnified Person") from and against any losses, claims, damages, judgments, assessments, costs and other liabilities (collectively, the "Liabilities"), and shall reimburse each Indemnified Person for all fees and expenses (including the reasonable fees and expenses of one counsel for all Indemnified Persons, except as otherwise expressly provided herein) (collectively, the "Expenses") as they are incurred by an Indemnified Person in investigating, preparing, pursuing or defending any actions, whether or not any Indemnified Person is a party thereto, (i) caused by, or arising out of or in connection with, any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, any Incorporated Document, or any Prospectus or by any omission or alleged omission to state therein a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading (other than untrue statements or alleged untrue statements in, or omissions or alleged omissions from, information relating to an Indemnified Person furnished in writing by or on behalf of such Indemnified Person expressly for use in the Incorporated Documents) or (ii) otherwise arising out of or in connection with advice or services rendered or to be rendered by any Indemnified Person pursuant to this Agreement, the transactions contemplated thereby or any Indemnified Person's actions or inactions in connection with any such advice, services or transactions; provided, however, that, in the case of clause (ii) only, the Company shall not be responsible for any Liabilities or Expenses of any Indemnified Person that are finally judicially determined to have resulted from such Indemnified Person's (x) gross negligence or willful misconduct in connection with any of the advice, actions, inactions or services referred to above or (y) use of any offering materials or information concerning the Company in connection with the offer or sale of the Securities in the Offering which were not authorized for such use by the Company and which use constitutes gross negligence or willful misconduct. The Company also agrees to reimburse each Indemnified Person for all Expenses as they are incurred in connection with enforcing such Indemnified Person's rights under this Agreement.

(b) Upon receipt by an Indemnified Person of actual notice of an action against such Indemnified Person with respect to which indemnity may be sought under this Agreement, such Indemnified Person shall promptly notify the Company in writing; provided that failure by any Indemnified Person so to notify the Company shall not relieve the Company from any liability which the Company may have on account of this indemnity or otherwise to such Indemnified Person, except to the extent the Company shall have been prejudiced by such failure. The Company shall, if requested by the Placement Agent, assume the defense of any such action including the employment of counsel reasonably satisfactory to the Placement Agent, which counsel may also be counsel to the Company. Any Indemnified Person shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Indemnified Person unless: (i) the Company has failed promptly to assume the defense and employ counsel or (ii) the named parties to any such action (including any impeded parties) include such Indemnified Person and the Company, and such Indemnified Person shall have been advised in the reasonable opinion of counsel that there is an actual conflict of interest that prevents the counsel selected by the Company from representing both the Company (or another client of such counsel) and any Indemnified Person; provided that the Company shall not in such event be responsible hereunder for the fees and expenses of more than one firm of separate counsel for all Indemnified Persons in connection with any action or related actions, in addition to any local counsel. The Company shall not be liable for any settlement of any action effected without its written consent (which shall not be unreasonably withheld). In addition, the Company shall not, without the prior written consent of the Placement Agent (which shall not be unreasonably withheld), settle, compromise or consent to the entry of any judgment in or otherwise seek to terminate any pending or threatened action in respect of which indemnification or contribution may be sought hereunder (whether or not such Indemnified Person is a party thereto) unless such settlement, compromise, consent or termination includes an unconditional release of each Indemnified Person from all Liabilities arising out of such action for which indemnification or contribution may be sought hereunder. The indemnification required hereby shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as such expense, loss, damage or liability is incurred and is due and payable.

(c) In the event that the foregoing indemnity is unavailable to an Indemnified Person other than in accordance with this Agreement, the Company shall contribute to the Liabilities and Expenses paid or payable by such Indemnified Person in such proportion as is appropriate to reflect (i) the relative benefits to the Company, on the one hand, and to the Placement Agent and any other Indemnified Person, on the other hand, of the matters contemplated by this Agreement or (ii) if the allocation provided by the immediately preceding clause is not permitted by applicable law, not only such relative benefits but also the relative fault of the Company, on the one hand, and the Placement Agent and any other Indemnified Person, on the other hand, in connection with the matters as to which such Liabilities or Expenses relate, as well as any other relevant equitable considerations; provided that in no event shall the Company contribute less than the amount necessary to ensure that all Indemnified Persons, in the aggregate, are not liable for any Liabilities and Expenses in excess of the amount of fees actually received by the Placement Agent pursuant to this Agreement. For purposes of this paragraph, the relative benefits to the Company, on the one hand, and to the Placement Agent on the other hand, of the matters contemplated by this Agreement shall be deemed to be in the same proportion as (a) the total value paid or contemplated to be paid to or received or contemplated to be received by the Company in the transaction or transactions that are within the scope of this Agreement, whether or not any such transaction is consummated, bears to (b) the fees paid to the Placement Agent under this Agreement. Notwithstanding the above, no person guilty of fraudulent misrepresentation within the meaning of Section 11(f) of the Securities Act, as amended, shall be entitled to contribution from a party who was not guilty of fraudulent misrepresentation.

(d) The Company also agrees that no Indemnified Person shall have any liability (whether direct or indirect, in contract or tort or otherwise) to the Company for or in connection with advice or services rendered or to be rendered by any Indemnified Person pursuant to this Agreement, the transactions contemplated thereby or any Indemnified Person's actions or inactions in connection with any such advice, services or transactions except for Liabilities (and related Expenses) of the Company that are finally judicially determined to have resulted from such Indemnified Person's gross negligence or willful misconduct in connection with any such advice, actions, inactions or services.

(e) The reimbursement, indemnity and contribution obligations of the Company set forth herein shall apply to any modification of this Agreement and shall remain in full force and effect regardless of any termination of, or the completion of any Indemnified Person's services under or in connection with, this Agreement.

**Section 8. Representations and Indemnities to Survive Delivery.** The respective indemnities, agreements, representations, warranties and other statements of the Company or any person controlling the Company, of its officers, and of the Placement Agent set forth in or made pursuant to this Agreement will remain in full force and effect, regardless of any investigation made by or on behalf of the Placement Agent, the Company, or any of its or their partners, officers or directors or any controlling person, as the case may be, and will survive delivery of and payment for the Securities sold hereunder and any termination of this Agreement. A successor to a Placement Agent, or to the Company, its directors or officers or any person controlling the Company, shall be entitled to the benefits of the indemnity, contribution and reimbursement agreements contained in this Agreement.

**Section 9. Notices.** All communications hereunder shall be in writing and shall be mailed, hand delivered or e-mailed and confirmed to the parties hereto as follows:

1000 RXR Plaza, Uniondale, NY 11556

If to the Placement Agent to the addresses set forth above, attention: Stephan A, Stein, President, email: [ \*\*\* ]

*With a copy to:*

Pryor Cashman LLP  
7 Times Square, New York, New York 10036-6569  
E-mail: [ \*\*\* ]

If to the Company:

VivoSim Labs, Inc.  
11555 Sorrento Valley Road, Suite 100  
San Diego, California 92121  
Attention: Keith Murphy, Executive Chairman  
Email: [ \*\*\* ]

*With a copy to:*

Paul Hastings LLP  
1117 California Ave  
Palo Alto, CA 94304  
Attn: Jeff Hartlin; Samantha Eldredge  
([ \*\*\* ]; [ \*\*\* ])

Any party hereto may change the address for receipt of communications by giving written notice to the others.

**Section 10. Successors.** This Agreement will inure to the benefit of and be binding upon the parties hereto, and to the benefit of the employees, officers and directors and controlling persons referred to in Section 7 hereof, and to their respective successors, and personal representatives, and no other person will have any right or obligation hereunder.

**Section 11. Partial Unenforceability.** The invalidity or unenforceability of any section, paragraph or provision of this Agreement shall not affect the validity or enforceability of any other section, paragraph or provision hereof. If any Section, paragraph or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

**Section 12. Governing Law Provisions.** This Agreement shall be deemed to have been made and delivered in New York City and both this Agreement and the transactions contemplated hereby shall be governed as to validity, interpretation, construction, effect and in all other respects by the internal laws of the State of New York, without regard to the conflicts of laws principles thereof. Each of the Placement Agent and the Company: (i) agrees that any legal suit, action or proceeding arising out of or relating to this Agreement and/or the transactions contemplated hereby shall be instituted exclusively in New York Supreme Court, County of New York, or in the United States District Court for the Southern District of New York, (ii) waives any objection which it may have or hereafter to the venue of any such suit, action or proceeding, and (iii) irrevocably consents to the jurisdiction of the New York Supreme Court, County of New York, and the United States District Court for the Southern District of New York in any such suit, action or proceeding. Each of the Placement Agent and the Company further agrees to accept and acknowledge service of any and all process which may be served in any such suit, action or proceeding in the New York Supreme Court, County of New York, or in the United States District Court for the Southern District of New York and agrees that service of process upon the Company mailed by certified mail to the Company's address shall be deemed in every respect effective service of process upon the Company, in any such suit, action or proceeding, and service of process upon the Placement Agent mailed by certified mail to the Placement Agent's address shall be deemed in every respect effective service process upon the Placement Agent, in any such suit, action or proceeding. If either party shall commence an action or proceeding to enforce any provisions of this Agreement, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its reasonable attorney's fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

**Section 13. General Provisions.**

(a) This Agreement constitutes the entire agreement of the parties to this Agreement and supersedes all prior written or oral and all contemporaneous oral agreements, understandings and negotiations with respect to the subject matter hereof. Notwithstanding anything herein to the contrary, the Engagement Agreement, dated February 17, 2026 (the "Engagement Agreement"), by and between the Company and the Placement Agent shall continue to be effective and the terms therein shall continue to survive and be enforceable by the Placement Agent in accordance with its terms, including but not limited to the Tail (as defined in the Engagement Agreement) in Section 4 and the Participation Right (as defined in the Engagement Agreement) in Section 15, provided that, in the event of a conflict between the terms of the Engagement Agreement and this Agreement, the terms of this Agreement shall prevail. This Agreement may be executed in two or more counterparts, each one of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. This Agreement may not be amended or modified unless in writing by all of the parties hereto, and no condition herein (express or implied) may be waived unless waived in writing by each party whom the condition is meant to benefit. Section headings herein are for the convenience of the parties only and shall not affect the construction or interpretation of this Agreement.

(b) The Company acknowledges that in connection with the offering of the Securities: (i) the Placement Agent's responsibility to the Company is solely contractual and commercial in nature, (ii) the Placement Agent have acted at arms length, are not agents of, and owe no fiduciary duties to the Company or any other person, (iii) the Placement Agent owe the Company only those duties and obligations set forth in this Agreement and (iv) the Placement Agent may have interests that differ from those of the Company. The Company waives to the fullest extent permitted by applicable law any claims it may have against the Placement Agent arising from any breach or alleged breach of fiduciary duty in connection with the offering of the Securities.

*[The remainder of this page has been intentionally left blank]*

If the foregoing is in accordance with your understanding of our agreement, please sign below whereupon this instrument, along with all counterparts hereof, shall become a binding agreement in accordance with its terms.

Very truly yours,

**VIVOSIM LABS, INC.**

By: \_\_\_\_\_  
Name: Keith Murphy  
Title: Executive Chairman

The foregoing Placement Agency Agreement is hereby confirmed and accepted as of the date first above written.

**JOSEPH GUNNAR & CO., LLC**

By: \_\_\_\_\_  
Name: Stephan A. Stein  
Title: President

## VIVOSIM LABS, INC.

## PRE-FUNDED COMMON STOCK PURCHASE WARRANT

Warrant Shares: [ ]

Initial Exercise Date: [ ], 2026

Issue Date: [ ], 2026

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 "Initial Exercise Date") and until this Warrant is exercised in full (the "Termination Date") but not thereafter, to subscribe for and purchase from VivoSim Labs, Inc., a Delaware corporation (the "Company"), up to [ ] shares of Common Stock, par value \$0.001 per share (the "Common Stock"), of the Company (as subject to adjustment hereunder, the "Warrant Shares"). 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. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Securities Purchase Agreement (the "Purchase Agreement"), dated [ ], 2026, among the Company and the purchasers signatory thereto.

Section 2. Exercise.

a) Exercise of Warrant. Subject to 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 Initial Exercise Date and on or before the Termination Date by delivery to 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) one (1) Trading Day 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. The Company shall have no obligation to inquire with respect to or otherwise confirm the authenticity of the signature(s) contained on any Notice of Exercise nor the authority of the person so executing such 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 this 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 \$0.001, subject to adjustment hereunder (the "Exercise Price").

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c) Cashless Exercise. If there is no effective registration statement permitting the issuance of Warrant Shares to, or the resale of Warrant Shares by, the Holder, then this Warrant may also be exercised, in whole or in part, 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) = as applicable: (i) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is (1) delivered pursuant to Section 2(a) hereof on a day that is not a Trading Day or (2) delivered pursuant to Section 2(a) hereof on a Trading Day prior to the opening of “regular trading hours” (as defined in Rule 600(b) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) the highest Bid Price of the Common Stock on the principal Trading Market as reported by Bloomberg L.P. (“Bloomberg”) within two (2) hours of the time of the Holder’s delivery of the Notice of Exercise pursuant to Section 2(a) hereof if such Notice of Exercise is delivered during “regular trading hours,” or within two (2) hours after the close of “regular trading hours,” on a Trading Day or (iii) the VWAP on the date of the applicable Notice of Exercise if the date of such Notice of Exercise is a Trading Day and such Notice of Exercise is delivered pursuant to Section 2(a) hereof after two (2) hours following the close of “regular trading hours” on such Trading Day;
- (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 characteristics of the Warrants being exercised, and the holding period of the Warrant Shares being issued may be tacked on to the holding period of this Warrant. The Company agrees not to take any position contrary to this Section 2(c).

“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 (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 OTCQB or OTCQX is not a Trading Market, 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 in The 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 Purchasers of a majority in interest of the Securities then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

“Bid Price” 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 bid price of the Common Stock for the time in question (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg (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 OTCQB or OTCQX is not a Trading Market, 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 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 Purchasers of a majority in interest of the Securities then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

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 registering the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) the Warrant Shares are eligible for resale by the Holder without volume or manner-of-sale limitations pursuant to Rule 144 (assuming cashless exercise of the Warrants), 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) one (1) Trading Day 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 and the aggregate Exercise Price (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) one (1) Trading Day 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 applicable to such exercise, the Holder may, upon written demand to the Company, require the Company to 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 third Trading Day after the Warrant Share Delivery Date) 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.

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 by delivering written notice to the Company at any time prior to the Company delivering such Warrant Shares.

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, but did not timely 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 shares of 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, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price or round up to the next 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 and shall have no liability for exercises of this Warrant that are not in compliance with the Beneficial Ownership Limitation. 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 one Trading Day 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%/9.99%] of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon 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 61<sup>st</sup> 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. If this Warrant is unexercisable as a result of the Holder's Beneficial Ownership Limitation, no alternate consideration shall be owing to the Holder.

### 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) Intentionally Omitted.

c) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if at any time when this Warrant is outstanding the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to 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).

d) 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 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, that, 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).

e) 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 (whether or not the Company is the surviving entity) unless the shareholders of the Company immediately prior to such consolidation or merger continue to hold greater than 50% of the outstanding shares of Voting Stock after such consolidation or merger, (ii) the Company (and all of its Subsidiaries, taken as a whole), directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of the Company's (including its Subsidiaries, taken as a whole) 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 greater than 50% of the outstanding Common Stock or greater than 50% of the voting power of the common equity of the Company, (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, merger or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires greater than 50% of the outstanding shares of Common Stock or greater than 50% of the voting power of the common equity of the Company (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 and the other Transaction Documents in accordance with the provisions of this Section 3(e) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) 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), and which is reasonably satisfactory in form and substance to the Holder. 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 and the other Transaction Documents 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 and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein. For the avoidance of doubt, the Holder shall be entitled to the benefits of the provisions of this Section 3(e) regardless of (i) whether the Company has sufficient authorized shares of Common Stock for the issuance of Warrant Shares and/or (ii) whether a Fundamental Transaction occurs prior to the Initial Exercise Date.

f) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share of Common Stock, 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.

g) 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, while this Warrant is outstanding, (A) the Company declares a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company declares a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company authorizes 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 is required in connection with a Fundamental Transaction, or (E) the Company authorizes 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 ten (10) calendar days prior to the applicable record or effective date hereinafter specified, a notice 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 shares of 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 shares of 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 and provided, further that no notice shall be required if the information is disseminated in a press release or document filed with the Securities and Exchange Commission. 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.

h) Voluntary Adjustment By Company. Subject to the rules and regulations of the Trading Market, the Company may at any time during the term of this Warrant, subject to the prior written consent of the holders of a majority of the then outstanding Warrants (based on the number of Warrant Shares then underlying such outstanding Warrants), reduce the then current Exercise Price to any amount and for any period of time deemed appropriate by the board of directors of the Company.

#### Section 4. Transfer of Warrant.

a) Transferability. Subject to compliance with any applicable securities laws, 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. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, 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 original Issue Date 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.

d) Intentionally Omitted.

e) Representation by the Holder. The Holder, by the acceptance hereof, represents and warrants that it is acquiring this Warrant and, upon any exercise hereof, will acquire the Warrant Shares issuable upon such exercise, for its own account and not with a view to or for distributing or reselling such Warrant Shares or any part thereof in violation of the Securities Act or any applicable state securities law, except pursuant to sales registered or exempted under the Securities Act.

#### 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 any rights of a Holder to receive Warrant Shares on a “cashless exercise” pursuant to Section 2(c) or to receive cash payments pursuant to Section 2(d)(i) and Section 2(d)(iv) herein, in no event shall the Company be required to net cash settle an exercise of this Warrant.

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 Trading Day, then such action may be taken or such right may be exercised on the next succeeding Trading Day.

d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued shares of 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 underlying 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) Jurisdiction. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be determined in accordance with the provisions of the Purchase Agreement.

f) Intentionally Omitted.

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 or the Purchase Agreement, 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 notice, request or other document required or permitted to be given or delivered to the Holder by the Company shall be delivered in accordance with the notice provisions of the Purchase Agreement.

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 and holders of a majority of the then outstanding Warrants (based on the number of Warrant Shares then underlying such outstanding Warrants), provided that if any amendment, modification or waiver disproportionately and adversely impacts a Holder (or group of Holders), the consent of such disproportionately impacted Holder (or group of Holders) shall also be required.

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.

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*(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.

**VIVOSIM LABS, INC.**

By: \_\_\_\_\_  
Name:  
Title:

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**NOTICE OF EXERCISE**

TO: \_\_\_\_\_

(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:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(4) Accredited Investor. The undersigned is an “accredited investor” as defined in Regulation D promulgated under the Securities Act of 1933, as amended.

[SIGNATURE OF HOLDER]

Name of Investing Entity: \_\_\_\_\_

*Signature of Authorized Signatory of Investing Entity:* \_\_\_\_\_

Name of Authorized Signatory: \_\_\_\_\_

Title of Authorized Signatory: \_\_\_\_\_

Date: \_\_\_\_\_

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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: \_\_\_\_\_ (Please Print)

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

Dated: \_\_\_\_\_, \_\_\_\_\_

Holder's Signature:

Holder's Address:

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## WARRANT

## VIVOSIM LABS, INC.

## WARRANT TO PURCHASE COMMON STOCK

Date of Issuance: [ ], 2026 (“**Issuance Date**”)

VivoSim Labs, Inc., a Delaware corporation (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, [ ], the registered holder hereof or its permitted assigns (the “**Holder**”), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, upon exercise of this Warrant to Purchase Common Stock (including any Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, the “**Warrant**”), at any time or times on or after the Issuance Date, but not after 11:59 p.m., New York time, on the Expiration Date (as defined below), [ ] (subject to adjustment as provided herein) fully paid and non-assessable shares of Common Stock (as defined below) (the “**Warrant Shares**”). Except as otherwise defined herein, capitalized terms in this Warrant shall have the meanings set forth in Section 16. This Warrant is one of the Warrants to purchase Common Stock (the “**SPA Warrants**”) issued to Holder pursuant to that certain Securities Purchase Agreement dated [ ], 2026 by and among the Company, the Holder and the other investors thereto (the “**Securities Purchase Agreement**”).

1. EXERCISE OF WARRANT.

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(f)), this Warrant may be exercised by the Holder on any day on or after the Issuance Date in whole or in part, by delivery (whether via facsimile, PDF submitted by e-mail, or otherwise) of a written notice, in the form attached hereto as **Exhibit A** (the “**Exercise Notice**”), of the Holder’s election to exercise this Warrant. Within one (1) Trading Day following an exercise of this Warrant as aforesaid, the Holder shall deliver payment to the Company of an amount equal to the Exercise Price in effect on the date of such exercise multiplied by the number of Warrant Shares as to which this Warrant was so exercised (in respect of such specific exercise, the “**Aggregate Exercise Price**”) in cash or via wire transfer of immediately available funds if the Holder did not notify the Company in such Exercise Notice that such exercise was made pursuant to a Cashless Exercise (as defined in Section 1(d)). The Holder shall not be required to deliver the original of this Warrant in order to effect an exercise hereunder. Execution and delivery of an Exercise Notice with respect to less than all of the Warrant Shares shall have the same effect as cancellation of the original of this Warrant certificate and issuance of a new Warrant certificate evidencing the right to purchase the remaining number of Warrant Shares. Execution and delivery of an Exercise Notice for all of the then-remaining Warrant Shares shall have the same effect as cancellation of the original of this Warrant certificate after delivery of the Warrant Shares in accordance with the terms hereof. On or before the first (1st) Trading Day following the date on which the Company has received an Exercise Notice, the Company shall transmit by facsimile or PDF submitted by email an acknowledgment of confirmation of receipt of such Exercise Notice, in the form attached hereto as **Exhibit B**, to the Holder and the Company’s transfer agent (the “**Transfer Agent**”). On or before the first (1st) Trading Day following the date on which the Company has received such Exercise Notice (the “**Required Delivery Date**”), the Company shall, upon the request of the Holder, credit such aggregate number of shares of Common Stock to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with The Depository Trust Company (“**DTC**”) through its Deposit/ Withdrawal at Custodian system. Upon delivery of an Exercise Notice, 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 such Warrant Shares are credited to the Holder’s DTC account. If this Warrant is submitted in connection with any exercise pursuant to this Section 1(a) and the number of Warrant Shares represented by this Warrant is greater than the number of Warrant Shares being acquired upon an exercise, then, at the request of the Holder and upon surrender hereof by the Holder to the Company, the Company shall as soon as practicable and in no event later than three (3) Business Days after any exercise and at its own expense, issue and deliver to the Holder (or its designee) a new Warrant (in accordance with Section 7(d)) representing the right to purchase the number of Warrant Shares purchasable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised. No fractional shares of Common Stock are to be issued upon the exercise of this Warrant, but rather the number of shares of Common Stock to be issued shall be rounded up to the nearest whole number. The Company shall pay any and all taxes and fees which may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant.

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(b) Exercise Price. For purposes of this Warrant, “**Exercise Price**” means \$[ ], subject to adjustment as provided herein.

(c) Company’s Failure to Timely Deliver Securities. If the Company fails to issue and credit the balance account of Holder or Holder’s nominee with DTC for such number of Warrant Shares for which this Warrant is exercised by the Holder, then, in addition to all other remedies available to Holder, at the sole discretion of Holder, the Company shall:

(i) pay in cash to Holder on each Trading Day after the Required Delivery Date that the issuance and credit of such Warrant Shares is not timely effected an amount equal to 5% of the product of (A) the number of shares of Common Stock not so credited to Holder or Holder’s nominee multiplied by (B) the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the Required Delivery Date; or

(ii) if on or after the Required Delivery Date, Holder (or any other Person in respect, or on behalf, of Holder) purchases (in an open market transaction or otherwise) Common Stock (“**Replacement Shares**”) to deliver in satisfaction of a sale by Holder of all or any portion of the number of shares of Common Stock, or a sale of a number of shares of Common Stock equal to all or any portion of the number of shares of Common Stock, that Holder so anticipated receiving from the Company without any restrictive legend, then, within five (5) Trading Days after Holder’s request and in Holder’s sole discretion, either (A) pay cash to Holder in an amount equal to Holder’s total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the Replacement Shares (the “**Buy-In Price**”), at which point the Company’s obligation to so credit Holder’s balance account shall terminate and such shares shall be cancelled, or (B) promptly honor its obligation to so credit Holder’s DTC account representing such number of shares of Common Stock that would have been so delivered if the Company timely complied with its obligations hereunder and pay cash to Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (1) such number of shares of Common Stock that the Company was required to deliver to Holder by the Required Delivery Date multiplied by (2) the lowest Closing Sale Price of the Common Stock on any Trading Day during the period commencing on the date Holder purchased Replacement Shares and ending on the date of such delivery and payment under this clause (ii).

To the extent permitted by law, the Company’s obligations to issue and deliver the Common Stock upon exercise of the Warrant in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other person of any obligation to the Company or any violation or alleged violation of law by the Holder or any other person, and irrespective of any other circumstance that might otherwise limit such obligation of the Company to the Holder in connection with the issuance of the Common Stock. Nothing herein shall limit the 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 the Common Stock issuable upon exercise of this Warrant as required pursuant to the terms hereof.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary (other than Section 1(f) below) at any time the Holder may in its sole discretion (and without limiting the Holder’s rights and remedies contained herein or in any of the other Transaction Documents (as defined in the Securities Purchase Agreement)), exercise this Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price, elect instead to receive upon such exercise the “Net Number” of shares of Common Stock determined according to the following formula (a “**Cashless Exercise**”):

$$\text{Net Number} = (A \times B) / C$$

For purposes of the foregoing formulas:

A = The total number of shares with respect to which this Warrant is then being exercised.

B = The Black Scholes Value (as defined in Section 16 herein).

C = The lower of the two Closing Bid Prices of the Common Stock in the two days prior the time of such exercise (as such Closing Bid Price is defined in Section 16 herein), but in any event not less than \$0.01 (as may be adjusted for stock dividends, subdivisions, or combinations in the manner described in Section 2(a) herein).

(e) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the number of Warrant Shares to be issued pursuant to the terms hereof (including, without limitation, the Net Number), the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed, *provided* that following such issuance to Holder such dispute shall be resolved in accordance with Section 13.

(f) Limitations on Exercises and Exchanges. Notwithstanding anything to the contrary contained in this Warrant, this Warrant shall not be exercisable or exchangeable by the Holder hereof to the extent (but only to the extent) that the Holder or any of its affiliates would beneficially own in excess of [4.99%/9.99%] of the number of shares of Common Stock outstanding after giving effect to the issuance of Common Stock issuable upon exercise of the Warrants calculated in accordance with Section 13(d) of the Exchange Act (the “**Maximum Percentage**”). To the extent the above limitation applies, the determination of whether this Warrant shall be exercisable or exchangeable (vis-à-vis other convertible, exercisable or exchangeable securities owned by the Holder or any of its affiliates) and of which such securities shall be exercisable or exchangeable (as among all such securities owned by the Holder) shall, subject to such Maximum Percentage limitation, be determined on the basis of the first submission to the Company for conversion, exercise or exchange (as the case may be). For the purposes of this paragraph, beneficial ownership and all determinations and calculations (including, without limitation, with respect to calculations of percentage ownership) shall be determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”) and the rules and regulations promulgated thereunder. The provisions of this paragraph shall be implemented in a manner otherwise than in strict conformity with the terms of this paragraph to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Maximum Percentage beneficial ownership limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such Maximum Percentage limitation. The limitations contained in this paragraph shall apply to a successor Holder of this Warrant. The holders of Common Stock shall be third party beneficiaries of this paragraph and the Company may not waive this paragraph without the consent of holders of a majority of its Common Stock. For any reason at any time, upon the written or oral request of the Holder, the Company shall within two (2) Business Days confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding, including by virtue of any prior conversion or exercise or exchange of convertible or exercisable or exchangeable securities into shares of Common Stock, including, without limitation, pursuant to this Warrant or securities issued pursuant to the Securities Purchase Agreement. No prior inability to exercise or exchange this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability or exchangeability.

(g) Reservation of Shares; Insufficient Authorized Shares. The Company shall initially reserve out of its authorized and unissued shares of Common Stock a number of shares of Common Stock equal to 250% of the maximum number of Warrant Shares issuable to satisfy the Company’s obligations to issue shares of Common Stock hereunder, and the Company shall at all times keep reserved for issuance under this Warrant a number of shares of Common Stock equal to 250% of the maximum number of Warrant Shares issuable to satisfy the Company’s obligation to issue shares of Common Stock hereunder.

(h) Activity Restrictions. For so long as Holder holds this Warrant or any Warrant Shares, Holder will not: (i) engage or participate in any actions, plans or proposals which relate to or would result in (a) acquiring additional securities of the Company, alone or together with any other Person, which would result in beneficially owning or controlling, or being deemed to beneficially own or control, more than 9.99% of the total outstanding shares of Common Stock or other voting securities of the Company, (b) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving Company, (c) a sale or transfer of a material amount of assets of the Company, (d) any change in the present board of directors or management of the Company, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board, (e) any material change in the present capitalization or dividend policy of the Company, (f) any other material change in the Company's business or corporate structure, including but not limited to, if the Company is a registered closed-end investment company, any plans or proposals to make any changes in its investment policy for which a vote is required by Section 13 of the Investment Company Act of 1940, (g) changes in the Company's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Company by any Person, (h) causing a class of securities of the Company to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association, (i) a class of equity securities of the Company becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Act of 1933, as amended (the "**Securities Act**"), or (j) any action, intention, plan or arrangement similar to any of those enumerated above, or (ii) request the Company or its directors, officers, employees, agents or representatives to amend or waive any provision of this Section 1(h); *provided, however,* that notwithstanding anything to the contrary contain in clauses (i) and (ii) above, Holder may vote any shares of Common Stock owned or controlled by it, solicit any proxies, or seek to advise or influence any Person with respect to any voting securities of the Company in Holder's discretion. Holder may only exercise this Warrant for a cash exercise price if the trading price at the time of exercise is greater than the then applicable Exercise Price.

2. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF WARRANT SHARES. The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 2.

(a) Stock Dividends and Splits. Without limiting any provision of Section 4, if the Company, at any time while this Warrant is outstanding, (i) pays a stock dividend on one or more classes of its then outstanding shares of Common Stock or otherwise makes a distribution on any class of capital stock that is payable in Common Stock, (ii) subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its then outstanding shares of Common Stock into a larger number of shares, or (iii) combines (by combination, reverse stock split or otherwise) one or more classes of its then outstanding shares of Common Stock into a smaller number of shares, then in each such case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock 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 clause (i) of this paragraph shall become effective immediately after the record date for the determination of shareholders entitled to receive such dividend or distribution, and any adjustment pursuant to clause (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this paragraph occurs during the period that an Exercise Price is calculated hereunder, then the calculation of such Exercise Price shall be adjusted appropriately to reflect such event.

(b) Adjustment Upon Issuance of Common Stock. If, during the Restricted Period (as defined in the Securities Purchase Agreement), the Company completes a financing involving the issuance by the Company of Common Stock or Common Stock Equivalents (a "Subsequent Financing"), or in accordance with this Section 2 is deemed to have effected a Subsequent Financing, any Common Stock (including the issuance or sale of Common Stock owned or held by or for the account of the Company) issued or sold or deemed to have been issued or sold) for a consideration per share (the "**New Issuance Price**") less than a price equal to the Exercise Price in effect immediately prior to such issue or sale or deemed issuance or sale (such Exercise Price then in effect is referred to as the "**Applicable Price**") (the foregoing a "**Dilutive Issuance**"), then immediately after such Dilutive Issuance, the Exercise Price then in effect shall be reduced (and in no event increased) to the price per share as determined in accordance with the following formula:

$$EP2 = EP1 \times (A + B) / (A + C)$$

For purposes of the foregoing formula:

A= The total number of Warrant Shares with respect to which this Warrant may then be exercised.

B= The total number of shares of Common Stock that would be issued or issuable under the Dilutive Issuance if issued at a per share equal to EP1.

C= The total number of shares of Common Stock actually issued or issuable under the Dilutive Issuance.

EP1= The Exercise Price in effect immediately prior to a Dilutive Issuance.

EP2= The Exercise Price immediately after such Dilutive Issuance; *provided, however*, that such price shall in no event be less than \$0.01 per share of Common Stock (as may be adjusted for stock dividends, subdivisions, or combinations in the manner described in Section 2(a) herein, the “**Floor Price**”);

*provided*, that if such issuance or sale (or deemed issuance or sale) was without consideration, then the Company shall be deemed to have received the Floor Price for each such share so issued or deemed to be issued. For all purposes of the foregoing (including, without limitation, determining the adjusted Exercise Price and consideration per share under this Section 2(b)), the following shall be applicable:

(i) Issuance of Options. If, during the Restricted Period, the Company in any manner grants or sells any Options and the lowest price per share for which one share of Common Stock is issuable upon the exercise of any such Option or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the granting or sale of such Option for such price per share. For purposes of this Section 2(b)(i), the “lowest price per share for which one share of Common Stock is issuable upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option” shall be equal to (A) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one share of Common Stock upon the granting or sale of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option minus (B) the sum of all amounts paid or payable to the holder of such Option (or any other Person) upon the granting or sale of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Option (or any other Person). Except as contemplated below, no further adjustment of the Exercise Price shall be made upon the actual issuance of such Common Stock or of such Convertible Securities upon the exercise of such Options or upon the actual issuance of such Common Stock upon conversion, exercise or exchange of such Convertible Securities.

(ii) Issuance of Convertible Securities. If, during the Restricted Period, the Company in any manner issues or sells any Convertible Securities and the lowest price per share for which one share of Common Stock is issuable upon the conversion, exercise or exchange thereof is less than the Applicable Price, then such share of Common Stock shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the issuance or sale of such Convertible Securities for such price per share. For the purposes of this Section 2(b)(ii), the “lowest price per share for which one share of Common Stock is issuable upon the conversion, exercise or exchange thereof” shall be equal to (A) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to one share of Common Stock upon the issuance or sale of the Convertible Security and upon conversion, exercise or exchange of such Convertible Security minus (B) the sum of all amounts paid or payable to the holder of such Convertible Security (or any other Person) upon the issuance or sale of such Convertible Security plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Convertible Security (or any other Person). Except as contemplated below, no further adjustment of the Exercise Price shall be made upon the actual issuance of such Common Stock upon conversion, exercise or exchange of such Convertible Securities, and if any such issue or sale of such Convertible Securities is made upon exercise of any Options for which adjustment of this Warrant has been or is to be made pursuant to other provisions of this Section 2(b), except as contemplated below, no further adjustment of the Exercise Price shall be made by reason of such issue or sale.

(iii) Change in Option Price or Rate of Conversion. If, during the Restricted Period, the purchase or exercise price provided for in any Options, the additional consideration, if any, payable upon the issue, conversion, exercise or exchange of any Convertible Securities, or the rate at which any Convertible Securities are convertible into or exercisable or exchangeable for Common Stock increases or decreases at any time, the Exercise Price in effect at the time of such increase or decrease shall be adjusted to the Exercise Price which would have been in effect at such time had such Options or Convertible Securities provided for such increased or decreased purchase price, additional consideration or increased or decreased conversion rate, as the case may be, at the time initially granted, issued or sold. For purposes of this Section 2(b)(iii), if the terms of any Option or Convertible Security that was outstanding as of the date of issuance of this Warrant are increased or decreased in the manner described in the immediately preceding sentence, then such Option or Convertible Security and the Common Stock deemed issuable upon exercise, conversion or exchange thereof shall be deemed to have been issued as of the date of such increase or decrease. No adjustment pursuant to this Section 2(b) shall be made if such adjustment would result in an increase of the Exercise Price then in effect.

(iv) Calculation of Consideration Received. If, during the Restricted Period, any Option or Convertible Security is issued in connection with the issuance or sale or deemed issuance or sale of any other securities of the Company, together comprising one integrated transaction, (A) such Option or Convertible Security (as applicable) will be deemed to have been issued for consideration equal to the Black Scholes Value – Consideration thereof and (B) the other securities issued or sold or deemed to have been issued or sold in such integrated transaction shall be deemed to have been issued for consideration equal to the difference of (1) the aggregate consideration received by the Company, minus (2) the Black Scholes Value – Consideration of each such Option or Convertible Security (as applicable). If any Common Stock, Options or Convertible Securities are issued or sold or deemed to have been issued or sold for cash, the consideration received therefor will be deemed to be the net amount of consideration received by the Company therefor. If any Common Stock, Options or Convertible Securities are issued or sold for a consideration other than cash, the amount of such consideration received by the Company will be the fair value of such consideration, except where such consideration consists of publicly traded securities, in which case the amount of consideration received by the Company for such securities will be the arithmetic average of the VWAPs of such security for each of the five (5) Trading Days immediately preceding the date of receipt. If any Common Stock, Options or Convertible Securities are issued to the owners of the non-surviving entity in connection with any merger in which the Company is the surviving entity, the amount of consideration therefor will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such Common Stock, Options or Convertible Securities, as the case may be. The fair value of any consideration other than cash or publicly traded securities will be determined jointly by the Company and the Holder. If such parties are unable to reach agreement within ten (10) days after the occurrence of an event requiring valuation (the “**Valuation Event**”), the fair value of such consideration will be determined within five (5) Trading Days after the tenth (10th) day following such Valuation Event by an independent, reputable appraiser jointly selected by the Company and the Holder. The determination of such appraiser shall be final and binding upon all parties absent manifest error and the fees and expenses of such appraiser shall be borne by the Company.

(v) Record Date. If, during the Restricted Period, the Company takes a record of the holders of Common Stock for the purpose of entitling them (A) to receive a dividend or other distribution payable in Common Stock, Options or in Convertible Securities or (B) to subscribe for or purchase Common Stock, Options or Convertible Securities, then such record date will be deemed to be the date of the issue or sale of the Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase (as the case may be).

(vi) Exempt Issuance. For the avoidance of doubt, no adjustment shall be made pursuant to this Section 2(b) for an Exempt Issuance (as defined in the Securities Purchase Agreement).

(c) Reserved.

(d) Reserved.

(e) Other Events. In the event that the Company shall take any action to which the provisions hereof are not strictly applicable, or, if applicable, would not operate to protect the Holder from dilution or if any event occurs of the type contemplated by the provisions of this Section 2 but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Company's board of directors shall in good faith determine and implement an appropriate adjustment in the Exercise Price and the number of Warrant Shares (if applicable) so as to protect the rights of the Holder, *provided* that no such adjustment pursuant to this Section 2(e) will increase the Exercise Price or decrease the number of Warrant Shares as otherwise determined pursuant to this Section 2, *provided further* that if the Holder does not accept such adjustments as appropriately protecting its interests hereunder against such dilution, then the Company's board of directors and the Holder shall agree, in good faith, upon an independent investment bank of nationally recognized standing to make such appropriate adjustments, whose determination shall be final and binding and whose fees and expenses shall be borne by the Company.

3. RIGHTS UPON DISTRIBUTION OF ASSETS. In addition to any adjustments pursuant to Section 2 above, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, indebtedness, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction, other than a distribution of Common Stock covered by Section 2(a)) (a "**Distribution**"), at any time after the issuance of this Warrant, then, in each such case, provision shall be made so that upon exercise of this Warrant, 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 Maximum Percentage) immediately before the date on which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders 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 Distributions would result in the Holder exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Distribution to such extent (or the beneficial ownership of any such Common Stock as a result of such Distribution to such extent) and such Distribution to such extent 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 Maximum Percentage).

4. PURCHASE RIGHTS; FUNDAMENTAL TRANSACTIONS.

(a) Purchase Rights. In addition to any adjustments pursuant to Section 2 above, if at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class 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 Maximum Percentage) 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 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 Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such 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 Maximum Percentage).

(b) Fundamental Transactions. The Company shall not enter into or be party to a Fundamental Transaction unless the Successor Entity assumes in writing all of the obligations of the Company under this Warrant and the other Transaction Documents related to this Warrant in accordance with the provisions of this Section 4(b) pursuant to written agreements in form and substance reasonably satisfactory to the Holder, including agreements confirming the obligations of the Successor Entity as set forth in this paragraph (b) and (c) and elsewhere in this Warrant and an obligation to 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, including, without limitation, which is exercisable for a corresponding number of shares of capital stock equivalent to the 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 Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such adjustments to the 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).

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 consideration it receives upon any exercise of this Warrant following such Fundamental Transaction.

Notwithstanding the foregoing, in the event of a Fundamental Transaction, the Company or any Successor Entity shall, at the Holder's option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction (or, if later, the date of the public announcement of the applicable Fundamental Transaction), purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value - FT of the remaining unexercised portion of this Warrant on the date of the consummation of such Fundamental Transaction; *provided, however*, that, if the Fundamental Transaction is not within the Company's control, including not approved by the Company's Board of Directors, the Holder shall only be entitled to receive from the Company or any Successor Entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value - FT of the unexercised portion of this Warrant, that is being offered and paid to the holders of Common Stock in connection with the Fundamental Transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of Common Stock are given the choice to receive from among alternative forms of consideration in connection with the Fundamental Transaction; *provided, further*, that if holders of Common Stock are not offered or paid any consideration in such Fundamental Transaction, such holders of Common Stock will be deemed to have received common stock of the Successor Entity (which Entity may be the Company following such Fundamental Transaction) in such Fundamental Transaction; *provided, further*, that such amount of reserved shares of Common Stock shall be limited by the Maximum Percentage of Common Stock as set forth in Section 1(f).

(c) Application. The provisions of this Section 4 shall apply similarly and equally to successive Fundamental Transactions and shall be applied as if this Warrant (and any such subsequent warrants issued hereunder) were fully exercisable and without regard to any limitations on the exercise of this Warrant (*provided* that the Holder shall continue to be entitled to the benefit of the Maximum Percentage, applied however with respect to shares of capital stock registered under the Exchange Act and thereafter receivable upon exercise of this Warrant (or any such other warrant)).

5. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation, bylaws or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, 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, and will at all times in good faith carry out all the provisions of this Warrant and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (i) shall not increase the par value of any Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, (ii) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and non-assessable shares of Common Stock upon the exercise of this Warrant, and (iii) shall, so long as any of the SPA Warrants are outstanding, take all action necessary to reserve and keep available out of its authorized and unissued shares of Common Stock, solely for the purpose of effecting the exercise of the SPA Warrants, the maximum number of shares of Common Stock as shall from time to time be necessary to effect the exercise of the SPA Warrants then outstanding; *provided, however*, that such amount of reserved Common Stock shall be limited by the Maximum Percentage of Common Stock as set forth in Section 1(f).

6. WARRANT HOLDER NOT DEEMED A SHAREHOLDER. Except as otherwise specifically provided herein, the Holder, solely in its capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in its capacity as the Holder of this Warrant, any of the rights of a shareholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which it is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a shareholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section 6, the Company shall provide the Holder with copies of the same notices and other information given to the shareholders of the Company generally, contemporaneously with the giving thereof to the shareholders.

7. REISSUANCE OF WARRANTS.

(a) Transfer of Warrant. If this Warrant is to be transferred, the Holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 7(d)), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the Holder representing the right to purchase the number of Warrant Shares not being transferred. If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant, the transfer of this Warrant shall not be either (i) registered pursuant to an effective registration statement under the Securities Act and under applicable state securities or blue sky laws or (ii) eligible for resale without volume or manner-of-sale restrictions or current public information requirements pursuant to Rule 144, the Company may require, as a condition of allowing such transfer, that the Holder or transferee of this Warrant, as the case may be, provide to the Company an opinion of counsel selected by the Holder and reasonably acceptable to the Company, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration of such transferred securities under the Securities Act.

(b) Lost, Stolen or Mutilated Warrant. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant (as to which a written certification and the indemnification contemplated below shall suffice as such evidence), and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary and reasonable form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 7(d)) representing the right to purchase the Warrant Shares then underlying this Warrant.

(c) Exchangeable for Multiple Warrants. This Warrant is exchangeable, upon the surrender hereof by the Holder to the Company, for a new Warrant or Warrants (in accordance with Section 7(d)) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the Holder at the time of such surrender; *provided, however*, no warrants for fractional share of Common Stock shall be given.

(d) Issuance of New Warrants. Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 7(a) or Section 7(c), the Warrant Shares designated by the Holder which, when added to the number of shares of Common Stock underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

8. NOTICES. Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be given in accordance with Section 5.4 of the Securities Purchase Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant, including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) as soon as practicable upon each adjustment of the Exercise Price and the number of Warrant Shares, setting forth in reasonable detail, and certifying, the calculation of such adjustment(s), (ii) at least ten (10) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Stock, (B) with respect to any grants, issuances or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities, indebtedness, or other property pro rata to holders of Common Stock or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information (to the extent it constitutes, or contains, material, non-public information regarding the Company) shall be made known to the public prior to or in conjunction with such notice being provided to the Holder and (iii) at least ten (10) Trading Days prior to the consummation of any Fundamental Transaction. It is expressly understood and agreed that the time of execution specified by the Holder in each Exercise Notice shall be definitive and may not be disputed or challenged by the Company.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Warrant (other than Section 1(f)) may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder. The Holder shall be entitled, at its option, to the benefit of any amendment of any other similar warrant issued under the Securities Purchase Agreement. No waiver shall be effective unless it is in writing and signed by an authorized representative of the waiving party.

10. SEVERABILITY. If any provision of this Warrant is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Warrant so long as this Warrant as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

11. GOVERNING LAW. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company 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 brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder or to enforce a judgment or other court ruling in favor of the Holder. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS WARRANT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

12. CONSTRUCTION; HEADINGS. This Warrant shall be deemed to be jointly drafted by the Company and the Holder and shall not be construed against any Person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant. Terms used in this Warrant but defined in the other Transaction Documents shall have the meanings ascribed to such terms on the Closing Date (as defined in the Securities Purchase Agreement) in such other Transaction Documents unless otherwise consented to in writing by the Holder.

13. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price, the Closing Sale Price, the Closing Bid Price, the Bid Price or fair market value or the arithmetic calculation of the Warrant Shares (as the case may be), the Company or the Holder (as the case may be) shall submit the disputed determinations or arithmetic calculations (as the case may be) via facsimile or PDF submitted by email (i) within two (2) Business Days after receipt of the applicable notice giving rise to such dispute to the Company or the Holder (as the case may be) or (ii) if no notice gave rise to such dispute, at any time after the Holder or the Company (as the case may be) learned of the circumstances giving rise to such dispute. If the Holder and the Company are unable to agree upon such determination or calculation (as the case may be) of the Exercise Price, the Closing Sale Price, the Closing Bid Price, the Bid Price or fair market value or the number of Warrant Shares (as the case may be) within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Company or the Holder (as the case may be), then the Company shall, within two (2) Business Days submit via facsimile or PDF submitted by email (a) the disputed arithmetic calculation of the Warrant Shares, the disputed determination of the Exercise Price, the Closing Sale Price, the Closing Bid Price, the Bid Price or fair market value (as the case may be) to an independent, reputable investment bank selected by the Holder, with the consent of the Company (which may not be unreasonably withheld, conditioned or delayed), or (b) if acceptable to the Holder, the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant. The Company shall, at its expense, cause the investment bank or the accountant (as the case may be) to perform the determinations or calculations (as the case may be) and notify the Company and the Holder of the results no later than ten (10) Business Days from the time it receives such disputed determinations or calculations (as the case may be). Such investment bank's or accountant's determination or calculation (as the case may be) shall be binding upon all parties absent demonstrable error. The fees and expenses of such investment bank or accountant shall be borne by the parties in the same proportion as the respective amounts by which the investment bank's or accountant's determination differs from such party's calculation.

14. REMEDIES, CHARACTERIZATION, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual damages for any failure by the Company to comply with the terms of this Warrant. The Company covenants to the Holder that there shall be no characterization concerning this instrument other than as expressly provided herein. Amounts set forth or provided for herein with respect to payments, exercises and the like (and the computation thereof) shall be the amounts to be received by the Holder and shall not, except as expressly provided herein, be subject to any other obligation of the Company (or the performance thereof). The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required. The Company shall provide all information and documentation to the Holder that is requested by the Holder to enable the Holder to confirm the Company's compliance with the terms and conditions of this Warrant (including, without limitation, compliance with Section 2 hereof). The issuance of shares as contemplated hereby upon the exercise of this Warrant shall be made without charge to the Holder or such shares for any issuance tax or other costs in respect thereof, *provided* that the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than the Holder or its agent on its behalf.

15. TRANSFER. This Warrant may be offered for sale, sold, transferred or assigned without the consent of the Company.

16. CERTAIN DEFINITIONS. For purposes of this Warrant, the following terms shall have the following meanings:

(a) "**Bid Price**" means, for any security as of the particular time of determination, the bid price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg as of such time of determination, or if the foregoing does not apply, the bid price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg as of such time of determination, or, if no bid price is reported for such security by Bloomberg as of such time of determination, the average of the bid prices of all of the market makers for such security as reported in the "pink sheets" by OTC Markets Group Inc. (formerly Pink Sheets LLC) as of such time of determination. If the Bid Price cannot be calculated for a security as of the particular time of determination on any of the foregoing bases, the Bid Price of such security as of such time of determination shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 13. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during such period.

(b) **“Black Scholes Value”** means the Black Scholes value of an option for one share of Common Stock at the date of the applicable Cashless Exercise, as such Black Scholes value is determined, calculated using the Black Scholes Option Pricing Model obtained from the “OV” function on Bloomberg utilizing (i) an underlying price per share equal to the Exercise Price, as adjusted, (ii) a risk-free interest rate corresponding to the U.S. Treasury rate, (iii) a strike price equal to the Exercise Price in effect at the time of the applicable Cashless Exercise, (iv) an expected volatility equal to 175%, and (v) a deemed remaining term of the Warrant of five (5) years (regardless of the actual remaining term of the Warrant).

(c) **“Black Scholes Value – Consideration”** means the value of the applicable Option or Convertible Security (as the case may be) as of the date of issuance thereof calculated using the Black Scholes Option Pricing Model obtained from the “OV” function on Bloomberg utilizing (i) an underlying price per share equal to the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the public announcement of the execution of definitive documents with respect to the issuance of such Option or Convertible Security (as the case may be), (ii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of such Option or Convertible Security (as the case may be) as of the date of issuance of such Option or Convertible Security (as the case may be) and (iii) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the date of issuance of such Option or Convertible Security (as the case may be).

(d) **“Black Scholes Value – FT”** means the value of the unexercised portion of this Warrant remaining on the date of the Holder’s request pursuant to Section 4(c), which value is calculated using the Black Scholes Option Pricing Model obtained from the “OV” function on Bloomberg utilizing (i) an underlying price per share equal to the greater of (A) the highest Closing Sale Price of the Common Stock during the period beginning on the Trading Day immediately preceding the earliest to occur of (1) the public disclosure of the applicable Fundamental Transaction, (2) the consummation of the applicable Fundamental Transaction and (3) the date on which the Holder first became aware of the applicable Fundamental Transaction and ending on the Trading Day of the Holder’s request pursuant to Section 4(c) and (B) the sum of the price per share being offered in cash in the applicable Fundamental Transaction (if any) plus the value of the non-cash consideration being offered in the applicable Fundamental Transaction (if any), (ii) a strike price equal to the Exercise Price in effect on the date of the Holder’s request pursuant to Section 4(c), (iii) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the greater of (A) the remaining term of this Warrant as of the date of the Holder’s request pursuant to Section 4(c) and (B) the remaining term of this Warrant as of the date of consummation of the applicable Fundamental Transaction or as of the date of the Holder’s request pursuant to Section 4(c) if such request is prior to the date of the consummation of the applicable Fundamental Transaction and (iv) an expected volatility equal to the greater of 175% and the 100 day volatility obtained from the HVT function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the earliest to occur of (A) the public disclosure of the applicable Fundamental Transaction, (B) the consummation of the applicable Fundamental Transaction and (C) the date on which the Holder first became aware of the applicable Fundamental Transaction.

(e) **“Bloomberg”** means Bloomberg, L.P.

(f) **“Business Day”** means any day other than Saturday, Sunday or other day on which commercial banks in New York, New York are authorized or required by law to remain closed.

(g) **“Certificate of Incorporation”** means the Company’s certificate of incorporation, as amended, filed with the Secretary of State of the State of Delaware.

(h) “**Closing Bid Price**” and “**Closing Sale Price**” means, for any security as of any date, the last closing bid price and the last closing trade price, respectively, for such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the average of the bid prices, or the ask prices, respectively, of all of the market makers for such security as reported in the “pink sheets” by OTC Markets Group Inc. (formerly Pink Sheets LLC). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price (as the case may be) of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 13. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during such period.

(i) “**Common Stock**” means the common stock, par value \$0.001 per share, of the Company and any other shares of stock issued or issuable with respect thereto (whether by way of a stock dividend or stock split or in exchange for or upon conversion of such shares or otherwise in connection with a combination of shares, distribution, recapitalization, merger, consolidation, other corporate reorganization or other similar event with respect to the Common Stock).

(j) “**Convertible Securities**” means any capital stock or other security of the Company that is at any time and under any circumstances directly or indirectly convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any capital stock or other security of the Company (including, without limitation, Common Stock).

(k) “**Eligible Market**” means the New York Stock Exchange (NYSE), the NYSE Amex, the Nasdaq Global Select Market, the Nasdaq Global Market or the Nasdaq Capital Market.

(l) “**Expiration Date**” means the date that is [ ], 2031<sup>1</sup> or, if such date falls on a day other than a Business Day or on which trading does not take place on the principal securities exchange or trading market where the Common Stock is listed (a “**Holiday**”), the next date that is not a Holiday.

(m) “**Fundamental Transaction**” means that (i) the Company shall, directly or indirectly, in one or more related transactions, (1) consolidate or merge with or into (whether or not the Company is the surviving entity) any other Person unless the shareholders of the Company immediately prior to such consolidation or merger continue to hold more than 50% of the outstanding shares of Voting Stock after such consolidation or merger, or (2) sell, lease, license, assign, transfer, convey or otherwise dispose of all or substantially all of its properties or assets to any other Person, in connection with which the Company is dissolved, or (3) allow any other Person to make a purchase, tender or exchange offer that is accepted by the holders of more than 50% of the outstanding shares of Voting Stock of the Company (not including any shares of Voting Stock of the Company held by the Person or Persons making or party to, or associated or affiliated with the Persons making or party to, such purchase, tender or exchange offer), or (4) consummate a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with any other Person whereby such other Person acquires more than 50% of the outstanding shares of Voting Stock of the Company (not including any shares of Voting Stock of the Company 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), or (ii) any “person” or “group” (as these terms are used for purposes of Sections 13(d) and 14(d) of the Exchange Act and the rules and regulations promulgated thereunder) is or shall become the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of more than 50% of the aggregate ordinary voting power represented by issued and outstanding Voting Stock of the Company.

(n) “**Options**” means any rights, warrants or options to subscribe for or purchase Common Stock or Convertible Securities.

(o) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person and whose common stock or equivalent equity security is quoted or listed on an Eligible Market, or, if there is more than one such Person or Parent Entity, the Person or Parent Entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

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<sup>1</sup> Insert date that is 5 years from the issue date.

(p) “**Person**” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity or a government or any department or agency thereof.

(q) “**Successor Entity**” means the Person (or, if so elected by the Holder, the Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or the Person (or, if so elected by the Holder, the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(r) “**Trading Day**” means, as applicable, (x) with respect to all price determinations relating to the Common Stock, any day on which the Common Stock is traded on the principal securities exchange or securities market on which the Common Stock is then traded, provided that “Trading Day” shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock is suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time) unless such day is otherwise designated as a Trading Day in writing by the Holder or (y) with respect to all determinations other than price determinations relating to the Common Stock, any day on which The New York Stock Exchange (or any successor thereto) is open for trading of securities.

(s) “**Voting Stock**” of a Person means capital stock of such Person of the class or classes pursuant to which the holders thereof have the general voting power to elect, or the general power to appoint, at least a majority of the board of directors, managers or trustees of such Person (irrespective of whether or not at the time capital stock of any other class or classes shall have or might have voting power by reason of the happening of any contingency).

(t) “**VWAP**” means, for any security as of any date, the dollar volume-weighted average price for such security on the principal securities exchange or securities market on which such security is then traded during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg through its “Volume at Price” function or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the three highest closing bid prices and the three lowest closing ask prices of all of the market makers for such security as reported in the “pink sheets” by OTC Markets Group Inc. (formerly Pink Sheets LLC). If VWAP cannot be calculated for such security on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved in accordance with the procedures in Section 13. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during such period.

*[signature page follows]*

**IN WITNESS WHEREOF**, the Company has caused this Warrant to Purchase Common Stock to be duly executed as of the Issuance Date set out above.

**VIVOSIM LABS, INC.**

By: \_\_\_\_\_

Name:

Title:

\_\_\_\_\_

EXHIBIT A

EXERCISE NOTICE

TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS WARRANT TO PURCHASE COMMON STOCK

VIVOSIM LABS, INC.

The undersigned holder hereby exercises the right to purchase \_\_\_\_\_ shares of the Common Stock (“**Warrant Shares**”) of VivoSim Labs, Inc., a Delaware corporation (the “**Company**”), evidenced by Warrant to Purchase Common Stock No. \_\_\_\_ (the “**Warrant**”). Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. Form of Exercise Price. The Holder intends that payment of the Exercise Price shall be made as:

\_\_\_\_\_ a “Cash Exercise” with respect to \_\_\_\_\_ Warrant Shares; and/or  
\_\_\_\_\_ a “Cashless Exercise” with respect to \_\_\_\_\_ Warrant Shares.

In the event that the Holder has elected a Cashless Exercise with respect to some or all of the Warrant Shares, the Holder represents and warrants that \_\_\_\_\_ Common Stock are to be delivered pursuant to such Cashless Exercise, as further specified in Annex A to this Exercise Notice.

2. Payment of Exercise Price. In the event that the Holder has elected a Cash Exercise with respect to some or all of the Warrant Shares, the Holder shall pay the Aggregate Exercise Price in the sum of \$\_\_\_\_\_ to the Company in accordance with the terms of the Warrant.

3. Delivery of Warrant Shares and Net Number of Common Stock. The Company shall deliver to Holder, or its designee or agent as specified below, \_\_\_\_\_ Common Stock in respect of the exercise contemplated hereby. Delivery shall be made to Holder, or for its benefit, to the following address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date: \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Name of Registered Holder

By: \_\_\_\_\_

Name:

Title:

Account Number: (if electronic book entry transfer) Transaction Code Number:

Transaction Code Number: (if electronic book entry transfer)

\_\_\_\_\_

**CASHLESS EXERCISE EXCHANGE CALCULATION**

**TO BE FILLED IN BY THE REGISTERED HOLDER TO EXCHANGE THE WARRANT TO PURCHASE COMMON STOCK IN A CASHLESS EXERCISE PURSUANT TO SECTION 1(d) OF THE WARRANT**

Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

[ ] Net Number =  $(A \times B) / C$  = shares of Common Stock

For purposes of the foregoing formula:

A = the total number of shares with respect to which the Warrant is then being exercised =.

B = Black Scholes Value (as defined in Section 16 of the Warrant) =.

C = The lower of the two Closing Bid Prices of the Common Stock in the two days prior the time of such exercise (as such Closing Bid Price is defined in Section 16 of the Warrant) =.

Date: \_\_\_\_\_, \_\_\_\_\_

Name of Registered Holder

By: \_\_\_\_\_

Name:

Title:

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**ACKNOWLEDGMENT**

The Company hereby acknowledges this Exercise Notice and hereby directs to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated , 20 , from the Company and acknowledged and agreed to by .

**VIVOSIM LABS, INC.**

By: \_\_\_\_\_  
Name:  
Title:

\_\_\_\_\_

## PLACEMENT AGENT'S PURCHASE WARRANT

VIVOSIM LABS, Inc.

Warrant Shares: [ ]<sup>1</sup>Initial Exercise Date: [ ], 2026<sup>2</sup>

Issue Date: [ ], 2026

This **PLACEMENT AGENT'S PURCHASE WARRANT** (this "Warrant") certifies that, for value received, Joseph Gunnar & Co., LLC 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 referred to above as the Initial Exercise Date (the "Initial Exercise Date") and on or prior to 5:00 p.m. (New York City time) on [ ], 2029<sup>3</sup> (the "Termination Date") but not thereafter, to subscribe for and purchase from VivoSim Labs, Inc., a Delaware corporation (the "Company"), up to [ ] shares of common stock, \$0.001 par value per share (the "Common Stock"), of the Company (as subject to adjustment hereunder, the "Warrant Shares"). 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. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Placement Agency Agreement (the "Placement Agency Agreement"), dated [ ], 2026, between the Company and Joseph Gunnar & Co., LLC, as placement agent.

Section 2. Exercise.

a) Exercise of Warrant. Subject to Section 2(d) 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 Initial Exercise Date and on or before the Termination Date by delivery to the Company of a duly executed facsimile copy or PDF copy submitted by email (or e-mail attachment) of the Notice of Exercise in the form annexed hereto (the "Notice of Exercise"). Within the earlier of (i) one (1) Trading Day 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. The Company shall have no obligation to inquire with respect to or otherwise confirm the authenticity of the signature(s) contained on any Notice of Exercise nor the authority of the person so executing such 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.**

<sup>1</sup> Insert number that equals 5% of the aggregate number of shares of common stock (or pre-funded warrants in lieu thereof) sold in the offering.

<sup>2</sup> Insert date that is six months from the issue date.

<sup>3</sup> Insert date that is three years from the issue date.

b) Exercise Price. The exercise price per share of Common Stock under this Warrant shall be \$[ ]<sup>4</sup>, subject to adjustment hereunder (the "Exercise Price").

c) Cashless Exercise. If there is no effective registration statement permitting the issuance of Warrant Shares to, or the resale of Warrant Shares by, the Holder, then this Warrant may also be exercised, in whole or in part, 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) = as applicable: (i) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is (1) delivered pursuant to Section 2(a) hereof on a day that is not a Trading Day or (2) delivered pursuant to Section 2(a) hereof on a Trading Day prior to the opening of "regular trading hours" (as defined in Rule 600(b) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) the highest Bid Price of the Common Stock on the principal Trading Market as reported by Bloomberg L.P. ("Bloomberg") within two (2) hours of the time of the Holder's delivery of the Notice of Exercise pursuant to Section 2(a) hereof if such Notice of Exercise is delivered during "regular trading hours," or within two (2) hours after the close of "regular trading hours," on a Trading Day or (iii) the VWAP on the date of the applicable Notice of Exercise if the date of such Notice of Exercise is a Trading Day and such Notice of Exercise is delivered pursuant to Section 2(a) hereof after two (2) hours following the close of "regular trading hours" on such Trading Day;
- (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 characteristics of the Warrants being exercised, and the holding period of the Warrant Shares being issued may be tacked on to the holding period of this Warrant. The Company agrees not to take any position contrary to this Section 2(c).

"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 (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 OTCQB or OTCQX is not a Trading Market, 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 in The 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 Holder and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

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<sup>4</sup> Insert exercise price equaling 125% of the public offering price per share of the securities sold.

“Bid Price” 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 bid price of the Common Stock for the time in question (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg (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 OTCQB or OTCQX is not a Trading Market, 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 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 Holder and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

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 registering the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) the Warrant Shares are eligible for resale by the Holder without volume or manner-of-sale limitations pursuant to Rule 144 (assuming cashless exercise of the Warrant) , 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) one (1) Trading Day 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 and the aggregate Exercise Price (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) one (1) Trading Day 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 applicable to such exercise, the Holder may, upon written demand to the Company, require the Company to 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 Trading Day after the Warrant Share Delivery Date) 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.

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 by delivering written notice to the Company at any time prior to the Company delivering such Warrant Shares.

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, but did not timely 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 shares of 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, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price or round up to the next 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, and shall be the sole responsibility 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 and shall have no liability for exercises of this Warrant that are not in compliance with the Beneficial Ownership Limitation. 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, and the Company shall have no obligation to verify or confirm the accuracy of such determination and shall have no liability for exercises of this Warrant that are not in compliance with the Beneficial Ownership Limitation. 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 one Trading Day 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 Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon 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 61<sup>st</sup> 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. If this Warrant is unexercisable as a result of the Holder's Beneficial Ownership Limitation, no alternate consideration shall be owing to the Holder.

### 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 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 when this Warrant is outstanding, the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to 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 (other than cash) or other distribution of its assets (or rights to acquire its assets) to 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 and excluding a stock split) (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, that, 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 (whether or not the Company is the surviving entity) unless the shareholders of the Company immediately prior to such consolidation or merger continue to hold greater than 50% of the outstanding shares of Voting Stock after such consolidation or merger, (ii) the Company (and all of its Subsidiaries, taken as a whole), directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of the Company's (including its Subsidiaries, taken as a whole) 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 greater than 50% of the outstanding Common Stock or greater than 50% of the voting power of the common equity of the Company, (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 (other than stock split), 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, merger or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires greater than 50% of the outstanding shares of Common Stock or greater than 50% of the voting power of the common equity of the Company (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 and the other Transaction Documents in accordance with the provisions of this Section 3(d) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) 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), and which is reasonably satisfactory in form and substance to the Holder. 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 and the other Transaction Documents 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 and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein. For the avoidance of doubt, the Holder shall be entitled to the benefits of the provisions of this Section 3(d) regardless of (i) whether the Company has sufficient authorized shares of Common Stock for the issuance of Warrant Shares and/or (ii) whether a Fundamental Transaction occurs prior to the Initial Exercise Date.

e) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share of Common Stock, 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, while this Warrant is outstanding, (A) the Company declares a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company declares a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company authorizes 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 is required in connection with a Fundamental Transaction, or (E) the Company authorizes 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 ten (10) calendar days prior to the applicable record or effective date hereinafter specified, a notice 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 shares of 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 shares of Common Stock of record shall be entitled to exchange their shares of 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 and provided, further that no notice shall be required if the information is disseminated in a press release or document filed with the Securities and Exchange Commission. 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. Neither this Warrant nor any Warrant Shares issued upon exercise of this Warrant shall be sold, transferred, assigned, pledged or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the securities by any person for a period of six months immediately following the commencement of sales of the offering pursuant to which this Warrant is being issued. Subject to the foregoing restriction, 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. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, 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. This 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 or on behalf of 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.

d) Representation by Holder. The Holder, by the acceptance hereof, represents and warrants that it is acquiring this Warrant and, upon any exercise hereof, will acquire the Warrant Shares issuable upon such exercise, for its own account and not with a view to or for distributing or reselling such Warrant Shares or any part thereof in violation of the Securities Act or any applicable state securities law, except pursuant to sales registered or exempted under the Securities Act.

## Section 5. Registration Rights.

a) To the extent the Company does not maintain an effective registration statement for the Warrant Shares and in the further event that the Company files a registration statement with the Securities and Exchange Commission covering the sale of its shares of Common Stock (other than a registration statement on Form S-4 or S-8, or on another form, or in another context, in which such “piggyback” registration would be inappropriate), then, for a period of five (5) years from the commencement of sales of the Offering, the Company shall give written notice of such proposed filing to the Holder as soon as practicable but in no event less than ten (10) days before the anticipated filing date, which notice shall describe the amount and type of securities to be included in such offering, the intended method(s) of distribution, and the name of the proposed managing underwriter or underwriters, if any, of the offering, and offer to the Holder in such notice the opportunity to register the sale of such number of shares of Warrant Shares as such Holder may request in writing within five (5) days following receipt of such notice (a “Piggyback Registration”). The Company shall cause such Warrant Shares to be included in such registration and shall use its commercially reasonable efforts to cause the managing underwriter or underwriters of a proposed underwritten offering to permit the Warrant Shares requested to be included in a Piggyback Registration on the same terms and conditions as any similar securities of the Company and to permit the sale or other disposition of such Warrant Shares in accordance with the intended method(s) of distribution thereof. All Holders proposing to distribute their securities through a Piggyback Registration that involves an underwriter or underwriters shall enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such Piggyback Registration. Furthermore, each Holder must provide such information as reasonably requested by the Company (which information shall be limited to that which is required for disclosure under the Securities Act and the forms, rules and regulations promulgated thereunder) to be included in the registration statement timely or the Company may elect to exclude such Holder from the registration statement.

b) In addition, to the extent the Company does not maintain an effective registration statement for the Warrant Shares, for a period of five (5) years from the commencement of sales of the Offering, the Holder shall be entitled to one (1) demand right for the registration of the Warrant Shares at the Company’s expense (other than any underwriting discounts, selling commissions, share transfer taxes applicable to the sale of the Warrant Shares, and fees and disbursements of counsel for the Holder) (the “Demand Registration”). In the event of a Demand Registration, the Company shall use its commercially reasonable efforts to register the applicable Warrant Shares. All Holders of Warrant Shares proposing to distribute their securities through a Demand Registration that involves an underwriter or underwriters shall enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such Demand Registration. Furthermore, each Holder must provide such information as reasonably requested by the Company (which information shall be limited to that which is required for disclosure under the Securities Act and the forms, rules and regulations promulgated thereunder) to be included in the registration statement timely or the Company may elect to exclude such Holder from the registration statement.

c) Notwithstanding the foregoing, the registration rights described in this Section 5 shall be subject to limitations imposed by the Commission’s rules or comments of the Commission staff in connection with its review of the registration statement for any such resale registration. Moreover, notwithstanding the foregoing registration obligations of the Company, if the Company furnishes to the Holders requesting a Demand Registration a certificate signed by the Company’s chief executive officer stating that in the good faith judgment of the Company’s Board of Directors it would be materially detrimental to the Company and its stockholders for a registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such Demand Registration or withdraw a related registration statement for a period of not more than forty-five (45) calendar days; provided, however, that the Company may not invoke this right more than twice in any twelve (12) month period or during the twelve (12) month period prior to the Termination Date.

Section 6. 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 any rights of a Holder to receive Warrant Shares on a “cashless exercise” pursuant to Section 2(c) or to receive cash payments pursuant to Section 2(d)(i) and Section 2(d)(iv) herein, in no event shall the Company be required to net cash settle an exercise of this Warrant.

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 Trading Day, then, such action may be taken or such right may be exercised on the next succeeding Trading Day.

d) Authorized Shares.

i. The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued shares of 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 underlying 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).

ii. 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.

iii. 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; Venue. This Warrant shall be deemed to have been made and delivered in New York City and both this Warrant and the transactions contemplated hereby shall be governed as to validity, interpretation, construction, effect and in all other respects by the internal laws of the State of New York, without regard to the conflicts of laws principles thereof. Each of the Holder and the Company: (a) agrees that any legal suit, action or proceeding arising out of or relating to this Warrant and/or the transactions contemplated hereby shall be instituted exclusively in the New York Supreme Court, County of New York, or in the United States District Court for the Southern District of New York, (b) waives any objection which it may have or hereafter to the venue of any such suit, action or proceeding, and (c) irrevocably consents to the jurisdiction of the New York Supreme Court, County of New York, and in the United States District Court for the Southern District of New York in any such suit, action or proceeding. Each of the Holder and the Company further agrees to accept and acknowledge service of any and all process which may be served in any such suit, action or proceeding in the New York Supreme Court, County of New York, or in the United States District Court for the Southern District of New York and agrees that service of process upon the Company mailed by certified mail to the Company's address shall be deemed in every respect effective service of process upon the Company, in any such suit, action or proceeding, and service of process upon the Holder mailed by certified mail to the Holder's address shall be deemed in every respect effective service process upon the Holder, in any such suit, action or proceeding. If either party shall commence an action or proceeding to enforce any provisions of this Warrant, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its reasonable attorney's 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 hereunder shall be made in accordance with the Placement Agency Agreement.

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 the Holder of this Warrant, on the other hand.

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.

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*(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.

**VIVOSIM LABS, INC.**

By: \_\_\_\_\_

Name:

Title:

**NOTICE OF EXERCISE**

To: **VIVOSIM 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: \_\_\_\_\_  
(Please Print)

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

Dated: \_\_\_\_\_

Holder's Signature: \_\_\_\_\_

Holder's Address: \_\_\_\_\_

**PAUL**  

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**HASTINGS**

March 27, 2026

47901.00017

VivoSim Labs, Inc.  
11555 Sorrento Valley Road, Suite 100  
San Diego, CA 92121

Ladies and Gentlemen:

We have acted as counsel to Organovo Holdings, Inc., a Delaware corporation (the “*Company*”), in connection with the preparation and filing with the U.S. Securities and Exchange Commission (the “*Commission*”), pursuant to the Securities Act of 1933, as amended (the “*Securities Act*”), of the Registration Statement on Form S-1 of the Company (including all exhibits thereto, the “*Registration Statement*”), including a related prospectus filed with the Registration Statement (the “*Prospectus*”) relating to the proposed public offering (the “*Offering*”) of (i) up to 2,366,862 shares (the “*Shares*”) of the Company’s common stock, \$0.001 par value per share (the “*Common Stock*”), (ii) pre-funded warrants to purchase up to an aggregate of 2,366,862 shares of Common Stock (the “*Pre-Funded Warrants*”), (iii) common warrants to purchase up to an aggregate of 3,550,293 shares of Common Stock (the “*Common Warrants*”), (iv) placement agent warrants to purchase up to an aggregate of 118,343 shares of Common Stock (the “*Placement Agent Warrants*”) and together with the Pre-Funded Warrants and the Common Warrants, the “*Warrants*”), (v) up to 2,366,862 shares of Common Stock underlying the Pre-Funded Warrants (the “*Pre-Funded Warrant Shares*”), (vi) up to 8,875,733 shares of Common Stock underlying the Common Warrants (the “*Common Warrant Shares*”), and (vii) up to 118,343 shares of Common Stock underlying the placement agent warrants (the “*Placement Agent Warrant Shares*”), and together with the Pre-Funded Warrant Shares and the Common Warrant Shares, the “*Warrant Shares*”). The Shares, the Pre-Funded Warrants, the Common Warrants, the Pre-Funded Warrant Shares and the Common Warrant Shares (collectively, the “*Investor Securities*”) are to be sold to the several purchasers pursuant to securities purchase agreements (each, a “*Securities Purchase Agreement*” and collectively, the “*Securities Purchase Agreements*”) among the Company and the purchasers signatory thereto (collectively, the “*Purchasers*”). The Placement Agent Warrants and the Placement Agent Warrant Shares are to be issued to Joseph Gunnar & Co., LLC pursuant to a placement agent agreement to be entered into between the Company and the Placement Agent (the “*Placement Agent Agreement*”). The Investor Securities, the Placement Agent Warrants and the Placement Agent Warrant Shares are collectively referred to herein as the “*Securities*”).

In connection with this opinion, we have examined and relied upon the Registration Statement, the Prospectus, the form of Securities Purchase Agreement, the form of Pre-Funded Warrant, the form of Common Warrant, the form of Placement Agent Warrant, the Placement Agent Agreement, the Company’s Certificate of Incorporation, as amended, and the Company’s Amended and Restated Bylaws, each as currently in effect, and the originals or copies, certified or otherwise identified to our satisfaction, of such documents, resolutions, certificates and other instruments of the Company and such other instruments and documents as we have deemed necessary or appropriate as a basis for the opinions set forth below.

As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters. We have assumed the genuineness and authenticity of all documents submitted to us as originals, and the conformity to originals of all documents submitted to us as copies thereof.

March 27, 2026

Page 2

Our opinion is limited to the matters stated herein and no opinion is implied or may be inferred beyond the matters expressly stated. Our opinion herein is expressed solely with respect to the federal laws of the United States and the General Corporation Law of the State of Delaware. We are not rendering any opinion as to compliance with any federal or state antifraud law, rule or regulation relating to securities, or to the sale or issuance thereof. Our opinion is based on these laws as in effect on the date hereof, and we disclaim any obligation to advise you of facts, circumstances, events or developments which hereafter may be brought to our attention and which may alter, affect or modify the opinion expressed herein. We express no opinion as to whether the laws of any particular jurisdiction other than those identified above are applicable to the subject matter hereof.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that:

1. The Shares have been duly authorized by the Company and, and when issued and sold in accordance with the Registration Statement and the Prospectus, with payment received by the Company in the manner described in the Securities Purchase Agreement, will be validly issued, fully paid and nonassessable.
2. The Warrants have been duly authorized by the Company, and when issued and sold in accordance with the Registration Statement and the Prospectus, with payment received by the Company in the manner described in the Securities Purchase Agreement or the Placement Agent Agreement, as applicable, will be valid and binding obligations of the Company, enforceable against the Company in accordance with their terms except as such enforceability may be limited by (i) any applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' rights generally including, without limitation, fraudulent transfer or fraudulent conveyance laws; (ii) public policy considerations, statutes or court decisions that may limit rights to obtain exculpation, indemnification or contribution (including, without limitation, indemnification regarding violations of the securities laws and indemnification for losses resulting from a judgment for the payment of any amount other than in United States dollars); and (iii) general principles of equity (including, without limitation, concepts of materiality, reasonableness, good faith and fair dealing) and the availability of equitable remedies (including, without limitation, specific performance and equitable relief), regardless of whether considered in a proceeding in equity or at law.
3. The Warrant Shares have been duly authorized by all necessary corporate action on the part of the Company and assuming sufficient authorized but unissued shares of Common Stock are available for issuance when the Warrants are exercised, the Warrant Shares, when issued, delivered and paid for in accordance with the terms of the Warrants, will be validly issued, fully paid and nonassessable.

With regard to opinion paragraph 2: (i) our opinion is subject to the qualification that the availability of specific performance, an injunction or other equitable remedies is subject to the discretion of the court before which the request is brought; (ii) we express no opinion as to any provision of the Warrants that (a) provides for liquidated damages, buy-in damages, monetary penalties, prepayment or make-whole payments or other economic remedies to the extent such provisions may constitute unlawful penalties, (b) relates to advance waivers of claims, defenses, rights granted by law, or notice, opportunity for hearing, evidentiary requirements, statutes of limitations, trial by jury, or procedural rights, (c) restricts non-written modifications and waivers, (d) provides for the payment of legal and other professional fees where such payment is contrary to law or public policy, (e) relates to exclusivity, election or accumulation of rights or remedies, (f) authorizes or validates conclusive or discretionary determinations, or (g) provides that provisions of the Warrants are severable to the extent an essential part of the agreed exchange is determined to be invalid and unenforceable; and (iii) we express no opinion as to whether a state court outside of the State of New York or a federal court of the United States would give effect to the choice of New York law provided for in the Warrants.

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# PAUL HASTINGS

March 27, 2026

Page 3

Without limiting any of the other limitations, exceptions, assumptions and qualifications stated elsewhere herein, we express no opinion with regard to the applicability or effect of the laws of any jurisdiction other than the General Corporation Law of the State of Delaware and the laws of the State of New York, as in effect on the date of this opinion letter. We are not rendering any opinion as to compliance with any federal or state antifraud law, rule or regulation relating to securities, or to the sale or issuance thereof.

This opinion letter deals only with the specified legal issues expressly addressed herein, and you should not infer any opinion that is not explicitly stated herein from any matter addressed in this opinion letter.

This opinion letter is rendered solely in connection with the offering of the Securities as described in the Registration Statement. This opinion letter is rendered as of the date hereof, and we assume no obligation to advise you or any other person with regard to any change after the date hereof in the circumstances or the law that may bear on the matters set forth herein, even if the change may affect the legal analysis or a legal conclusion or other matters in this opinion letter.

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

Very truly yours,

/s/ Paul Hastings LLP

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## SECURITIES PURCHASE AGREEMENT

This Securities Purchase Agreement (this “Agreement”) is dated as of [\_\_\_\_], 2026, between VivoSim Labs, Inc., a Delaware corporation (the “Company”), and each purchaser identified on the signature pages hereto (each, including its successors and assigns, a “Purchaser” and collectively, the “Purchasers”).

WHEREAS, subject to the terms and conditions set forth in this Agreement, the Company desires to issue and sell to each Purchaser, and each Purchaser, severally and not jointly, desires to purchase from the Company, securities of the Company as more fully described in this Agreement.

WHEREAS, the Company and the Purchasers are executing and delivering this Agreement with respect to the securities of the Company in reliance upon the registration statement on Form S-1 (SEC File No. 333-[\_\_\_\_]) (the “Registration Statement”) filed by the Company with the United States Securities and Exchange Commission (the “Commission”) pursuant to the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder (collectively, the “Securities Act”), for the registration of the Securities, as such Registration Statement may be amended and supplemented from time to time (including pursuant to Rule 462(b) of the Securities Act), including all documents filed as part thereof or incorporated by reference therein.

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Company and each Purchaser agree as follows:

## ARTICLE 1

## DEFINITIONS

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

“Acquiring Person” shall have the meaning ascribed to such term in Section 4.6.

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

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

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

“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.

“Approved Stock Plan” means any equity incentive plan, employee stock purchase plan or other employee benefit plan which has been approved by the Board of Directors and future increases in the shares of Common Stock authorized to be issued pursuant to the Company’s existing equity incentive plan approved 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 or the Company’s stockholders, pursuant to which shares of Common Stock, options to purchase Common Stock, restricted stock units, restricted stock awards, stock appreciation rights or other equity awards may be issued or granted to any employee, officer or director for services provided to the Company in their capacity as such.

“Beneficial Ownership Limitation” shall have the meaning ascribed to such term in Section 2.1(b).

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

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“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, however, for clarification, commercial banks shall not be deemed to be authorized or required by law to remain closed due to “stay at home”, “shelter-in-place”, “non-essential employee” or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of commercial banks in the City of New York are generally open for use by customers on such day.

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

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

“Closing Sale Price” shall mean for any security as of any date, the last closing trade price for such security on the principal securities exchange or trading market where such security is listed or traded, as reported by Bloomberg, L.P., or if the foregoing does not apply, the average of the bid prices of all of the market makers for such security as reported in the “pink sheets” by OTC Markets Group Inc. (formerly Pink Sheets LLC). All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction.

“Closing Statement” means the Closing Statement in the form on Annex A attached hereto.

“Commission” shall have the meaning ascribed to such term in the preamble.

“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.

“Common Warrants” means the Common Stock purchase warrants delivered to the Purchasers at the applicable Closing in accordance with Section 2.2(a) hereof, which Common Warrants shall be exercisable immediately and have a term of exercise equal to five years from the date of issuance thereof, in the form of Exhibit A attached hereto.

“Company Counsel” means Paul Hastings LLP.

“Convertible Securities” means any capital stock or other security of the Company that is at any time and under any circumstances directly or indirectly convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any capital stock or other security of the Company (including, without limitation, Common Stock).

“Disclosure Time” means, (i) if this Agreement is signed on a day that is not a Trading Day or after 9:00 a.m. (New York City time) and before midnight (New York City time) on any Trading Day, 9:01 a.m. (New York City time) on the Trading Day immediately following the date hereof, unless otherwise instructed as to an earlier time by the Placement Agent, and (ii) if this Agreement is signed between midnight (New York City time) and 9:00 a.m. (New York City time) on any Trading Day, no later than 9:01 a.m. (New York City time) on the date hereof, unless otherwise instructed as to an earlier time by the Placement Agent.

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

“Evaluation Date” shall have the meaning ascribed to such term in Section 3.1(s).

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

“Exempt Issuances” shall have the meaning ascribed to such term in Section 4.12(a).

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

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

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

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

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

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

“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, dated as of the date hereof, by and among the Company and each of the directors, executive officers, and 10% stockholders of the Company, in the form of Exhibit C attached hereto.

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

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

“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.

“Per Share Purchase Price” means a price per Share equal to the product of (i) 80% multiplied by (ii) the Closing Sale Price of the Common Stock on the Trading Day immediately prior to the applicable Closing Date.

“Placement Agent” means Joseph Gunnar & Co., LLC.

“Pre-Funded Warrants” means the Common Stock purchase warrants delivered to certain of the Purchasers at the applicable Closing in accordance with Section 2.2(a)(iv) hereof to the extent any Purchasers elect to receive Pre-Funded Warrants in lieu of Shares, which Pre-Funded Warrants shall be exercisable into shares of Common Stock and shall be in the form of Exhibit B attached hereto, which Pre-Funded Warrants shall be exercisable beginning on the Issuance Date (as defined therein) until all of the Pre-Funded Warrants have been exercised, and shall be exercisable at an exercise price of \$0.001 per share.

“Preliminary Prospectus” means any preliminary prospectus included in the Registration Statement, as originally filed or as part of any amendment thereto, or filed with the Commission pursuant to Rule 424(a) of the rules and regulations of the Commission under the Securities Act, including all information, documents and exhibits filed with or incorporated by reference into such preliminary prospectus.

“Pricing Prospectus” means (i) the Preliminary Prospectus relating to the Shares and Warrant Shares that was included in the Registration Statement immediately prior to [ ] p.m. (New York City time) on the date hereof, and (ii) any free writing prospectus (as defined in the Securities Act) identified on Schedule I hereto, taken together.

“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” means the final prospectus filed pursuant to the Registration Statement, including all information, documents and exhibits filed with or incorporated by reference into such final prospectus.

“Public Report” shall have the meaning ascribed to such term in Section 3.1(h).

“Purchaser Party” shall have the meaning ascribed to such term in Section 4.9.

“Registration Statement” shall have the meaning ascribed to such term in the preamble.

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

“Restricted Period” shall have the meaning ascribed to such term in Section 4.12(a).

“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.

“Securities” means the Shares, the Warrants and the Warrant Shares.

“Securities Act” shall have the meaning ascribed to such term in the preamble.

“Shares” means the shares of Common Stock issued or issuable to each Purchaser pursuant to this Agreement, including any Common Stock underlying the Pre-Funded Warrants but excluding the Warrant Shares.

“Short Sales” means all “short sales” as defined in Rule 200 of Regulation SHO under the Exchange Act (but shall not be deemed to include locating and/or borrowing shares of Common Stock).

“Subsidiary” means any subsidiary of the Company as set forth on Schedule 3.1(a) 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 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, the Lock-Up Agreements, the Warrants, all exhibits and schedules thereto and hereto and any other documents or agreements executed in connection with the transactions contemplated hereunder.

“Transfer Agent” means the transfer agent of the Company, and any successor transfer agent of the Company.

“Variable Rate Transaction” shall have the meaning ascribed to such term in Section 4.12(b).

“Warrants” means, collectively, the Common Warrants and the Pre-Funded Warrants.

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

## ARTICLE 2

### PURCHASE AND SALE

#### 2.1 Closing.

(a) Closing Sequencing. Subject to the satisfaction (or waiver) of the conditions set forth herein, the Company agrees to issue and sell, and the Purchasers, severally and not jointly, agree to purchase, up to an aggregate of \$4,000,000 (the "Purchase Price") of Shares (or Pre-Funded Warrants in lieu of Shares) and Common Warrants, scheduled as follows: (i) the initial sale and purchase (the "Initial Closing" and the date thereof, the "Initial Closing Date") of an aggregate of \$3,000,000 of Shares (or Pre-Funded Warrants in lieu of Shares) and Common Warrants shall take place as soon as practicable, but no later than the Business Day following the satisfaction of all of the closing conditions set forth Section 2.3 applicable to the Initial Closing (other than those to be satisfied at the Initial Closing, but subject to the satisfaction or waiver of such closing conditions); and (ii) the additional sale and purchase (the "Additional Closing") of \$1,000,000 of Shares (or Pre-Funded Warrants in lieu of Shares) and Common Warrants, subject to the satisfaction or waiver of all of the closing conditions set forth in Section 2.3 applicable to the Additional Closing, shall take place on the thirtieth (30<sup>th</sup>) day following the Initial Closing (the "Additional Closing Date"). Each of the Initial Closing and the Additional Closing is referred to as a "Closing", and the date of each such Closing, a "Closing Date".

(b) Beneficial Ownership Limitation. Notwithstanding anything herein to the contrary, to the extent that a Purchaser determines, in its sole discretion, that such Purchaser's purchase of Shares at a Closing would cause such Purchaser's beneficial ownership (together with such Purchaser's Affiliates, and any Person acting as a group together with such Purchaser or any of such Purchaser's Affiliates) of Common Stock to exceed the Beneficial Ownership Limitation, or as such Purchaser may otherwise choose, such Purchaser shall receive Pre-Funded Warrants in lieu of Shares in such manner to result in the same aggregate portion of the Purchase Price being paid by such Purchaser to the Company. The "Beneficial Ownership Limitation" shall be [9.99]% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of the Shares on the applicable Closing Date. Each Purchaser shall deliver to the Company, via wire transfer or a certified check, immediately available funds equal to such Purchaser's Purchase Price as to the applicable Closing, and the Company shall deliver to each Purchaser its respective Shares (or Pre-Funded Warrants in lieu of Shares) and Common Warrants, as determined pursuant to Section 2.2(a), and the Company and each Purchaser shall deliver the other items set forth in Section 2.2 deliverable at each Closing. Upon satisfaction of the covenants and conditions set forth in Sections 2.2 and 2.3, the Closing shall occur at the offices of Company Counsel or such other location as the parties shall mutually agree.

#### 2.2 Closing Deliveries.

(a) On or prior to the applicable Closing Date, the Company shall deliver or cause to be delivered to each Purchaser the following:

- (i) with regard to the Initial Closing, this Agreement duly executed by the Company;
- (ii) a legal opinion of Company Counsel, directed to the Placement Agent and the Purchasers, in a form reasonably acceptable to the Placement Agent and Purchasers;
- (iii) a copy of the irrevocable instructions to the Transfer Agent to credit shares of Common Stock to the applicable balance accounts at The Depository Trust Company ("DTC"), registered in the name of Purchaser or its respective nominee(s), for the Shares equal to such Purchaser's pro rata portion of the Purchase Price to be paid at the applicable Closing divided by the Per Share Purchase Price (plus, if applicable, such Purchaser's aggregate exercise price of the Pre-Funded Warrants, provided that such instructions shall state that the number of shares of Common Stock issuable upon exercise of such Purchaser's Pre-Funded Warrants shall not be issued until exercise of such Purchaser's Pre-Funded Warrants), registered in the name of such Purchaser;

- Purchaser;
- (iv) duly executed Pre-Funded Warrants, if any, registered in the name of such Purchaser, as applicable to such Purchaser;
  - (v) duly executed Common Warrants registered in the name of such Purchaser to purchase up to a number of Warrant Shares equal to 1.5 multiplied by the total number of Shares and Pre-Funded Warrants purchased by such Purchaser;
  - (vi) the Company's wire instructions, on Company letterhead and executed by the Executive Chairman, Chief Executive Officer, or Chief Financial Officer;
  - (vii) with regard to the Initial Closing, the duly executed Lock-Up Agreements;
  - (viii) with regard to the Initial Closing, the Preliminary Prospectus and the Prospectus (which will be deemed to be delivered in accordance with Rule 172 under the Securities Act);
  - (ix) a duly executed Officer's Certificate, substantially in the form acceptable to the Purchasers;
  - (x) a duly executed Secretary's Certificate, substantially in the form acceptable to the Purchasers;
  - (xi) reimbursement for legal expenses incurred by the Purchasers for legal counsel in connection with preparation of the Transaction Documents in an aggregate amount equal to \$50,000, which the parties acknowledge has already been paid; and
  - (xii) all documents, instruments and other writings required to be delivered by the Company to the Purchasers on or before the applicable Closing Date pursuant to any provision of this Agreement or in order to implement and effect the transactions contemplated hereby.

(b) On or prior to the applicable Closing Date, each Purchaser shall deliver or cause to be delivered to the Company the following:

- (i) with regard to the Initial Closing, this Agreement duly executed by such Purchaser; and
- (ii) such Purchaser's pro rata portion of the Purchase Price to be paid at the applicable Closing (minus, if applicable, a Purchaser's aggregate exercise price of the Pre-Funded Warrants, which amounts shall be paid as and when such Pre-Funded Warrants are exercised for cash) as set forth on such Purchaser's signature hereto by wire transfer to the account specified in writing by the Company.

### 2.3 Closing Conditions.

(a) The obligations of the Company hereunder in connection with each Closing are subject to the following conditions being met:

(i) the accuracy in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) on such Closing Date of the representations and warranties of the Purchasers contained herein (unless as of a specific date therein in which case they shall be accurate as of such date);

(ii) all obligations, covenants and agreements of each Purchaser required to be performed at or prior to such Closing Date shall have been performed; and

(iii) the delivery by each Purchaser of the items set forth in Section 2.2(b) of this Agreement applicable to such Closing Date.

(b) The respective obligations of the Purchasers hereunder in connection with each Closing are subject to the following conditions being met:

(i) the accuracy in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) when made and on such Closing Date of the representations and warranties of the Company contained herein (unless as of a specific date therein in which case they shall be accurate as of such date);

(ii) all obligations, covenants and agreements of the Company required to be performed at or prior to such Closing Date shall have been performed;

(iii) the delivery by the Company of the items set forth in Section 2.2(a) of this Agreement applicable to such Closing Date;

(iv) there shall have been no Material Adverse Effect with respect to the Company since the date hereof;

(v) the Registration Statement shall be effective and available for the issuance and sale of the Securities hereunder;

(vi) from the date hereof to such Closing Date, trading in the Common Stock shall not have been suspended by the Commission or the Company's principal Trading Market, and, at any time prior to such Closing Date, trading in securities generally as reported by Bloomberg L.P. shall not have been suspended or limited, or minimum prices shall not have been established on securities whose trades are reported by such service, or on any Trading Market, nor shall a banking moratorium have been declared either by the United States or New York State authorities nor shall there have occurred any material outbreak or escalation of hostilities or other national or international calamity of such magnitude in its effect on, or any material adverse change in, any financial market which, in each case, in the reasonable judgment of such Purchaser, makes it impracticable or inadvisable to purchase the Securities at such Closing;

(vii) with regard to the Additional Closing, on the Trading Day immediately prior to the Closing Date for such Closing, the Closing Sale Price for the Common Stock on the Trading Market is at least \$[ ]<sup>1</sup> per share; and

(viii) with regard to the Additional Closing, the average daily trading volume of the Common Stock on the Trading Market during the ten (10) consecutive Trading Days immediately prior to the Closing Date for such Closing is at least \$100,000.

### ARTICLE 3

#### REPRESENTATIONS AND WARRANTIES

3.1 Representations and Warranties of the Company. Except as set forth, or incorporated by reference, in the Registration Statement, which shall be deemed a part hereof and shall qualify any representation made herein to the extent of the disclosure contained therein, the Company hereby makes the following representations and warranties as of the date hereof and as of each Closing Date to each Purchaser (unless as of a specific date therein, in which case they shall be accurate as of such date):

(a) Subsidiaries. All of the direct and indirect subsidiaries of the Company are set forth on Exhibit 21.1 to the Registration Statement. 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.

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<sup>1</sup> NTD: To insert Closing Sale Price of the Common Stock on the Trading Day immediately prior to the Initial Closing Date.

(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 described in the Registration Statement, the Preliminary Prospectus, and the Prospectus. 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 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 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 it 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.

(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, or (ii) except to the extent the Company has obtained consent or waiver, 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, anti-dilution or similar adjustments, 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, without limitation, foreign, federal and state securities laws and regulations and the rules and regulations of the Trading Market and including all applicable foreign, federal and state laws, rules 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, individually or in the aggregate, 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 filings required pursuant to Sections 4.5 and 4.7 of this Agreement, (ii) the filing with the Commission of the Prospectus, (iii) the notice and/or application(s) to each applicable Trading Market for the issuance and sale of the Securities and the listing of the Shares and Warrant Shares for trading thereon in the time and manner required thereby, and (iv) such filings as are required to be made under applicable state securities laws (collectively, the "Required Approvals").

(f) Issuance of the Securities; Registration. The 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. The Warrants are duly authorized and, when issued in accordance with this Agreement, will be duly and validly issued and constitute the legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their terms, free and clear of all Liens. The Warrant Shares, when issued in accordance with the terms of the Transaction Documents, will be 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 and registered under the Securities Act (pursuant to the Registration Statement and the Prospectus) 100% of the Shares, 100% of the Warrant Shares issuable upon exercise of the Pre-Funded Warrants and 250% of the Warrant Shares issuable upon exercise of the Common Warrants. The Company has prepared and filed the Registration Statement in conformity with the requirements of the Securities Act, which became effective on [ ], 2026, including the Pricing Prospectus and the Prospectus, and such amendments and supplements thereto as may have been required to the date of this Agreement. The Registration Statement is effective under the Securities Act and no stop order preventing or suspending the effectiveness of the Registration Statement or suspending or preventing the use of the Pricing Prospectus or the Prospectus has been issued by the Commission and no proceedings for that purpose have been instituted or, to the knowledge of the Company, are threatened by the Commission. The Company, if required by the rules and regulations of the Commission, shall file the Prospectus with the Commission pursuant to Rule 424(b). At the time the Registration Statement and any amendments thereto became effective, at the date of this Agreement and at the applicable Closing Date, the Registration Statement and any amendments thereto conformed and will conform in all material respects to the requirements of the Securities Act and did not and will not 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 not misleading; and the Pricing Prospectus and the Prospectus and any amendments or supplements thereto, at the time the Pricing Prospectus or the Prospectus, as applicable, or any amendment or supplement thereto was issued and at the applicable Closing Date, conformed and will conform in all material respects to the requirements of the Securities Act and did not and will not contain an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Company was at the time of the filing of the Registration Statement eligible to use Form S-1.

(g) Capitalization. The capitalization of the Company as of the date hereof is as set forth in the Registration Statement and includes the number of shares of Common Stock owned beneficially, and of record, by Affiliates of the Company as of the date hereof. The Company has not issued any capital stock since the filing of the Registration Statement other than pursuant to the exercise of compensatory awards under the Company's equity incentive 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 Registration Statement. Except to the extent the Company has obtained consent or waiver, no Person 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 as set forth in the Registration Statement, 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 capital stock of any Subsidiary. 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 Purchasers). There are no outstanding securities or instruments of the Company or any Subsidiary with any provision that adjusts the exercise, conversion, exchange or reset price of such security or instrument upon an issuance of securities by the Company or any Subsidiary. 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. 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 laws, and none of such outstanding shares was issued in violation of any preemptive rights or similar rights to subscribe for or purchase securities. 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. The Company is not a "shell" company as defined in Section 405 of the Securities Act.

(h) Public 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 “Public Reports”) on a timely basis or has received a valid extension of such time of filing and has filed any such Public Reports prior to the expiration of any such extension. As of their respective dates, the Public Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable, and none of the Public 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 never been an issuer subject to Rule 144(i) under the Securities Act. The financial statements of the Company included in the Public 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.

(i) Material Changes; Undisclosed Events, Liabilities or Developments. Since the date of the latest audited financial statements included within the Public Reports, except as set forth in the Pricing 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 equity incentive plans. 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, 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.

(j) Litigation. Except as set forth in the Registration Statement, there is no 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”). None of such Actions (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 knowledge of the Company, any director or executive 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. The Company has not received notice of, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or executive 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.

(k) 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 its 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 its Subsidiaries is a party to a collective bargaining agreement, and the Company and its 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 its Subsidiaries to any material liability with respect to any of the foregoing matters. The Company and its Subsidiaries are in material 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.

(l) 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 written 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 international, foreign, federal, state and local laws relating to taxes, environmental protection, space, land use, 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.

(m) Environmental Laws. The Company and its Subsidiaries (i) have complied with and 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 and maintained all permits licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses; and (iii) have complied with and are in compliance with all terms and conditions of any such permit, license or approval, except as could not have or reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

(n) Regulatory Permits. The Company and the Subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state, local or foreign regulatory authorities necessary to conduct their respective businesses as described in the Public Reports, except where the failure to possess such permits could not reasonably be expected to result in a Material Adverse Effect ("Material Permits"), and neither the Company nor any Subsidiary has received written notice of proceedings relating to the revocation or modification of any Material Permit.

(o) Title to Assets. 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.

(p) Intellectual Property. The Company and its Subsidiaries own, or possess adequate rights to use, all patents, patent applications, trademarks, trademark applications, service marks, trade names, trade secrets, inventions, know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), copyrights, licenses and other intellectual property rights and similar rights as are material for the conduct of their respective businesses as currently conducted or as currently proposed to be conducted, in each case, as described in the Public Reports (collectively, the “Intellectual Property Rights”). To the knowledge of the Company, neither the Company nor its Subsidiaries is infringing, any valid claim of any issued patents, copyrights or trademarks of others. The Company has not conducted a “freedom to operate” study. None of, and 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. Neither the Company nor any Subsidiary has received, since the date of the latest audited financial statements included within the Public Reports, a written notice of a claim or otherwise has any knowledge that the Company’s products or planned products as described in the Public Reports 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. 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. To the knowledge of the Company, no employee, consultant or independent contractor of the Company or its Subsidiaries is in or has ever been in violation in any material respect of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non- competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer or independent contractor where the basis of such violation relates to such employee’s employment or independent contractor’s engagement with the Company or its Subsidiaries or actions undertaken while employed or engaged with the Company or its Subsidiaries. The Company and its Subsidiaries have taken reasonable measures to protect its confidential information and trade secrets of its business and to maintain and safeguard the Company’s Intellectual Property Rights, including the execution of appropriate nondisclosure and confidentiality agreements, and to the Company’s knowledge, no employee of the Company or its Subsidiaries is in or has been in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement, or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee’s employment with the Company or any of its Subsidiaries. All patents and patent applications owned by or licensed to the Company or its Subsidiaries or under which the Company or its Subsidiaries have rights, to the knowledge of the Company, been duly and properly filed and maintained; to the knowledge of the Company, there are no material defects in any of the patents or patent applications disclosed in the Public Reports as being owned by the Company or its Subsidiaries; to the knowledge of the Company, the parties prosecuting such applications have complied with their duty of candor and disclosure to the United States Patent and Trademark Office (the “USPTO”) in connection with such applications; and the Company is not aware of any facts required to be disclosed to the USPTO that were not disclosed to the USPTO and which would preclude the grant of a patent in connection with any such application or could form the basis of a finding of invalidity with respect to any patents that have issued with respect to such applications.

(q) 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 at least equal to the aggregate Purchase Price. 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.

(r) Transactions with Affiliates and Employees. Except as set forth in the Registration Statement and as contemplated herein, 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.

(s) Sarbanes-Oxley; Internal Accounting Controls. Except as set forth in the Registration Statement, the Company and the Subsidiaries are in 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 applicable 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's internal accounting controls are effective. The Company and the Subsidiaries maintain disclosure controls and procedures, as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, that are designed 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 Commission rules and forms, and that such information is accumulated and communicated to the Company's management, including its Executive Chairman, Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure. Under the supervision and with the participation of the Company's management, 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 Public Report (such date, the "Evaluation Date"). The Company presented in its most recently filed Public Report 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 its Subsidiaries that have materially affected, or are reasonably likely to materially affect, the internal control over financial reporting of the Company and its Subsidiaries.

(t) Certain Fees. Except as set forth in the Prospectus, no brokerage or finder's fees or commissions are or will be payable by the Company or any Subsidiary 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. The Purchasers shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section that may be due in connection with the transactions contemplated by the Transaction Documents.

(u) [Reserved.]

(v) Investment Company. The Company is not, and immediately after receipt of payment for the Securities will not be, an "investment company" or 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.

(w) 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.

(x) Listing and Maintenance Requirements. The Common Stock is registered pursuant to Section 12(b) or 12(g) of the Exchange Act, and the Company has taken no action designed to terminate, 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 in the Registration Statement, 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 in the Registration Statement, 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 to the Depository Trust Company (or such other established clearing corporation) in connection with such electronic transfer. The Company believes that, taking into account the Company's receipt of the proceeds from this offering and the Company's twelve-month projections, it will satisfy the Trading Market's continued listing requirements relating to shareholders' equity.

(y) 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 certificate of incorporation (or similar charter documents) or the laws of its state of incorporation that is or could become applicable to the Purchasers as a result of the Purchasers and the Company fulfilling their obligations or exercising their rights under the Transaction Documents, including without limitation as a result of the Company's issuance of the Securities and the Purchasers' ownership of the Securities.

(z) Disclosure. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, the Company confirms that neither it nor any other Person acting on its behalf has provided any of the Purchasers or their agents or counsel with any information that it believes constitutes or might constitute material, non-public information. The Company understands and confirms that the Purchasers will rely on the foregoing representation in effecting transactions in securities of the Company. All of the disclosure furnished by or on behalf of the Company to the Purchasers regarding the Company and its Subsidiaries, their respective businesses and the transactions contemplated hereby, is true and correct and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading. 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 the light of the circumstances under which they were made and when made, not misleading. The Company acknowledges and agrees that no Purchaser makes or has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 3.2 hereof.

(aa) No Integrated Offering. Assuming the accuracy of the Purchasers' representations and warranties set forth in Section 3.2, 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.

(bb) Solvency. Based on the consolidated financial condition of the Company as of the applicable Closing Date, after giving effect to the receipt by the Company of the proceeds from the sale of the Securities hereunder, 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. 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 applicable Closing Date. The Registration Statement sets forth as of the date hereof all outstanding secured and unsecured Indebtedness of the Company or any Subsidiary, or for which the Company or any Subsidiary has commitments. For the purposes of this Agreement, "Indebtedness" means (x) any liabilities for borrowed money or amounts owed in excess of \$50,000 (other than trade accounts payable incurred in the ordinary course of business), (y) 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 (z) the present value of any lease payments in excess of \$50,000 due under leases required to be capitalized in accordance with GAAP. Except as disclosed in the Registration Statement, neither the Company nor any Subsidiary is in default with respect to any Indebtedness.

(cc) 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 its 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.

(dd) [Reserved.]

(ee) 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, offered, promised or authorized 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, or any applicable law or regulation implementing the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, or committed an offence under the Bribery Act of 2010 of the United Kingdom, or any other anti-bribery or anti- corruption law applicable to the Company and/or its Subsidiaries.

(ff) Accountants. The Company's independent registered public accounting firm is set forth in the Public Reports. To the knowledge and belief of the Company, such accounting firm (i) is a registered public accounting firm as required by the Exchange Act and the rules of the Public Company Accounting Oversight Board ("PCAOB") whose registration has not been suspended or revoked and who has not requested such registration to be withdrawn, (ii) shall express its opinion with respect to the financial statements to be included in the Company's Annual Report on Form 10-K for the fiscal year ending March 31, 2026, (iii) is in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X under the Act.

(gg) No Disagreements with Accountants and Lawyers. There are no disagreements of any kind presently existing, or reasonably anticipated by the Company to arise, between the Company and the accountants and lawyers formerly or presently employed by the Company and the Company is current with respect to any fees owed to its accountants and lawyers which could affect the Company's ability to perform any of its obligations under any of the Transaction Documents.

(hh) Acknowledgment Regarding Purchasers' Purchase of Securities. The Company acknowledges and agrees that each of the Purchasers is acting solely in the capacity of an arm's length purchaser with respect to the Transaction Documents and the transactions contemplated thereby. The Company further acknowledges that no Purchaser is acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated thereby and any advice given by any Purchaser or any of their respective representatives or agents in connection with the Transaction Documents and the transactions contemplated thereby is merely incidental to the Purchasers' purchase of the Securities. The Company further represents to each Purchaser that the Company's decision to enter into this Agreement and the other Transaction Documents has been based solely on the independent evaluation of the transactions contemplated hereby by the Company and its representatives.

(ii) Acknowledgment Regarding Purchaser's Trading Activity. Anything in this Agreement or elsewhere herein to the contrary notwithstanding (except for Section 4.14 hereof), it is understood and acknowledged by the Company that: (i) none of the Purchasers has been asked by the Company to agree, nor has any Purchaser agreed, to desist from purchasing or selling, long and/or short, securities of the Company, or "derivative" securities based on securities issued by the Company or to hold the Securities for any specified term, (ii) past or future open market or other transactions by any Purchaser, specifically including, without limitation, Short Sales or "derivative" transactions, before or after the closing of this or future transactions, may negatively impact the market price of the Company's publicly-traded securities, (iii) any Purchaser, and counter-parties in "derivative" transactions to which any such Purchaser is a party, directly or indirectly, may presently have a "short" position in the Common Stock and (iv) each Purchaser shall not be deemed to have any affiliation with or control over any arm's length counter-party in any "derivative" transaction. The Company further understands and acknowledges that (y) one or more Purchasers may engage in hedging activities at various times during the period that the Securities are outstanding, including, without limitation, during the periods that the value of the Securities are being determined, and (z) such hedging activities (if any) could reduce the value of the existing stockholders' equity interests in the Company at and after the time that the hedging activities are being conducted. The Company acknowledges that such aforementioned hedging activities do not constitute a breach of any of the Transaction Documents.

(jj) Regulation M Compliance. The Company has not, and to its knowledge no one acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or paid any compensation for soliciting purchases of, any of the Securities, or (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company, other than, in the case of clauses (ii) and (iii), compensation paid to the Placement Agent in connection with the placement of the Securities.

(kk) Stock Options. No stock option granted under the Company's equity incentive 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 its Subsidiaries or their financial results or prospects.

(ll) No Conflicts with Sanctions Laws. Neither the Company nor any of its Subsidiaries, directors, officers, or employees, nor, to the knowledge of the Company, any agent, employee, affiliate or other person associated with or acting on behalf of the Company or any of its Subsidiaries is currently the subject or the target of any sanctions administered or enforced by the U.S. government, including, without limitation, the Office of Foreign Assets Control of the U.S. Department of the Treasury ("OFAC") and the U.S. Department of State and including, without limitation, the designation as a "specially designated national" or "blocked person", the United Nations Security Council, the European Union, His Majesty's Treasury or other relevant sanctions authority (collectively, "Sanctions"), nor is the Company or any of its Subsidiaries located, organized or resident in a country or territory that is the subject or target of Sanctions, including, without limitation, Cuba, Iran, North Korea and Syria (each, a "Sanctioned Country"); and the Company will not directly or indirectly use the proceeds of the offering of the Securities hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity (i) to fund or facilitate any activities of or business with any person that, at the time of such funding or facilitation, is the subject or target of Sanctions, (ii) to fund or facilitate any activities of or business in any Sanctioned Country or (iii) in any other manner that will result in a violation by any person (including any person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions. For the past five (5) years, the Company and its Subsidiaries have not knowingly engaged in and are not now knowingly engaged in any dealings or transactions with any person that at the time of the dealing or transaction is or was the subject or the target of Sanctions or with any Sanctioned Country.

(mm) [Reserved.]

(nn) 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 Purchaser's request.

(oo) Bank Holding Company Act. Neither the Company nor any of its Subsidiaries or, to the knowledge of the Company, its 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 its 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 its 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.

(pp) Money Laundering. The operations of the Company and its 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, the applicable money laundering statutes of all jurisdictions where the Company or any Subsidiary is subject to, the applicable rules and regulations thereunder and any related or similar rules, regulations or guidelines issued, administered or enforced by any governmental agency (collectively, the "Money Laundering Laws"), and no Action 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.

(qq) [Reserved.]

(rr) Other Covered Persons. The Company is not aware of any person that has been or will be paid (directly or indirectly) remuneration for solicitation of purchasers in connection with the sale of any Securities.

(ss) Government Audits; Trade Controls. To the knowledge of the Company, there are no outstanding allegations of improper activities arising from any government audit or non-audit review, including without limitation, by the Defense Contract Audit Agency, of the Company or any of its Subsidiaries or work performed by the Company or any of its Subsidiaries that would, individually or in the aggregate, have a Material Adverse Effect. In the past five (5) years, the Company and each of its Subsidiaries has been and is in compliance in all material respects with any applicable United States national customs or export control laws and regulations, including the Export Administration Regulations, the Arms Export Control Act, and the International Traffic in Arms Regulations.

(tt) ERISA. Except as disclosed in the Public Reports, 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 Public Reports 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 under the Securities Act and Exchange Act 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 Public Reports, 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.

(uu) Privacy and Data Security Laws and Regulations. The Company and the Subsidiaries have established and maintain appropriate technical, physical and organizational measures and security systems and technologies in compliance with all material data security requirements under all applicable laws designed to protect Company data against accidental or unlawful processing in a manner appropriate to the risks represented by the processing of such data by the Company and its data processors, in all material respects. The Company and the Subsidiaries have operated and currently operate their respective businesses in a manner compliant with all applicable foreign, federal, state and local laws and regulations, all contractual obligations and all Company policies (internal and posted) related to privacy and data security applicable to the Company's and the Subsidiaries' collection, use, handling, transfer, transmission, storage, disclosure and/or disposal of the data of their respective customers, employees and other third parties (the "Privacy and Data Security Laws") and there has been no non-compliance with such Privacy and Data Security Laws that would be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect. There has been no loss or unauthorized access, use, modification or breach of security of customer, employee, third party or other confidential information, including data of the Company and its Subsidiaries, maintained by or on behalf of the Company and the Subsidiaries, and neither the Company nor any of the Subsidiaries has notified, nor has the current intention or obligation to notify, any customer, governmental entity or the media of any such event with regard to any material data breach.

3.2 Representations and Warranties of the Purchasers. Each Purchaser, for itself and for no other Purchaser, hereby represents and warrants as of the date hereof and as of each Closing Date to the Company as follows (unless as of a specific date therein, in which case they shall be accurate as of such date):

(a) Organization; Authority. Such Purchaser is either an individual or an entity duly incorporated or formed, validly existing and in good standing under the laws of the jurisdiction of its incorporation or formation with full right, corporate, partnership, limited liability company or similar power and authority to enter into and to consummate the transactions contemplated by the Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of the Transaction Documents and performance by such Purchaser of the transactions contemplated by the Transaction Documents have been duly authorized by all necessary corporate, partnership, limited liability company or similar action, as applicable, on the part of such Purchaser. Each Transaction Document to which it is a party has been duly executed by such Purchaser, and when delivered by such Purchaser in accordance with the terms hereof, will constitute the valid and legally binding obligation of such Purchaser, enforceable against it 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.

(b) Own Account. Such Purchaser is acquiring the Securities as principal for its own account and not with a view to or for distributing or reselling such Securities or any part thereof in violation of the Securities Act or any applicable state securities law, has no present intention of distributing any of such Securities in violation of the Securities Act or any applicable state securities law and has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of such Securities in violation of the Securities Act or any applicable state securities law (this representation and warranty not limiting such Purchaser's right to sell the Securities pursuant to the Registration Statement or otherwise in compliance with applicable federal and state securities laws). Such Purchaser is acquiring the Securities hereunder in the ordinary course of its business.

(c) Purchaser Status. At the time such Purchaser was offered the Securities, it was, and as of the date hereof it is, and on each date on which it exercise any Warrants, it will be, either: (i) an "accredited investor" as defined in Rule 501(a)(1), (a)(2), (a)(3), (a)(7), (a)(8), (a)(9), (a)(12), or (a)(13) under the Securities Act or (ii) a "qualified institutional buyer" as defined in Rule 144A(a) under the Securities Act.

(d) Experience of Such Purchaser. Such Purchaser, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in the Securities, and has so evaluated the merits and risks of such investment. Such Purchaser is able to bear the economic risk of an investment in the Securities and, at the present time, is able to afford a complete loss of such investment.

(e) [Reserved].

(f) Access to Information. Such Purchaser acknowledges that it has had the opportunity to review the Public Reports, Transaction Documents and has been afforded (i) the opportunity to ask such questions as it has deemed necessary of, and to receive answers from, representatives of the Company concerning the terms and conditions of the offering of the Securities and the merits and risks of investing in the Securities; (ii) access to information about the Company and its financial condition, results of operations, business, properties, management and prospects sufficient to enable it to evaluate its investment; and (iii) the opportunity to obtain such additional information that the Company possesses or can acquire without unreasonable effort or expense that is necessary to make an informed investment decision with respect to the investment.

The Company acknowledges and agrees that the representations contained in this Section 3.2 shall not modify, amend or affect such Purchaser's right to rely on the Company's representations and warranties contained in this Agreement or any representations and warranties contained in any other Transaction Document or any other document or instrument executed and/or delivered in connection with this Agreement or the consummation of the transactions contemplated hereby.

#### ARTICLE 4

##### OTHER AGREEMENTS OF THE PARTIES

4.1 [Reserved.]

4.2 Acknowledgment of Dilution. The Company acknowledges that the issuance of the Securities may result in dilution of the outstanding shares of Common Stock, which dilution may be substantial under certain market conditions. The Company further acknowledges that its obligations under the Transaction Documents, including, without limitation, its obligation to issue the Securities pursuant to the Transaction Documents, are unconditional and absolute and not subject to any right of set off, counterclaim, delay or reduction, regardless of the effect of any such dilution or any claim the Company may have against any Purchaser and regardless of the dilutive effect that such issuance may have on the ownership of the other stockholders of the Company.

4.3 Furnishing of Information; Public Information. Until the earlier of the time that (i) no Purchaser owns Securities or (ii) the Warrants have expired, the Company covenants to maintain the registration of the Common Stock under Section 12(b) or 12(g) of the Exchange Act and to timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to the Exchange Act even if the Company is not then subject to the reporting requirements of the Exchange Act.

4.4 Integration. The Company shall not sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) in a manner that would be integrated with the offer or sale of the Securities for purposes of the rules and regulations of any Trading Market such that it would require shareholder approval prior to the closing of such other transaction unless shareholder approval is obtained before the closing of such subsequent transaction.

4.5 Securities Laws Disclosure; Publicity. The Company shall (a) by the Disclosure Time, issue a press release disclosing the material terms of the transactions contemplated hereby, and (b) file a Current Report on Form 8-K, including the Transaction Documents as exhibits thereto, with the Commission within the time required by the Exchange Act. From and after the issuance of such press release, the Company represents to the Purchasers that it shall have publicly disclosed all material, non-public information delivered to any of the Purchasers by the Company or any of its Subsidiaries, or any of their respective officers, directors, employees, Affiliates or agents, including, without limitation, the Placement Agent, in connection with the transactions contemplated by the Transaction Documents. In addition, effective upon the issuance of such press release, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, employees, Affiliates or agents, including, without limitation, the Placement Agent, on the one hand, and any of the Purchasers or any of their Affiliates on the other hand, shall terminate. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company. The Company and each Purchaser shall consult with each other in issuing any other press releases with respect to the transactions contemplated hereby, and neither the Company nor any Purchaser shall issue any such press release nor otherwise make any such public statement without the prior consent of the Company, with respect to any press release of any Purchaser, or without the prior consent of each Purchaser, with respect to any press release 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. Notwithstanding the foregoing, the Company shall not publicly disclose the name of any Purchaser, or include the name of any Purchaser in any filing with the Commission or any regulatory agency or Trading Market, without the prior written consent of such Purchaser, except (a) as required by federal securities law in connection with the filing of final Transaction Documents with the Commission and (b) to the extent such disclosure is required by law or Trading Market regulations, in which case the Company shall provide the Purchasers with prior notice of such disclosure permitted under this clause (b) and reasonably cooperate with such Purchaser regarding such disclosure.

4.6 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 Purchaser 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 Purchaser could be deemed to trigger the provisions of any such plan or arrangement, by virtue of receiving Securities under the Transaction Documents or under any other agreement between the Company and the Purchasers.

4.7 Non-Public Information. Except with respect to the material pricing terms of the transactions contemplated by the Transaction Documents, which shall be disclosed pursuant to Section 4.5, the Company covenants and agrees that neither it, nor any other Person acting on its behalf will provide any Purchaser or its agents or counsel with any information that constitutes, or the Company reasonably believes constitutes, material non-public information, unless prior thereto such Purchaser shall have consented in writing to the receipt of such information and agreed in writing with the Company to keep such information confidential. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company. To the extent that the Company, any of its Subsidiaries, or any of their respective officers, directors, agents, employees or Affiliates delivers any material, non-public information to a Purchaser without such Purchaser’s consent, the Company hereby covenants and agrees that such Purchaser shall not have any duty of confidentiality to the Company, any of its Subsidiaries, or any of their respective officers, directors, employees, Affiliates or agents, including, without limitation, the Placement Agent, or a duty to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, Affiliates or agents, including, without limitation, the Placement Agent, not to trade on the basis of, such material, non- public information, provided that the Purchaser shall remain subject to applicable law. To the extent that any notice provided pursuant to any Transaction Document 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. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company.

4.8 Use of Proceeds. The Company shall use the net proceeds from the sale of the Securities hereunder for working capital and general corporate purposes and for strategic investments and acquisitions and shall not use such proceeds: (a) for the satisfaction of any portion of the Company’s debt (other than payment of trade payables in the ordinary course of the Company’s business and prior practices), (b) for the redemption of any Common Stock or Common Stock Equivalents, (c) for the settlement of any outstanding litigation or (d) in violation of FCPA or OFAC regulations.

4.9 Indemnification of Purchasers. Subject to the provisions of this Section 4.9, the Company will indemnify and hold each Purchaser and its directors, officers, shareholders, members, partners, employees and agents (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title), each Person who controls such Purchaser (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, shareholders, agents, members, partners or employees (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title) of such controlling persons (each, a "Purchaser Party") harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys' fees and costs of investigation that any such Purchaser Party may suffer or incur as a result of, arising out of, in connection with or relating to (a) any breach of any of the representations, warranties, covenants or agreements made by the Company in this Agreement or in the other Transaction Documents or (b) any action instituted against the Purchaser Parties in any capacity, or any of them or their respective Affiliates, by any stockholder of the Company who is not an Affiliate of such Purchaser Party, with respect to any of the transactions contemplated by the Transaction Documents (unless such action is solely based upon a material breach of such Purchaser Party's representations, warranties or covenants under the Transaction Documents or any agreements or understandings such Purchaser Party may have with any such stockholder or any violations by such Purchaser Party of state or federal securities laws or any conduct by such Purchaser Party which is finally judicially determined to constitute fraud, gross negligence or willful misconduct). For the avoidance of doubt, the Company will reimburse each Purchaser Party for all reasonable expenses (including actual, documented and reasonable fees and expenses of counsel) as they are incurred in connection with investigating, preparing, pursuing or defending any such action whether or not pending or threatened and whether or not any Purchaser Party is a party, provided that the Company will not be responsible for any losses, claims, damages or liabilities (or expense relating thereto) that have resulted from the bad faith, gross negligence or intentional misconduct of any Purchaser Party. If any action shall be brought against any Purchaser Party in respect of which indemnity may be sought pursuant to this Agreement, such Purchaser Party shall promptly notify the Company in writing, and the Company shall have the right to assume the defense thereof with counsel of its own choosing reasonably acceptable to the Purchaser Party. Any Purchaser Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Purchaser Party except to the extent that (i) the employment thereof has been specifically authorized by the Company in writing, (ii) the Company has failed after a reasonable period of time to assume such defense and to employ counsel or (iii) in such action there is, in the reasonable opinion of counsel, a material conflict on any material issue between the position of the Company and the position of such Purchaser Party, in which case the Company shall be responsible for the actual, documented and reasonable fees and expenses of no more than one such separate counsel. The Company will not be liable to any Purchaser Party under this Agreement (y) for any settlement by a Purchaser Party effected without the Company's prior written consent, which shall not be unreasonably withheld or delayed; or (z) to the extent, but only to the extent that a loss, claim, damage or liability is attributable to any Purchaser Party's breach of any of the representations, warranties, covenants or agreements made by such Purchaser Party in this Agreement or in the other Transaction Documents. The Company will not, without the Purchaser Party's prior written consent, settle, compromise, consent to the entry of any judgment in or otherwise seek to terminate any action, claim, suit or proceeding in respect of which indemnification may be sought hereunder (whether or not any Purchaser Party is a party thereto) unless such settlement, compromise, consent or termination includes a release of each Purchaser Party from any liabilities asserted against such Purchaser Party arising out of such action, claim, suit or proceeding. If the indemnification provided for in this Section is judicially determined to be unavailable to a Purchaser Party in respect of any losses, claims, damages or liabilities referred to herein, then, in lieu of indemnifying such Purchaser Party hereunder, the Company shall contribute to the amount paid or payable by such Purchaser Party as a result of such losses, claims, damages or liabilities (and expense relating thereto): (i) in such proportion as is appropriate to reflect the relative benefits to the applicable Purchaser Party, on the one hand, and the Company, on the other hand, of the transaction or (ii) if the allocation provided by clause (i) above is not available, in such proportion as is appropriate to reflect not only the relative benefits referred to in such clause (i) but also the relative fault of each of the applicable Purchaser Party and the Company, as well as any other relevant equitable considerations; provided, however, that in no event shall any Purchaser Party's aggregate contribution to the amount paid or payable exceed such Purchaser's aggregate Purchase Price. Assuming that the Company has fully satisfied or agreed to satisfy the amount of its obligations provided for herein to the Purchaser Party, and have agreed that the Purchaser Party shall have no further liabilities in connection therewith, then the Company may take control of any pending action or litigation in order to reduce the expenses in connection therewith. The indemnification and contribution required by this Section 4.9 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or are incurred. The indemnity agreements contained herein shall be in addition to any cause of action or similar right of any Purchaser Party against the Company or others and any liabilities the Company may be subject to pursuant to law.

4.10 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, free of preemptive rights, a number of its duly authorized and unissued shares of Common Stock equal to (i) the number of Shares issuable pursuant to this Agreement, (ii) 100% of the number of Warrant Shares issuable pursuant to any exercise of the Pre-Funded Warrants and (iii) 250% of the maximum number of Warrant Shares issuable pursuant to any exercise of the Common Warrants.

4.11 Listing of Common Stock. The Company shall: (i) in the time and manner required by the principal Trading Market, prepare and file with such Trading Market an additional shares listing application covering a number of shares of Common Stock on the date of such application for the Shares and Warrant Shares, (ii) take all steps necessary to cause such shares of Common Stock to be approved for listing or quotation on such Trading Market, (iii) provide to the Purchasers evidence of such listing or quotation and (iv) maintain the listing or quotation of such Common Stock on such date on such Trading Market or another Trading Market. The Company further agrees, if the Company applies to have the Common Stock traded on any other Trading Market, it will then include in such application all of the Shares and Warrant Shares, and will take such other action as is necessary to cause all of the Shares and Warrant Shares to be listed or quoted on such other Trading Market as promptly as possible. The Company will then take all action reasonably necessary to continue the listing and trading of its Common Stock on a Trading Market and will comply in all respects with the Company's reporting, filing and other obligations under the bylaws or rules of the Trading Market. The Company agrees to maintain the eligibility of the Common Stock for electronic transfer through the Depository Trust Company or another established clearing corporation, including, without limitation, by timely payment of fees to the Depository Trust Company or such other established clearing corporation in connection with such electronic transfer.

#### 4.12 Additional Issuance of Securities.

(a) The Company agrees that for the period commencing on the date hereof and ending on the earlier of the ninetieth (90th) day after the most recent Closing Date and the date upon which all Warrants have been exercised (the "Restricted Period"), the Company shall not (i) directly or indirectly issue, offer, sell, grant any option, restricted stock unit or right to purchase, or otherwise dispose of (or announce any issuance, offer, sale, grant of any option or right to purchase or other disposition of) any shares of Common Stock or any Common Stock Equivalents or (ii) file any new registration statement or amendment or supplement thereto, other than the Prospectus, amendments or supplements to registration statements filed prior to the date hereof, or registration statements on Form S-8 in connection with any employee benefit plan or Approved Stock Plan, or a confidential draft registration statement on Form S-1 or Form S-3. Notwithstanding the foregoing, this Section 4.12(a) shall not apply in respect of the issuance of (collectively, the "Exempt Issuances") (A) shares of Common Stock or standard options to purchase or restricted stock units to acquire Common Stock to directors, officers, employees or consultants of the Company in their capacity as such pursuant to an Approved Stock Plan; (B) shares of Common Stock issued upon the conversion, exercise, or exchange of Convertible Securities (other than standard equity awards to purchase Common Stock issued pursuant to an Approved Stock Plan that are covered by clause (A) above) issued prior to the date hereof, provided that the conversion, exercise, exchange or other method of issuance (as the case may be) of any such Convertible Security is made solely pursuant to the conversion, exercise, exchange or other method of issuance (as the case may be) provisions of such Convertible Security that were in effect on the date immediately prior to the date of this Agreement, the conversion, exercise or issuance price of any such Convertible Securities (other than standard equity awards to purchase Common Stock issued pursuant to an Approved Stock Plan that are covered by clause (A) above) is not lowered, none of such Convertible Securities (other than standard equity awards to purchase Common Stock issued pursuant to an Approved Stock Plan that are covered by clause (A) above) are amended to increase the number of shares issuable thereunder and none of the terms or conditions of any such Convertible Securities (other than standard equity awards to purchase Common Stock issued pursuant to an Approved Stock Plan that are covered by clause (A) above) are otherwise materially changed in any manner that adversely affects any Purchaser; (C) the Shares and the Warrant Shares, (D) Common Stock or Convertible Securities issued in connection with acquisitions or any licensing, commercialization, joint venture, technology transfer, acquisition, development collaboration or other strategic transactions or institutional investments or partnerships; and shall not apply to the filing of any amendments or supplements to any existing resale registration statements contained in the Public Reports.

(b) From the date hereof until the earlier of six (6) months from the most recent Closing Date and the date as of which the Purchasers no longer hold Securities, the Company shall be prohibited from entering into or agreeing to enter into a Variable Rate Transaction. “Variable Rate Transaction” means a transaction in which the Company (i) issues or sells any debt or equity securities that are convertible into, exchangeable or exercisable for, or include the right to receive, additional shares of Common Stock either (A) at a conversion price, exercise price or exchange rate or other price that is based upon, and/or varies with, the trading prices of or quotations for the shares of Common Stock at any time after the initial issuance of such debt or equity securities or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such debt or equity security or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Stock or (ii) enters into, or effects a transaction under, any agreement, including, but not limited to, an equity line of credit or an “at the market offering”, whereby the Company may issue securities at a future determined price, regardless of whether shares pursuant to such agreement have actually been issued and regardless of whether such agreement is subsequently canceled; provided that Exempt Issuances as provided in Section 4.12(a) above shall not be considered Variable Rate Transactions. Any Purchaser shall be entitled to obtain injunctive relief against the Company to preclude any such issuance, which remedy shall be in addition to any right to collect damages.

4.13 Equal Treatment of Purchasers. No consideration (including any modification of any Transaction Document) shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of the Transaction Documents unless the same consideration is also offered to all of the parties to such Transaction Documents. For clarification purposes, this provision constitutes a separate right granted to each Purchaser by the Company and negotiated separately by each Purchaser, and is intended for the Company to treat the Purchasers as a class and shall not in any way be construed as the Purchasers acting in concert or as a group with respect to the purchase, disposition or voting of Securities or otherwise.

4.14 Certain Transactions and Confidentiality. Each Purchaser, severally and not jointly with the other Purchasers, covenants that neither it, nor any Affiliate acting on its behalf or pursuant to any understanding with it will execute any purchases or sales, including Short Sales, of any of the Company’s securities during the period commencing with the execution of this Agreement and ending at such time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.5. Each Purchaser, severally and not jointly with the other Purchasers, covenants that until such time as the transactions contemplated by this Agreement are publicly disclosed by the Company pursuant to the initial press release as described in Section 4.5, such Purchaser will maintain the confidentiality of the existence and terms of this transaction. Notwithstanding the foregoing, and notwithstanding anything contained in this Agreement to the contrary, the Company expressly acknowledges and agrees that (i) no Purchaser makes any representation, warranty or covenant hereby that it will not engage in effecting transactions in any securities of the Company after the time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.5, (ii) no Purchaser shall be restricted or prohibited from effecting any transactions in any securities of the Company in accordance with applicable securities laws from and after the time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.5 and (iii) no Purchaser shall have any duty of confidentiality or duty not to trade in the securities of the Company to the Company or its Subsidiaries, or any of their respective officers, directors, employees, Affiliates or agent, including, without limitation, the Placement Agent after the issuance of the initial press release as described in Section 4.5. Notwithstanding the foregoing, in the case of a Purchaser that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser’s assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser’s assets, the covenant set forth above shall only apply with respect to the portion of assets managed by the portfolio manager that made the investment decision to purchase the Securities covered by this Agreement.

4.15 Exercise Procedures. The form of Notice of Exercise included in the Warrants set forth the totality of the procedures required of the Purchasers in order to exercise the Warrants. No additional legal opinion, other information or instructions shall be required of the Purchasers to exercise their Warrants. Without limiting the preceding sentences, 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 form be required in order to exercise the Warrants. The Company shall honor exercises of the Warrants and shall deliver Warrant Shares in accordance with the terms, conditions and time periods set forth in the Transaction Documents.

4.16 Lock-Up Agreements. The Company shall not amend, modify, waive or terminate any provision of any of the Lock-Up Agreements except to extend the term of the lock-up period and shall enforce the provisions of each Lock-Up Agreement in accordance with its terms. If any party to a Lock-Up Agreement breaches any provision of a Lock-Up Agreement, the Company shall promptly use its best efforts to seek specific performance of the terms of such Lock-Up Agreement.

4.17 Blue Sky Filings. The Company shall take such action as the Company shall reasonably determine is necessary in order to obtain an exemption for, or to qualify the Securities for, sale to the Purchasers at the Closing under applicable securities or "Blue Sky" laws of the states of the United States, and shall provide evidence of such actions promptly upon request of any Purchaser.

4.18

(a) Maintaining the Registration Statement. If all or any portion of a Warrant is exercised at a time when there is an effective registration statement to cover the issuance or resale of the Warrant Shares or if the Warrant is exercised via cashless exercise, the Warrant Shares issued pursuant to any such exercise shall be issued free of all legends. If at any time following the date hereof the Registration Statement (or any subsequent registration statement registering the sale of the Warrant Shares) is not effective or is not otherwise available for the sale of the Warrant Shares, the Company shall immediately notify the holders of the Warrants 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 Warrant Shares (it being understood and agreed that the foregoing shall not limit the ability of the Company to issue, or any Purchaser to sell, any of the Warrant Shares in compliance with applicable federal and state securities laws). The Company shall use best efforts to keep a registration statement registering the issuance of the Warrant Shares effective during the term of the Warrants.

(b) Effect of Failure to Maintain Effectiveness of any Registration Statement. If (A) the Company fails to maintain a registration statement covering the sale of the Warrant Shares issuable upon exercise of the Warrants required to be covered thereby and required to be filed by the Company pursuant to this Agreement or if the Registration Statement is not effective for any reason or the prospectus contained therein is not available for use for any reason and (B) the Warrant Shares cannot be issued without any restrictive legend, then, the Company shall enter into an exchange agreement with the Purchaser, pursuant to Section 3(a)(9) of the Securities Act, in order to allow the Purchasers to be able to sell the Warrant Shares.

## ARTICLE 5

### MISCELLANEOUS

5.1 Termination. This Agreement may be terminated by any Purchaser, as to such Purchaser's obligations hereunder only and without any effect whatsoever on the obligations between the Company and the other Purchasers, by written notice to the other parties, if a Closing has not been consummated on or before the fifth (5th) Trading Day following the date hereof, provided, however, that no such termination will affect the right of any party to sue for any breach by any other party (or parties).

5.2 Fees and Expenses. The Company shall deliver to each Purchaser, prior to each Closing, a completed and executed copy of a Closing Statement, attached hereto as Annex A. Except as expressly set forth in the Transaction Documents to the contrary, each party shall pay the fees and expenses of its advisers, counsel, accountants and other experts, if any, and all other expenses incurred by such party incident to the negotiation, preparation, execution, delivery and performance of this Agreement. The Company shall pay all Transfer Agent fees (including, without limitation, any fees required for same-day processing of any instruction letter delivered by the Company and any conversion or exercise notice delivered by a Purchaser), stamp taxes and other taxes and duties levied in connection with the delivery of any Securities to the Purchasers.

5.3 Entire Agreement. The Transaction Documents, together with the exhibits and schedules thereto, the Pricing 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.

5.4 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 time of transmission, if such notice or communication is delivered via email attachment at the email address as 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 time of transmission, if such notice or communication is delivered via email attachment at the email address 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. To the extent that any notice provided pursuant to any Transaction Document constitutes, or contains, material, non-public information regarding the Company or any Subsidiaries, the Company shall simultaneously with the delivery of such notice file such notice with the Commission pursuant to a Current Report on Form 8-K. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company.

5.5 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 Purchasers which purchased at least 50.1% in interest of the Securities based on such Purchasers' aggregate Purchase Prices hereunder (or, prior to a Closing, the Company and each Purchaser) or, in the case of a waiver, by the party against whom enforcement of any such waived provision is sought, provided that if any amendment, modification or waiver disproportionately and adversely impacts a Purchaser (or group of Purchasers), the consent of such disproportionately impacted Purchaser (or group of Purchasers) shall also be required. 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. Any amendment effected in accordance with this Section 5.5 shall be binding upon each Purchaser and holder of Securities and the Company.

5.6 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.

5.7 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns. The Company may not assign this Agreement or any rights or obligations hereunder without the prior written consent of each Purchaser (other than by merger). Any Purchaser may assign any or all of its rights under this Agreement to any Person to whom such Purchaser assigns or transfers any Securities, provided that such transferee agrees in writing to be bound, with respect to the transferred Securities, by the provisions of the Transaction Documents that apply to the Purchasers.

5.8 No Third Party Beneficiaries. The Placement Agent shall be the third party beneficiary of the representations and warranties of the Company in Section 3.1 and the representations and warranties of the Purchasers in Section 3.2. This Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except as otherwise set forth in Section 4.9 and this Section 5.8.

5.9 Governing Law. This Agreement and each of the Transaction Documents will be deemed to have been made and delivered in the State of Delaware, and the binding provisions of this Agreement, the Transaction Documents, and the transactions contemplated hereby, will be governed as to validity, interpretation, construction, effect and in all other respects by the internal laws of the State of Delaware, without regard to the conflict of laws principles thereof. Each of the parties hereto: (i) agrees that any legal suit, Action or Proceeding arising out of or relating to Agreement and/or the transactions contemplated hereby will be instituted exclusively in the courts located in the City of New York, County of New York, State of New York, (ii) irrevocably waives any objection which it may have or hereafter to the venue of any such suit, action or proceeding, (iii) irrevocably waives, and agrees not to assert in any Action or Proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such action or proceeding is improper or is an inconvenient venue for such Action or Proceeding, and (iv) irrevocably consents to the exclusive jurisdiction of the state courts located in the City of New York, County of New York, State of New York, in any such suit, action or proceeding, waiving any, and consenting not to assert any, basis for seeking transfer or removal of such action to any other court, whether federal or state, unless the New York court in which such action or proceeding was commenced first declines jurisdiction. Each party hereby irrevocably waives personal service of process and consents to process being served in any such 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 any 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 Section 4.9, the prevailing party in such Action or Proceeding shall be reimbursed by the non-prevailing party for its reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such Action or Proceeding.

5.10 Survival. The representations and warranties contained herein shall survive each Closing and the delivery of the Securities.

5.11 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 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 “.pdf” signature page were an original thereof.

5.12 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.

5.13 Rescission and Withdrawal Right. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) any of the other Transaction Documents, whenever any Purchaser exercises a right, election, demand or option under a Transaction Document and the Company does not timely perform its related obligations within the periods therein provided, then such Purchaser may rescind or withdraw, in its sole discretion from time to time upon written notice to the Company, any relevant notice, demand or election in whole or in part without prejudice to its future actions and rights; provided, however, that, in the case of a rescission of an exercise of a Warrant, the applicable Purchaser shall be required to return any shares of Common Stock subject to any such rescinded exercise notice concurrently with the return to such Purchaser of the aggregate exercise price paid to the Company for such shares and the restoration of such Purchaser's right to acquire such shares pursuant to such Purchaser's Warrant (including, issuance of a replacement warrant certificate evidencing such restored right).

5.14 Replacement of Securities. If any certificate or instrument evidencing any Securities is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation thereof (in the case of mutilation), or in lieu of and substitution therefor, a new certificate or instrument, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction. The applicant for a new certificate or instrument under such circumstances shall also pay any reasonable third-party costs (including customary indemnity) associated with the issuance of such replacement Securities.

5.15 Remedies. In addition to being entitled to exercise all rights provided herein or granted by law, including recovery of damages, each of the Purchasers 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.

5.16 Payment Set Aside. To the extent that the Company makes a payment or payments to any Purchaser pursuant to any Transaction Document or a Purchaser enforces or exercises its rights thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other Person under any law (including, without limitation, any bankruptcy law, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

5.17 Independent Nature of Purchasers' Obligations and Rights. The obligations of each Purchaser under any Transaction Document are several and not joint with the obligations of any other Purchaser, and no Purchaser shall be responsible in any way for the performance or non-performance of the obligations of any other Purchaser under any Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Purchaser pursuant hereto or thereto, shall be deemed to constitute the Purchasers as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Purchasers are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. Each Purchaser shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of this Agreement or out of the other Transaction Documents, and it shall not be necessary for any other Purchaser to be joined as an additional party in any Proceeding for such purpose. Each Purchaser has been represented by its own separate legal counsel in its review and negotiation of the Transaction Documents. For reasons of administrative convenience only, each Purchaser and its respective counsel have chosen to communicate with the Company through the legal counsel of the Placement Agent. The legal counsel of the Placement Agent does not represent any of the Purchasers and only represents the Placement Agent. The Company has elected to provide all Purchasers with the same terms and Transaction Documents for the convenience of the Company and not because it was required or requested to do so by any of the Purchasers. It is expressly understood and agreed that each provision contained in this Agreement and in each other Transaction Document is between the Company and a Purchaser, solely, and not between the Company and the Purchasers collectively and not between and among the Purchasers.

5.18 Liquidated Damages. The Company's obligations to pay any partial liquidated damages or other amounts owing under the Transaction Documents is a continuing obligation of the Company and shall not terminate until all unpaid partial liquidated damages and other amounts have been paid notwithstanding the fact that the instrument or security pursuant to which such partial liquidated damages or other amounts are due and payable shall have been canceled.

5.19 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.

5.20 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. For the avoidance of doubt, the average daily trading volume figures expressed in dollar amounts shall not be adjusted for reverse or forward share splits or otherwise.

5.21 WAIVER OF JURY TRIAL. IN ANY ACTION, SUIT, OR PROCEEDING IN ANY JURISDICTION BROUGHT BY ANY PARTY AGAINST ANY OTHER PARTY, THE PARTIES EACH KNOWINGLY AND INTENTIONALLY, TO THE GREATEST EXTENT PERMITTED BY APPLICABLE LAW, HEREBY ABSOLUTELY, UNCONDITIONALLY, IRREVOCABLY AND EXPRESSLY WAIVES FOREVER TRIAL BY JURY.

*(Signature Pages Follow)*

IN WITNESS WHEREOF, the parties hereto have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

**VIVOSIM LABS, INC.**

Address for Notice:

1155 Sorrento Valley Road, Suite 100  
San Diego, California 92121

Email: [ \*\*\* ]

By: \_\_\_\_\_

Name: Keith Murphy

Title: Executive Chairman

With a copy to (which shall not constitute notice):

Paul Hastings LLP

1117 California Ave

Palo Alto, CA 94304

Attn: Jeff Hartlin; Samantha Eldredge

( [ \*\*\* ] ; [ \*\*\* ] )

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SIGNATURE PAGE FOR PURCHASER FOLLOWS]

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[PURCHASER SIGNATURE PAGES TO VIVOSIM LABS, INC.  
SECURITIES PURCHASE AGREEMENT]

IN WITNESS WHEREOF, the undersigned have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

Name of Purchaser:

Signature of Authorized Signatory of Purchaser:

Name of Authorized Signatory:

Title of Authorized Signatory:

Email Address of Authorized Signatory:

Address for Notice to Purchaser:

Address for Delivery of Securities to Purchaser (if not same as address for notice):

Purchase Price:

Initial Closing:

Additional Closing:

Initial Closing Shares of Common Stock issuable:

Initial Closing Pre-Funded Warrants issuable (if applicable):

EIN Number: [ ]

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**CLOSING STATEMENT**

Pursuant to the attached Securities Purchase Agreement, dated as of the date hereto, the purchasers shall purchase [ ] Shares from VivoSim Labs, Inc., a Delaware corporation (the "Company"), at a price per share of \$[\_\_\_\_]. All funds will be wired into an account maintained by the Company. All funds will be disbursed in accordance with this Closing Statement.

**Disbursement Date:** [\_\_\_\_], 2026

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**I. PURCHASE PRICE**

**Gross Proceeds to be Received \$[\_\_\_\_]**

**WIRE INSTRUCTIONS:**

**Please see attached.**

Acknowledged and agreed to this [\_\_\_\_] day of [\_\_\_\_], 2026

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

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**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in this Registration Statement on Form S-1 of our report dated June 5, 2025 (which report includes an explanatory paragraph relating to the existence of substantial doubt about the Company's ability to continue as a going concern), with respect to the consolidated financial statements of Organovo Holdings, Inc. as of March 31, 2025 and for the year then ended, included in the Company's Annual Report on Form 10-K for the year ended March 31, 2025 and to the reference to our Firm under the caption "Experts" in the Registration Statement.

/s/ Rosenberg Rich Baker Berman, P.A.

Somerset, New Jersey  
March 27, 2026

## CALCULATION OF FILING FEE TABLES

S-1

## VIVOSIM LABS, INC

Table 1: Newly Registered and Carry Forward Securities

Line Item	Type	Security Type	Security Class Title	Notes	Fee Calculation Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
<i>Newly Registered Securities</i>										
Fees to be Paid	Equity		Common Stock, \$0.001 par value per share	(1)	457(o)		\$	\$ 4,000,000.00	0.0001381	\$ 552.40
Fees to be Paid	Equity		Pre-Funded Warrants to purchase shares of Common Stock	(2)	Other				0.0001381	0.00
Fees to be Paid	Equity		Common Stock issuable upon exercise of Pre-Funded Warrants	(3)	Other				0.0001381	0.00
Fees to be Paid	Equity		Common Warrants to purchase shares of Common Stock	(4)	Other				0.0001381	0.00
Fees to be Paid	Equity		Common Stock issuable upon exercise of the Common Warrants	(5)	457(o)			15,000,000.00	0.0001381	2,071.50
Fees to be Paid	Equity		Placement Agent Warrants to purchase shares of Common Stock	(6)	Other				0.0001381	0.00
Fees to be Paid	Equity		Common Stock issuable upon exercise of the Placement Agent Warrants	(7)	457(o)		\$	\$ 250,000.00	0.0001381	\$ 34.53
							Total Offering Amounts:	<u>\$ 19,250,000.00</u>		<u>2,658.43</u>
							Total Fees Previously Paid:			0.00
							Total Fee Offsets:			0.00
							Net Fee Due:			<u>\$ 2,658.43</u>

**Offering Note(s)**

- (1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) of the Securities Act of 1933, as amended (the "Securities Act"), based on an estimate of the proposed maximum aggregate offering price. Pursuant to Rule 416 under the Securities Act, the securities being registered hereunder include such indeterminate number of additional common stock as may be issued after the date hereof as a result of share subdivisions, share capitalization or similar transactions.
- (2) In accordance with Rule 457(g), the entire registration fee for the warrants is allocated to the shares of common stock underlying the warrants, and no separate fee is payable for the warrants.
- (3) The proposed maximum aggregate offering price of the common stock will be reduced on a dollar-for-dollar basis based on the offering price of any Pre-Funded Warrants issued in the offering, and the proposed maximum aggregate offering price of the Pre-Funded Warrants to be issued in the offering will be reduced on a dollar-for-dollar basis based on the offering price of any common stock issued in the offering. Accordingly, the proposed maximum aggregate offering price of the common stock and Pre-Funded Warrants (including the common stock issuable upon exercise of the Pre-Funded Warrants), if any, is \$4,000,000.
- (4) In accordance with Rule 457(g), the entire registration fee for the warrants is allocated to the shares of common stock underlying the warrants, and no separate fee is payable for the warrants.
- (5) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) of the Securities Act based on an estimate of the proposed maximum aggregate offering price. Pursuant to Rule 416 under the Securities Act, the securities being registered hereunder include such indeterminate number of additional common stock as may be issued after the date hereof as a result of share sub-divisions, share capitalization or similar transactions.
- (6) In accordance with Rule 457(g), the entire registration fee for the warrants is allocated to the shares of common stock underlying the warrants, and no separate fee is payable for the warrants.
- (7) Represents common stock issuable upon exercise of the Placement Agent Warrants equal to 5.0% of the aggregate number of shares of common stock and Pre-Funded Warrants being offered in this offering, at an exercise price equal to 125% of the combined public offering price per share of common stock and accompanying warrant. Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) of the Securities Act, the proposed maximum aggregate offering price is \$250,000, which is equal to 125% of \$200,000 (5.0% of the proposed maximum aggregate offering price of \$4,000,000). Pursuant to Rule 416 under the Securities Act, the securities being registered hereunder include such indeterminate number of additional common stock as may be issued after the date hereof as a result of share sub-divisions, share capitalization or similar transactions.