UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): February 14, 2024

Larimar Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-36510 (Commission File Number) 20-3857670 (I.R.S. Employer Identification No.)

Three Bala Plaza East, Suite 506 Bala Cynwyd, Pennsylvania (Address of principal executive offices)

19004 (Zip Code)

Registrant's telephone number, including area code: (844) 511-9056

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

□ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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

	Trading	Name of each exchange
Title of each class	Symbol(s)	on which registered
Common Stock, par value \$0.001 per share	LRMR	Nasdaq Global Market

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

Emerging growth company \Box

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box

Item 1.01 Entry into a Material Definitive Agreement.

On February 14, 2024, Larimar Therapeutics, Inc. (the "*Company*") entered into an underwriting agreement (the "*Underwriting Agreement*") with Leerink Partners LLC, Citigroup Global Markets Inc. and Guggenheim Securities, LLC, as representatives of the several underwriters named therein (the "*Underwriters*"), relating to an underwritten public offering (the "*Offering*") of 17,162,472 shares (the "*Shares*") of the common stock, par value \$0.001 per share (the "*Common Stock*"), of the Company at a public offering price of \$8.74 per share, less the underwriting discounts and commissions. Pursuant to the terms of the Underwriting Agreement, the Company granted the Underwriters an option, exercisable for 30 days following the date of the Underwriting Agreement, to purchase up to an additional 2,574,370 shares of Common Stock (the "*Additional Shares*") at the same price, which the Underwriters exercised on February 14, 2024.

Giving effect to the sale of the Additional Shares, the net proceeds to the Company from the Offering were approximately \$161.8 million, after deducting underwriting discounts and commissions and estimated offering expenses.

Leerink Partners LLC, Citigroup Global Markets Inc. and Guggenheim Securities, LLC acted as joint bookrunning managers for the Offering. The Offering closed on February 16, 2024. All of the shares of Common Stock in the Offering were sold by the Company.

The Offering was made pursuant to the Company's effective shelf registration statement on Form S-3 (Registration No. 333-268312), filed with the Securities and Exchange Commission on November 11, 2022 and declared effective on November 21, 2022.

The Underwriting Agreement contains customary representations, warranties and agreements by the Company, customary conditions to closing, indemnification obligations of the Company and the Underwriters, including for liabilities under the Securities Act of 1933, as amended, other obligations of the parties and termination provisions. The representations, warranties and covenants contained in the Underwriting Agreement were made only for purposes of such agreement and as of specific dates, were solely for the benefit of the parties to such agreement and may be subject to limitations agreed upon by the contracting parties.

The Underwriting Agreement is filed as Exhibit 1.1 to this Current Report on Form 8-K and is incorporated herein by reference. The foregoing description of the terms of the Underwriting Agreement is qualified in its entirety by reference to such exhibit.

A copy of the legal opinion and consent of Goodwin Procter LLP relating to the legality of the issuance and sale of the Shares and Additional Shares in the Offering is attached as Exhibit 5.1 to this Current Report on Form 8-K.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Below is a list of exhibits included with this Current Report on Form 8-K.

Exhibit No.	Document
1.1	Underwriting Agreement, dated February 14, 2024, by and among the Company, Leerink Partners LLC, Citigroup Global Markets Inc. and Guggenheim Securities, LLC, as representatives of the several underwriters named therin*
5.1	Opinion of Goodwin Procter LLP*
23.1	Consent of Goodwin Procter LLP (included in Exhibit 5.1)*
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith

SIGNATURES

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

Larimar Therapeutics, Inc.

By:/s/ Carole S. Ben-Maimon, M.D.Name:Carole S. Ben-Maimon, M.D.Title:President and Chief Executive Officer

Date: February 16, 2024

Larimar Therapeutics, Inc.

UNDERWRITING AGREEMENT

February 14, 2024

LEERINK PARTNERS LLC CITIGROUP GLOBAL MARKETS INC. GUGGENHEIM SECURITIES, LLC As Representatives of the several Underwriters

- c/o LEERINK PARTNERS LLC 53 State Street, 40th Floor Boston, Massachusetts 02109
- c/o CITIGROUP GLOBAL MARKETS INC. 388 Greenwich Street New York, New York 10013
- c/o GUGGENHEIM SECURITIES, LLC 330 Madison Avenue New York, New York 10017

Ladies and Gentlemen:

Introductory. Larimar Therapeutics, Inc., a Delaware corporation (the "**Company**"), proposes, subject to the terms and conditions stated herein, to issue and sell to the several underwriters named in <u>Schedule A</u> (the "**Underwriters**") an aggregate of 17,162,472 shares of its common stock, par value \$0.001 per share (the "**Shares**"). The 17,162,472 Shares to be sold by the Company are called the "**Firm Shares**." In addition, the Company has granted to the Underwriters an option to purchase up to an additional 2,574,370 Shares as provided in Section 2. The additional 2,574,370 Shares to be sold by the Company pursuant to such option are collectively called the "**Optional Shares**." The Firm Shares and, if and to the extent such option is exercised, the Optional Shares are called the "**Offered Shares**." Leerink Partners LLC ("**Leerink Partners**"), Citigroup Global Markets Inc. ("**Citi**") and Guggenheim Securities, LLC ("**Guggenheim**") have agreed to act as representatives of the several Underwriters (in such capacity, the "**Representatives**") in connection with the offering and sale of the Offered Shares. To the extent there are no additional underwriters listed on <u>Schedule A</u>, the term "Representatives" as used herein shall mean you, as Underwriters, and the term "Underwriters" shall mean either the singular or the plural, as the context requires.

The Company has prepared and filed with the Securities and Exchange Commission (the "**Commission**") a shelf registration statement on Form S-3, File No. 333-268312, including a base prospectus (the "**Base Prospectus**") to be used in connection with the public offering and sale of the Offered Shares. Such registration statement, as amended, including the financial statements, exhibits and schedules thereto, in the form in which it became effective under the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder (collectively, the "**Securities Act**"), including all documents incorporated or deemed to be incorporated by reference therein and any information deemed to be a part thereof at the time of effectiveness pursuant to Rule 430B under the Securities Act, is called the "**Registration Statement**." Any registration statement filed by the Company pursuant to Rule 462(b) under the Securities Act in connection with the offer and sale of the Offered Shares is called the "**Rule 462(b) Registration Statement**," and from and after the date and time of filing of any such Rule 462(b) Registration Statement the term "Registration Statement" shall include the Rule 462(b) Registration Statement. The preliminary prospectus supplement, dated February 13, 2024, describing the Offered Shares and the offering thereof (the "**Preliminary Prospectus Supplement**"), together with the Base Prospectus, is called the "**Preliminary Prospectus**," and the Preliminary Prospectus and any other prospectus supplement to the Base Prospectus in preliminary form that describes the Offered Shares and the offering thereof and is used prior to the filing of the Prospectus (as defined below), together with the Base Prospectus, is called a "**preliminary prospectus**." As used herein, the term "**Prospectus Supplement**"), together with the Base Prospectus, in the form first used by the Underwriters to confirm sales of the Offered Shares or in the form first made available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act. References herein to the Preliminary Prospectus. As used herein, "**Applicable Time**" is 6:30 a.m., New York City time, on February 14, 2024. As used herein, "**free writing prospectus**" has the meaning set forth in Rule 405 under the Securities Act, and "**Time of Sale Prospectus**" has used herein, "**Road Show**" means a "road show" (as defined in Rule 433 under the Securities Act).

All references in this Agreement to the Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus and the Prospectus shall include the documents incorporated or deemed to be incorporated by reference therein. All references in this Agreement to financial statements and schedules and other information which are "contained," "included" or "stated" in, or "part of" the Registration Statement, the Rule 462(b) Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus or the Prospectus, and all other references of like import, shall be deemed to mean and include all such financial statements and schedules and other information which is or is deemed to be incorporated by reference in the Registration Statement, the Rule 462(b) Registration Statement, the Preliminary Prospectus, the Base Prospectus, any preliminary prospectus, any preliminary prospectus, any preliminary prospectus, the Base Prospectus, any preliminary prospectus, the Base Prospectus, any preliminary prospectus, and end the references in this Agreement to amendments or supplements to the Registration Statement, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus, any preliminary prospectus, the Base Prospectus, the Time of Sale Prospectus, any preliminary prospectus, the Base Prospectus, the Sale Prospectus, any preliminary prospectus, the Base Prospectus, the Preliminary Prospectus, any preliminary prospectus, the Base Prospectus, the Registration Statement, the Preliminary Prospectus, any preliminary prospectus, any preliminary prospectus, and include the filing of any document under the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder (collectively, the "**Exchange Act**") that is or is deemed to be incorporated by reference in the Registration Statement, the Preliminary Prospectus, any preliminary prospectus, any preliminary prospectus, as

In the event that the Company has only one subsidiary, then all references herein to "subsidiaries" of the Company shall be deemed to refer to such single subsidiary, <u>mutatis mutandis</u>.

The Company hereby confirms its agreements with the Underwriters as follows:

Section 1. Representations and Warranties of the Company. The Company hereby represents, warrants and covenants to each Underwriter, as of the date of this Agreement, as of the First Closing Date (as hereinafter defined) and as of each Option Closing Date (as hereinafter defined), if any, as follows:

(a) *Effectiveness of Registration Statement.* The Registration Statement has been declared effective by the Commission under the Securities Act. The Company has complied, to the Commission's satisfaction, with all requests of the Commission for additional or supplemental information, if any. No stop order suspending the effectiveness of either Registration Statement is in effect and no proceedings for such purpose have been instituted or are pending or, to the Company's knowledge, are contemplated or threatened by the Commission. At the time the Registration Statement was originally filed with the Commission, the Company met the then-applicable requirements for use of Form S-3 under the Securities Act. The documents incorporated or deemed to be incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus, at the time they were or hereafter are filed with the Commission, or became effective under the Exchange Act, as the case may be, complied and will comply in all material respects with the requirements of the Exchange Act.

(b) Compliance with Registration Requirements. Each of the Registration Statement, any Rule 462(b) Registration Statement and any posteffective amendment thereto, as of the applicable Effective Date, complied and, until such time as the Underwriters are no longer required to deliver a Prospectus in order to confirm sales of the Shares, will comply in all material respects with the Securities Act and the rules and regulations of the Commission thereunder (the "**Rules and Regulations**"). The Preliminary Prospectus and the Prospectus, at the time each was filed with the Commission, complied in all material respects with the requirements of the Securities Act and the Rules and Regulations. Each Preliminary Prospectus delivered to the Underwriters for use in connection with this Offering and the Prospectus was or will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(c) *Registration Statement Disclosure.* The Registration Statement, when it became effective, did not and, as amended or supplemented, if applicable, will not (i) contain, as of the date of such amendment or supplement, an untrue statement of a material fact, or (ii) omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; *provided, however*, that this representation and warranty shall not apply to any information contained in or omitted from the Registration Statement or any amendment thereto in reliance upon and in conformity with information furnished in writing to the Company by or on behalf of any Underwriter through the Representative specifically for use therein. The parties hereto agree that such information provided by or on behalf of any Underwriter through the Representative consists solely of the material referred to in Section 9(b) hereof. Each "forward-looking statement" (within the meaning of Section 27A of the Securities Act or Section 21E of the Exchange Act) contained or incorporated by reference in the Registration Statement, the Preliminary Prospectus or the Prospectus has been made or reaffirmed with a reasonable basis and has been disclosed in good faith.

(d) *Prospectus Disclosure.* The Time of Sale Prospectus, as of the Applicable Time, did 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 Prospectus will not, as of its date, as of the First Closing Date or as of any Option Closing Date, 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. Each free writing prospectus (i) complies in all material respects with the applicable provisions of the Securities Act and the Rules and Regulations, (ii) does not conflict with the information contained in the Registration Statement, the Time of Sale Prospectus or the Prospectus and (iii) does not contain an untrue statement of a material fact or omit to state a material fact necessary in order to make the statement of a material fact or omit to state a material fact necessary in order to make the information contained in the Registration Statement, the Time of Sale Prospectus or the Prospectus and (iii) does 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 in which they were made, not misleading. No representation and warranty is made in this Section 1(d) with respect to any information contained in or omitted from the Time of Sale Prospectus or the Prospectus in reliance upon and in conformity with information furnished in writing to the Company by or on behalf of any Underwriter through the Representative specifically for use therein. The parties hereto agree that such information provided by or on behalf of any Underwriter through the Representative consists solely of the material referred to in Section 9(b) hereof.

(e) *Ineligible Issuer*. At the earliest time (i) after the filing of the Registration Statement that the Company or another offering participant made a bona fide offer (within the meaning of Rule 164(h)(2) of the Securities Act) of the Shares and (ii) at the date hereof, the Company was not and is not an "ineligible issuer," as defined in Rule 405 of the Securities Act, including (but not limited to) the Company or any subsidiary in the preceding three years not having been convicted of a felony or misdemeanor or having been made the subject of a judicial or administrative decree or order as described in Rule 405 of the Securities Act.

(f) *Free Writing Prospectuses.* Each free writing prospectus conformed or will conform in all material respects to the requirements of the Securities Act and the Rules and Regulations on the date of first use, and the Company has complied with the requirements of Rule 433 under the Securities Act with respect to each free writing prospectus including, without limitation, all prospectus delivery, filing, record retention and legending requirements applicable to any such free writing prospectus. The Company has not (i) distributed any offering material in connection with the Offering other than any Preliminary Prospectus, the Prospectus, and any free writing prospectus set forth on <u>Schedule B</u> hereto, or (ii) filed, referred to, approved, used or authorized the use of any "free writing prospectus" as defined in Rule 405 under the Securities Act with respect to the Offering or the Shares, except for any free writing prospectus set forth in <u>Schedule B</u> hereto and any electronic Road Show previously approved by the Representative. The Company has retained in accordance with the Securities Act and the Rules and Regulations all free writing prospectuses that were not required to be filed pursuant to the Securities Act and the Rules and Regulations.

(g) Independent Accountants. PricewaterhouseCoopers LLP, which has expressed its opinion with respect to the financial statements (which term as used in this Agreement includes the related notes thereto) filed with the Commission as a part of the Registration Statement, the Time of Sale Prospectus or the Prospectus, is an independent registered public accounting firm as required by the Securities Act, the Exchange Act, and the rules of the Public Company Accounting Oversight Board ("PCAOB").

(h) *No Material Adverse Effect.* Since the date of the latest audited financial statements included in the Registration Statement, the Time of Sale Prospectus and the Prospectus, and, except as disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus, (A) neither the Company nor any of its subsidiaries listed in <u>Exhibit A</u> hereto ("**Subsidiaries**") has (i) sustained any loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, (ii) issued or granted any securities (other than pursuant to employee benefit plans, qualified stock option plans or other equity compensation plans or arrangements existing on the date hereof and disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus), (iii) incurred any material liability or obligation, direct or contingent, other than liabilities and obligations that were incurred in the ordinary course of business, (iv) entered into any material transaction not in the ordinary course of business, or (v) declared or paid any dividend on its share capital; and (B) there has not been any change in the share capital, long-term debt, net current assets or short-term debt of the Company or any of its Subsidiaries or any adverse change, or any development involving a prospective adverse change, in or affecting the

condition (financial or otherwise), results of operations, shareholders' equity, properties, management, business or prospects of the Company and its Subsidiaries taken as a whole.

(i) *Capitalization and Other Capital Stock Matters.* The Company has an authorized capitalization as set forth in the Registration Statement, Time of Sale Prospectus and the Prospectus, and all of the issued shares of the Company have been duly authorized and validly issued, are fully paid and non-assessable, conform in all material respects to the description thereof contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus and were not issued in violation of any preemptive right, resale right, right of first refusal or similar right. All of the Company's options, warrants and other rights to purchase or exchange any securities for shares of the Company's capital stock have been duly authorized and validly issued, and conform in all material respects to the description thereof contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus. All of the issued shares of capital stock or other ownership interest of each subsidiary of the Company have been duly authorized and validly issued, are fully paid and non-assessable and are owned directly or indirectly by the Company, free and clear of all liens, encumbrances, equities or claims, except for such liens, encumbrances, equities or claims as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. "Material Adverse Effect" shall mean any material adverse change or effect on or affecting (i) the business, earnings, assets, liabilities, prospects, condition (financial or otherwise), operations, general affairs, management, financial position, stockholders' equity or results of operations of the Company to perform its obligations under this Agreement, including this issuance and sale of the Shares, or to consummate the transactions contemplated by this Agreement.

(j) Authorization of the Offered Shares. The Shares to be delivered on the First Closing Date and any Option Closing Date, if any, have been duly authorized and, when issued and delivered in accordance with this Agreement, will be validly issued, fully paid and non-assessable, will conform in all material respects to the description thereof contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus, will be issued in compliance with federal and state securities laws and will be free of statutory and contractual preemptive rights, rights of first refusal and similar rights.

(k) Incorporation and Good Standing of the Company and Subsidiaries. The Company and each of its Subsidiaries have been duly organized, validly existing as a corporation and in good standing under the laws of their respective jurisdictions of organization. The Company and each of its Subsidiaries are, and will be, duly licensed or qualified as a foreign corporation for transaction of business and in good standing under the laws of each other jurisdiction, and have all corporate power and authority necessary to own or hold their respective properties and to conduct their respective businesses as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, except where the failure to be so qualified or in good standing or have such power or authority would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(1) Non-Contravention of Existing Instruments. The issue and sale of the Shares, the execution, delivery and performance of this Agreement by the Company, the consummation of the transactions contemplated hereby and the application of the proceeds from the sale of the Shares as described under "Use of Proceeds" in the Registration Statement, the Time of Sale Prospectus and the Prospectus will not (i) conflict with or result in a breach or violation of any of the terms or provisions of, impose any lien, charge or encumbrance upon any property or assets of the Company and its Subsidiaries, or constitute a default under, any indenture, mortgage, deed of trust, loan agreement, license, lease or other agreement or instrument to which the Company or any of its Subsidiaries is a party or by which the Company or any of its Subsidiaries is subject; (ii) result in any violation of the provisions of the certificate of

incorporation or bylaws (or similar organizational documents) of the Company or any of its Subsidiaries; or (iii) result in any violation of any statute or any judgment, order, decree, rule or regulation of any court or governmental agency or body having jurisdiction over the Company or any of its Subsidiaries or any of their properties or assets, except, with respect to clauses (i) and (iii), for such conflicts, breaches, violations, liens, charges, encumbrances or defaults that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(m) *Government Consents.* No consent, approval, authorization or order of, or filing, registration or qualification with, any court or governmental agency or body having jurisdiction over the Company or any of its Subsidiaries or any of their properties or assets is required for the issue and sale of the Shares, the execution, delivery and performance of this Agreement by the Company, the consummation of the transactions contemplated hereby, the application of the proceeds from the sale of the Shares as described under "Use of Proceeds" in the Registration Statement, the Time of Sale Prospectus and the Prospectus, except for (i) the registration of the Shares under the Securities Act; (ii) such consents, approvals, authorizations, orders, filings, registrations or qualifications as may be required under the Exchange Act, and applicable state or foreign securities laws and/or the bylaws and rules of the Financial Industry Regulatory Authority (the "FINRA") in connection with the sale of the Shares by the Underwriters; and (iii) the inclusion of the Shares on The Nasdaq Global Market ("Nasdaq").

(n) *Corporate Power.* The Company has all requisite corporate power and authority to execute, deliver and perform its obligations under this Agreement. This Agreement has been duly and validly authorized, executed and delivered by the Company.

(o) *Corporate Documents.* Neither the Company nor any of its Subsidiaries (i) is in violation of its certificate of incorporation or bylaws (or similar organizational documents), (ii) is in default, and no event has occurred that, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant, condition or other obligation contained in any indenture, mortgage, deed of trust, loan agreement, license or other agreement or instrument to which it is a party or by which it is bound or to which any of its properties or assets is subject, or (iii) is in violation of any statute or any order, rule or regulation of any court or governmental agency or body having jurisdiction over it or its property or assets or has failed to obtain any license, permit, certificate, franchise or other governmental authorization or permit necessary to the ownership of its property or to the conduct of its business, except in the case of clauses (ii) and (iii), to the extent any such conflict, breach, violation or default would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(p) No Material Actions or Proceedings. There are no legal or governmental proceedings pending to which the Company or any of its Subsidiaries is a party or of which any property or assets of the Company or any of its Subsidiaries is the subject that, if determined adversely to the Company, would, in the aggregate, reasonably be expected to have a Material Adverse Effect; and to the Company's knowledge, no such proceedings are threatened in writing by governmental authorities or others.

(q) *Financial Statements.* The historical financial statements (including the related notes and supporting schedules) included or incorporated by reference, in the Registration Statement, the Time of Sale Prospectus, and the Prospectus comply as to form in all material respects with the requirements of Regulation S-X under the Securities Act ("**Regulation S-X**") and present fairly in all material respects the financial condition, results of operations and cash flows of the entities purported to be shown thereby at the dates and for the periods indicated and have been prepared in conformity with generally accepted accounting principles in the United States ("**GAAP**") applied on a consistent basis throughout the periods involved (except (i) as may be otherwise indicated in such financial statements or the notes thereto, or (ii) in the case of unaudited interim statements, to the extent they may exclude footnotes and are subject to

normal and recurring year-end adjustments that are not reasonably expected to be material in amount). All disclosures contained in the Registration Statement, the Time of Sale Prospectus and Prospectus regarding "non-GAAP financial measures" (as such term is defined by the rules and regulations of the Commission) comply with Regulation G of the Exchange Act and Item 10 of Regulation S-K of the Securities Act, to the extent applicable. There are no financial statements (historical or pro forma) that are required to be included in the Registration Statement, the Time of Sale Prospectus or the Prospectus that are not so included as required. The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus fairly present the information called for in all material respects and have been prepared in accordance with the Commission's rules and guidelines applicable thereto.

(r) *Material Contracts.* There are no contracts or other documents required to be described in the Registration Statement, the Time of Sale Prospectus or the Prospectus or to be filed as exhibits to the Registration Statement that are not described and filed as required. The statements made in the Registration Statement, the Time of Sale Prospectus and Prospectus, insofar as they purport to constitute summaries of the terms of the contracts and other documents described and filed, constitute accurate summaries of the terms of such contracts and documents in all material respects. Neither the Company nor any of its Subsidiaries has knowledge that any other party to any such contract or other document has any intention not to render full performance as contemplated by the terms thereof.

(s) Internal Controls Over Financial Reporting. The Company and each of its Subsidiaries maintain a system of "internal controls over financial reporting" (as defined in Rule 13a-15(f) of the Exchange Act) designed to provide reasonable assurances regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP, including, but not limited to, internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorization, (ii) transactions are recorded as necessary to permit preparation of the Company's financial statements in conformity with GAAP and to maintain accountability for its assets, (iii) access to the Company's assets is permitted only in accordance with management's general or specific authorization, (iv) the recorded accountability for the Company's assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences, and (v) the interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus fairly present the information called for in all material respects and are prepared in accordance with the Commission's rules and guidelines applicable thereto. As of the date of the most recent balance sheet of the Company and its consolidated Subsidiaries audited by PricewaterhouseCoopers LLP, there were no "material weaknesses" (as defined by the PCAOB) in the Company's internal controls over financial reporting, or any fraud, whether or not material, that involves management or other employees of the Company and its Subsidiaries who have a significant role in the Company's internal controls; and since the end of the latest audited fiscal year, there has been no change in the Company's internal control over financial reporting (whether or not remediated) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. The Company's board of directors has, subject to the exceptions, cure periods and the phase in periods specified in the Exchange rules ("Exchange Rules"), validly appointed an audit committee to oversee internal accounting controls whose composition satisfies the applicable requirements of the Exchange Rules and the Company's board of directors and/or the audit committee has adopted a charter that satisfies the requirements of the Exchange Rules.

(t) *Disclosure Controls and Procedures.* The Company and its Subsidiaries maintain "disclosure controls and procedures" (as defined in Rule 13a-15(e) of the Exchange Act) that comply with the requirements of the Exchange Act and that have been designed to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded,

processed, summarized and reported within the time periods specified in the Commission's rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to the Company's management as appropriate to allow timely decisions regarding required disclosure. The Company and its Subsidiaries have carried out evaluations of the effectiveness of their disclosure controls and procedures as required by Rule 13a-15 of the Exchange Act.

(u) *Critical Accounting Policies.* The section entitled "Critical Accounting Policies and Significant Judgments and Estimates" incorporated by reference in the Registration Statement, the Time of Sale Prospectus and the Prospectus accurately describes in all material respects (i) the accounting policies that the Company believes are the most important in the portrayal of the Company's financial condition and results of operations and that require management's most difficult, subjective or complex judgments ("**Critical Accounting Policies**"); (ii) the judgments and uncertainties affecting the application of Critical Accounting Policies; and (iii) the likelihood that materially different amounts would be reported under different conditions or using different assumptions, and an explanation thereof.

(v) Compliance with Sarbanes Oxley Act. There is and has been no failure on the part of the Company or, to the knowledge of the Company, any of the Company's directors or officers, in their capacities as such, to comply with any provision of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith (the "Sarbanes Oxley Act") that are applicable to the Company or its directors or officers in their capacities as directors or officers of the Company.

(w) *Registration.* The shares of Common Stock are registered pursuant to Section 12(b) of the Exchange Act and listed on Nasdaq; the Company has taken no action designed to, or reasonably likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from Nasdaq, nor has the Company received any notification that the Commission or Nasdaq is contemplating terminating such registration or listing.

(x) *Related-Party Transactions.* No relationship, direct or indirect, exists between or among the Company, on the one hand, and the directors, officers, shareholders, customers or suppliers of the Company, on the other hand, that is required to be described in the Registration Statement, the Time of Sale Prospectus or the Prospectus which is not so described.

(y) No Price Stabilization or Manipulation; Compliance with Regulation M. The Company has not taken and will not take, directly or indirectly, any action designed to, or which might reasonably be expected to cause or result in, or which constitutes: (i) the stabilization or manipulation of the price of the Common Stock or any other security of the Company to facilitate the sale or resule of the Shares or (ii) a violation of Regulation M.

(z) No Integration. The Company has not sold or issued any securities that would be integrated with the offering and sale of the Shares contemplated by this Agreement pursuant to the Securities Act or the interpretations thereof by the Commission.

(aa) FINRA Matters. All of the information provided to the Underwriters or to counsel for the Underwriters by the Company and, to the Company's knowledge, its officers, directors and the holders of any securities (debt or equity) or options to acquire any securities of the Company in connection with the offering of the Shares is true, complete and correct in all material respects and compliant with FINRA rules and, to the Company's knowledge, any letters, filings or other supplemental information provided to FINRA pursuant to FINRA Rules or NASD Conduct Rules is true, complete and correct in all material respects.

(bb) Accuracy of Description of Capital Stock, Risk Factors and Underwriting Disclosure. The statements set forth in the Time of Sale Prospectus and the Prospectus under the caption "Description of Capital Stock", insofar as it purports to constitute a summary of the terms of the Common Stock, and under the captions "Risk Factors" and "Underwriting", insofar as they purport to describe the provisions of the laws and documents referred to therein, are accurate and complete in all material respects.

(cc) Company Not an "Investment Company." The Company is not and, at all times up to and including consummation of the transactions contemplated by this Agreement, and after giving effect to application of the net proceeds of the Offering as described in the Time of Sale Prospectus and the Prospectus, will not be, required to register as an "investment company" under the Investment Company Act of 1940, as amended, and is not and will not be an entity "controlled" by an "investment company" within the meaning of such act.

(dd) *Brokers.* Neither the Company nor any of its Subsidiaries is a party to any contract, agreement or understanding with any person (other than this Agreement) that would give rise to a valid claim against any of them or any Underwriter for a brokerage commission, finder's fee or like payment in connection with the offering and sale of the Shares.

(ee) *Title to Property.* The Company and each of its Subsidiaries have good and marketable title in fee simple to all real property and good and marketable title to all personal property owned by them, that are material to the business of the Company, in each case free and clear of all liens, encumbrances and defects, except such liens, encumbrances and defects 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 its Subsidiaries. All assets held under lease by the Company and its Subsidiaries, that are material to the business of the Company, are held by them under valid, subsisting and enforceable leases, with such exceptions as do not materially interfere with the use made and proposed to be made of such property to be made of such assets by the Company and its Subsidiaries.

(ff) Intellectual Property Rights. The Company and each of its Subsidiaries owns, possesses, or can acquire on reasonable terms, all Intellectual Property necessary for the conduct of the Company's and its Subsidiaries' business as now conducted or as proposed to be conducted, as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus. Furthermore, (A) to the knowledge of the Company, there is no infringement, misappropriation or violation by third parties of any such Intellectual Property; (B) there is no pending or, to the knowledge of the Company, threatened, action, suit, proceeding or claim by others challenging the Company's or any of its Subsidiaries' rights in or to any such Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (C) the Intellectual Property owned by the Company and its Subsidiaries, and to the knowledge of the Company, the Intellectual Property licensed to the Company and its Subsidiaries, in each case that is necessary for the conduct of the Company's and its Subsidiaries' business as now conducted or as proposed to be conducted, has not been adjudged invalid or unenforceable, in whole or in part, and there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property and the Company is unaware of any facts which would form a reasonable basis for any such claim; (D) there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others that the Company or any of its Subsidiaries infringes, misappropriates or otherwise violates any Intellectual Property or other proprietary rights of others, and neither the Company or any of its Subsidiaries has received any written notice of such claim and the Company is unaware of any other fact which would form a reasonable basis for any such claim; (E) to the Company's knowledge, no employee of the Company or any of its Subsidiaries is in or has ever been in material violation 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 nor any of its Subsidiaries or actions undertaken by the employee while employed with the Company or any of its Subsidiaries; (F) with respect to the Intellectual Property that is necessary for the conduct of the Company's and its Subsidiaries' business as now conducted or as proposed to be conducted, there is no prior art or public or commercial activity of which the Company is aware that may render any patent included with respect to such Intellectual Property invalid or that would preclude the issuance of any patent on any patent application included in such Intellectual Property, which has not been disclosed to the U.S. Patent and Trademark Office or the relevant foreign patent authority, as the case may be; (G) to the Company's knowledge, the issued patents included in the Intellectual Property that is necessary for the conduct of the Company's and its Subsidiaries' business as now conducted or as proposed to be conducted are valid and enforceable and the Company is unaware of any facts that would preclude the issuance of a valid and enforceable patent on any pending patent application included in such Intellectual Property; (H) with respect to the Intellectual Property that is necessary for the conduct of the Company's and its Subsidiaries' business as now conducted or proposed to be conducted and that is owned or purported to be owned by the Company, the Company has taken reasonable steps necessary to secure the interests of the Company in such Intellectual Property from all employees, consultants, agents or contractors that developed (in whole or in part) such Intellectual Property; (I) no government funding, facilities or resources of a university, college, other educational institution or research center was used in the development of any Intellectual Property necessary for the conduct of the Company's and it subsidiaries' business as now conducted or proposed to be conducted and that is owned or purported to be owned by the Company that would confer upon any governmental agency or body, university, college, other educational institution or research center any claim or right in or to any such Intellectual Property; and (J) to the Company's knowledge, none of the technology employed by the Company has been obtained or is being used by the Company in violation of the rights of any entity. "Intellectual Property" shall mean all patents, patent applications, trade and service marks, trade and service mark registrations, trade names, copyrights, licenses, inventions, trade secrets, domain names, technology, know-how and other intellectual property in the United States and foreign jurisdictions.

(gg) All Necessary Permits, etc. The Company has submitted and possesses, or qualifies for applicable exemptions to, such valid and current registrations, listings, approvals, clearances, licenses, certificates, authorizations or permits and supplements or amendments thereto issued or required by the appropriate state, federal or foreign regulatory agencies or bodies necessary to conduct their business ("Permits"), including, without limitation, all such Permits required by the U.S. Food and Drug Administration (the "FDA"), the U.S. Department of Health and Human Services ("HHS"), the U.S. Centers for Medicare & Medicaid Services ("CMS"), the European Medicines Agency ("EMA"), Health Canada or any other comparable state, federal or foreign agencies or bodies to which it is subject, and the Company has not received any notice of proceedings relating to the revocation or modification of, or non-compliance with, any such Permit, except for such Permits, the lack of which would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect.

(hh) *Compliance with Health Care Laws.* The Company and, to the Company's knowledge, its directors, employees and agents (while acting in such capacity) are and at all times have been in material compliance with, all health care laws applicable to the Company, or any of its products or activities, including, but not limited to, the federal Anti-Kickback Statute (42 U.S.C. Section 1320a-7b(b)), the Anti-Inducement Law (42 U.S.C. Section 1320a-7b(a)(5)), the civil False Claims Act (31 U.S.C. Section 3729 et seq.), the administrative False Claims Law (42 U.S.C. Section 1320a-7b(a)), the Stark law (42 U.S.C. Section 1395nn), the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. Section 1320d et seq.) as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. Section 17921 et seq.), the exclusion laws (42 U.S.C. Section 1320a-7), the Federal Food, Drug, and Cosmetic Act (21 U.S.C. Section 301 et seq.), the Controlled Substances Act (21 U.S.C. Section 801 et seq.), the Public Health Service Act (42 U.S.C. Section 201 et seq.), the Clinical Laboratory

Improvement Amendments of 1988 (42 U.S.C. Section 263a), Medicare (Title XVIII of the Social Security Act), Medicaid (Title XIX of the Social Security Act), and the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, the regulations promulgated pursuant to such laws, and any other state, federal or foreign law, accreditation standards, regulation, memorandum, opinion letter, or other issuance which imposes legally binding requirements on manufacturing, development, testing, labeling, advertising, marketing, promotion, distribution, reporting, kickbacks, patient or program charges, recordkeeping, claims process, documentation requirements, medical necessity, referrals, the hiring of employees or acquisition of services or supplies from those who have been excluded from government health care programs, quality, safety, privacy, security, licensure, accreditation or any other aspect of providing health care, clinical laboratory or diagnostics products or services (collectively, "Health Care Laws"). The Company has not received any notification, correspondence or any other written or oral communication, including notification of any pending or threatened claim, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any governmental authority, including, without limitation, the FDA, the EMA, Health Canada, the U.S. Federal Trade Commission, the U.S. Drug Enforcement Administration, CMS, HHS's Office of Inspector General, the U.S. Department of Justice and state Attorneys General or similar agencies of potential or actual non-compliance by, or liability of, the Company under any Health Care Laws, except, with respect to any of the foregoing, such as would not, individually or in the aggregate, result in a Material Adverse Effect. To the Company's knowledge, there are no facts or circumstances that would reasonably be expected to give rise to material liability of the Company under any Health Care Laws. Neither the Company, nor any of its Subsidiaries, is a party to or has any ongoing reporting obligations pursuant to any corporate integrity agreements, monitoring agreements, deferred prosecution agreements, consent decrees, settlement orders, plan of correction or similar agreements with or imposed by any governmental authority for non-compliance with any Health Care Law. The statements with respect to Health Care Laws and the Company's compliance therewith included in the Registration Statement, the Time of Sale Prospectus and the Prospectus fairly summarize the matters therein described.

(ii) Clinical Data and Regulatory Compliance. The studies, tests and preclinical and clinical trials conducted by or on behalf of, or sponsored by, the Company, or in which the Company has participated, that are described in the Registration Statement, the Time of Sale Prospectus or the Prospectus, or the results of which are referred to in the Registration Statement, the Time of Sale Prospectus or the Prospectus, were and, if still pending, are being conducted in all material respects in accordance with protocols submitted to the FDA or comparable regulatory agencies outside of the U.S., as applicable, and all applicable statutes, rules and regulations of the FDA, the EMA, Health Canada and other comparable regulatory agencies outside of the U.S. to which they are subject, including, without limitation, 21 C.F.R. Parts 50, 54, 56, 58, 312, and 812; the descriptions of the results of such studies, tests and trials contained in the Registration Statement, the Time of Sale Prospectus or the Prospectus do not contain any misstatement of a material fact or omit a material fact necessary to make such statements not misleading; the Company has no knowledge of any studies, tests or trials not described in the Registration Statement, the Time of Sale Prospectus or the Prospectus the results of which reasonably call into question in any material respect the results of the studies, tests and trials described in the Registration Statement, the Time of Sale Prospectus or Prospectus; and except as described in the Registration Statement, the Time of Sale Prospectus or the Prospectus, the Company has not received any notices or other correspondence from the FDA, EMA, Health Canada or any other foreign, state or local governmental body exercising comparable authority or any Institutional Review Board or comparable authority requiring or threatening the termination, suspension or material modification of any studies, tests or preclinical or clinical trials conducted by or on behalf of, or sponsored by, the Company or in which the Company has participated, and, to the Company's knowledge, there are no reasonable grounds for the same. There has not been any material violation of law or regulation by the Company in its respective product development efforts, submissions or reports to any regulatory authority that could reasonably be expected to require investigation, corrective action or enforcement action. None of the Company or its Subsidiaries nor any of

their respective employees or agents, officers or directors have been excluded, suspended or debarred from participation in any U.S. state or federal health care program or human clinical research or, to the knowledge of the Company, is subject to a governmental inquiry, claim, investigation, or any other proceeding that could reasonably be expected to result in debarment, suspension, or exclusion.

(jj) Cybersecurity and Data Protection. The Company and its Subsidiaries' information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, and databases (collectively, "IT Systems") are adequate for, and operate and perform in all material respects as required in connection with the operation of the business of the Company and its Subsidiaries as currently conducted, free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants. The Company and its Subsidiaries have implemented and maintained commercially reasonable physical, technical and administrative controls, policies, procedures, and safeguards to maintain and protect their material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and data, including "Personal Data," used in connection with their businesses (collectively, "Sensitive Data"). "Personal Data" means (i) a natural person's name, street address, telephone number, e-mail address, photograph, social security number or tax identification number, driver's license number, passport number, credit card number, bank information, or customer or account number; (ii) any information which would qualify as "personally identifying information" under the Federal Trade Commission Act, as amended; (iii) "personal data" as defined by GDPR (as defined below); (iv) any information which would qualify as "protected health information" under the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act (collectively, "HIPAA"); and (v) any other piece of information that allows the identification of such natural person, or his or her family, or permits the collection or analysis of any data related to an identified person's health or sexual orientation. There have been no breaches, violations, outages or unauthorized uses of or accesses to same, except for those that have been remedied without material cost or liability or the duty to notify any other person, nor any incidents under internal review or investigations relating to the same. The Company and its Subsidiaries are presently in material compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Personal Data and to the protection of such IT Systems and Sensitive Data from unauthorized use, access, misappropriation or modification.

(kk) Compliance with Data Privacy and Security Laws. The Company and its Subsidiaries are, and at all prior times were, in material compliance with all applicable state and federal data privacy and security laws and regulations, including without limitation HIPAA, the European Union General Data Protection Regulation ("GDPR") (EU 2016/679), and other similar state privacy laws (collectively, the "Privacy Laws"). To ensure compliance with the Privacy Laws, the Company and its Subsidiaries have in place, comply with, and take appropriate steps reasonably designed to ensure compliance in all material respects with their policies and procedures relating to data privacy and security and the collection, storage, use, disclosure, handling, and analysis of Personal Data (the "Policies"). The Company and its Subsidiaries have at all times made all disclosures to users or customers required by applicable laws and regulatory rules or requirements, and none of such disclosures made or contained in any Policy have, to the knowledge of the Company, been inaccurate or in violation of any applicable laws and regulatory rules or requirements in any material respect. The Company further certifies that neither it nor any of its Subsidiaries: (i) has received notice of any actual or potential liability under or relating to, or actual or potential violation of, any of the Privacy Laws, and has no knowledge of any event or condition that would reasonably be expected to result in any such notice; (ii) is currently conducting or paying for, in whole or in part, any investigation, remediation, or other corrective action pursuant to any Privacy Law; or (iii) is a party to any order, decree, or agreement that imposes any obligation or liability under any Privacy Law.

(II) *No Government Prohibitions.* The Company has not had any product, clinical laboratory or manufacturing site that manufactured products used by the Company (whether Company-owned or, to the Company's knowledge, that of a third party manufacturer for the Company's products) subject to a governmental authority (including FDA) shutdown or import or export prohibition, nor received any FDA Form 483 or other governmental authority notice of inspectional observations, "warning letters," "untitled letters," requests to make changes to the Company's products, processes or operations, or similar correspondence or notice from the FDA or other governmental authority alleging or asserting material noncompliance with any applicable Health Care Laws. To the Company's knowledge, neither the FDA nor any other governmental authority is considering such action.

(mm) *No Recalls or Safety Notices.* Except as disclosed in the Registration Statement, the Time of Sale Prospectus and the Prospectus, (A) there have been no recalls, field notifications, field corrections, market withdrawals or replacements, warnings, "dear doctor" letters, investigator notices, safety alerts or other notice of action relating to an alleged lack of safety, efficacy, or regulatory compliance of the Company's products ("**Safety Notices**") and (B) to the Company's knowledge, there are no facts that would be reasonably likely to result in (x) a Safety Notice with respect to the Company's products or services, (y) a change in labeling of any of the Company's respective products or services, or (z) a termination or suspension of marketing or testing of any of the Company's products or services.

(nn) *Insurance.* The Company and each of its Subsidiaries maintain insurance from insurers of recognized financial responsibility in such amounts and covering such risks is commercially reasonable in accordance with customary practices for companies engaged in similar businesses and similar industries for the conduct of their respective businesses and the value of their respective properties and as is customary for companies engaged in similar businesses in similar industries. All policies of insurance of the Company and its subsidiaries are in full force and effect; the Company and each of its Subsidiaries are in compliance with the terms of such policies in all material respects; neither the Company nor any of its Subsidiaries has received notice from any insurer or agent of such insurer that capital improvements or other expenditures are required or necessary to be made in order to continue such insurance; there are no material claims by the Company or any of its Subsidiaries under any such policy or instrument as to which any insurance company is denying liability or defending under a reservation of rights clause; and neither the Company nor any such 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 at a cost that would not reasonably be expected to have a Material Adverse Effect.

(oo) *Tax Law Compliance.* The Company and each of its Subsidiaries have filed all federal, state, local and foreign tax returns required to be filed through the date hereof, subject to permitted extensions, and have paid all taxes due except where the failure to file or pay would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, and no tax deficiency has been determined adversely to the Company or any of its Subsidiaries, nor does the Company have any knowledge of any tax deficiencies that have been, or would reasonably be expected to be asserted against the Company, that would, in the aggregate, reasonably be expected to have a Material Adverse Effect.

(pp) No Labor Disputes. No labor disturbance or dispute with the employees of the Company or any of its Subsidiaries exists or, to the knowledge of the Company, is imminent that could reasonably be expected to have a Material Adverse Effect.

(qq) *ERISA Compliance.* (i) Each "employee benefit plan" (within the meaning of Section 3(3) of the Employee Retirement Security Act of 1974, as amended ("ERISA")) for which the Company or any member of its "Controlled Group" (defined as any organization which is a member of a controlled group of corporations within the meaning of Section 414 of the Internal Revenue Code of 1986, as amended (the

"**Code**")) would have any liability (each a "**Plan**") has been maintained in compliance in all material respects with its terms and with the requirements of all applicable statutes, rules and regulations including ERISA and the Code; (ii) no prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred with respect to any Plan excluding transactions effected pursuant to a statutory or administrative exemption; (iii) with respect to each Plan subject to Title IV of ERISA (A) no "reportable event" (within the meaning of Section 4043(c) of ERISA) has occurred or is reasonably expected to occur that would result in a material loss to the Company, (B) no "accumulated funding deficiency" (within the meaning of Section 302 of ERISA or Section 412 of the Code), whether or not waived, has occurred or is reasonably expected to occur, (C) the fair market value of the assets under each Plan that is required to be funded exceeds the present value of all benefits accrued under such Plan (determined based on those assumptions used to fund such Plan), and (D) neither the Company or any member of its Controlled Group has incurred, or reasonably expects to incur, any liability under Title IV of ERISA (other than contributions to the Plan or premiums to the Pension Benefit Guaranty Corporation in the ordinary course and without default) in respect of a Plan (including a "multiemployer plan", within the meaning of Section 4001(c)(3) of ERISA); and (iv) each Plan that is intended to be qualified under Section 401(a) of the Code is so qualified and nothing has occurred, to the Company's knowledge, whether by action or by failure to act, which would cause the loss of such qualification.

(rr) Compliance with Environmental Laws. The Company and each of its Subsidiaries (i) are, and at all times prior hereto were, in compliance with all laws, regulations, ordinances, rules, orders, judgments, decrees, permits or other legal requirements of any governmental authority, including without limitation any international, foreign, national, state, provincial, regional, or local authority, relating to pollution, the protection of human health or safety, the environment, or natural resources, or to use, handling, storage, manufacturing, transportation, treatment, discharge, disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants ("Environmental Laws") applicable to such entity, which compliance includes, without limitation, obtaining, maintaining and complying with all permits and authorizations and approvals required by Environmental Laws to conduct their respective businesses, and (ii) have not received written notice or otherwise have knowledge of any actual or alleged violation of Environmental Laws, or of any actual or potential liability for or other obligation concerning the presence, disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants, except in the case of clauses (i) and (ii), to the extent any such non-compliance, violation, liability or other obligation would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. Except as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, (x) there are no proceedings that are pending, or to the Company's knowledge, threatened, against the Company or any of its Subsidiaries under Environmental Laws in which a governmental authority is also a party, other than such proceedings regarding which it is reasonably believed no monetary sanctions of \$100,000 or more will be imposed, (y) the Company and its Subsidiaries are not aware of any issues regarding compliance with Environmental Laws, including any pending or proposed Environmental Laws, or liabilities or other obligations under Environmental Laws or concerning hazardous or toxic substances or wastes, pollutants or contaminants, that would reasonably be expected to have a Material Adverse Effect, and (z) neither the Company nor its Subsidiaries anticipate material capital expenditures relating to Environmental Laws.

(ss) Anti-Corruption and Anti-Bribery Laws. Neither the Company nor any Subsidiary nor, to the Company's knowledge, any director, officer, agent, employee, affiliate or other person acting on behalf of the Company or any Subsidiary, has authorized the giving of, offer or promise to give or (i) made any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (ii) made any direct or indirect unlawful payment to any domestic governmental official, "foreign official" (as defined in the U.S. Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (collectively, the "FCPA")) or employee; (iii) violated or is in violation of any provision of the FCPA, UK Bribery Act, any applicable non-U.S. anti-bribery statute or regulation or any locally applicable

corruption laws; (iv) made any bribe, rebate, payoff, influence payment, kickback or other unlawful payment; or (v) received notice of any investigation, proceeding or inquiry by any governmental agency, authority or body regarding any of the matters in clauses (i)-(iv) above; and the Company and the Subsidiaries and, to the Company's knowledge, the Company's affiliates have conducted their respective businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith.

(tt) Money Laundering Laws. The operations of the Company and the Subsidiaries are and have been conducted at all times in compliance with applicable financial record-keeping and reporting requirements, including those of the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act) (Title III of Pub. L. 107-56 (signed into law 18 October 26, 2001)) (the "USA Patriot Act"), and those of the Currency and Foreign Transactions Reporting Act of 1970, as amended, and the money laundering statutes of all applicable jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines issued, administered or enforced by any governmental agency (collectively, the "Money Laundering Laws") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or the Subsidiaries with respect to the Money Laundering Laws is pending or, to the Company's knowledge, threatened.

(uu) Sanctions. None of the Company nor any Subsidiary nor, to the knowledge of the Company, any officer, director, agent, employee, affiliate or any person acting on behalf of the Company or any Subsidiary is or, in the past five years, has been (A) engaged in any services (including financial services), transfers of goods, software, or technology, or any other business activity related to (i) Cuba, Iran, North Korea, Syria or Crimea, so-called Donetsk People's Republic, or so-called Luhansk People's Republic regions of Ukraine ("Sanctioned Countries"), (ii) the government of any Sanctioned Country, (iii) any person, entity or organization located in, resident in, formed under the laws of, or owned or controlled by the government of, any Sanctioned Country, or (iv) any person, entity or organization made subject or target of any sanctions administered or enforced by the United States Government (including the US Department of Treasury, Office of Foreign Assets Control and the US Department of State), including, without limitation, the list of Specially Designated Nationals ("SDN List") of the Office of Foreign Assets Control of the U.S. Treasury Department ("OFAC"), or by the United Nations Security Council, the European Union, His Majesty's Treasury-UK, or other relevant sanctions authority (collectively, "Sanctions") and the Company will not directly or indirectly use the proceeds of this offering, or lend, contribute or otherwise make available such proceeds to any of its Subsidiaries, or any joint venture partner or other person or entity, for the purpose of financing the activities of or business with any person, or in any country or territory, that currently is the subject to any U.S. sanctions administered by OFAC or 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 U.S. sanctions administered by OFAC; (B) engaged in any transfers of goods, technologies or services (including financial services) that may assist the governments of Sanctioned Countries or facilitate money laundering or other activities proscribed by United States laws, rules or regulations; (C) is a person, entity or organization currently the subject of any Sanctions; or (D) located, organized or resident in any Sanctioned Country.

(vv) *Relationships with Underwriters.* The Company (i) does not have any material lending or other relationship with any bank or lending affiliate of any Underwriter and (ii) does not intend to use any of the proceeds from the sale of the Shares to repay any outstanding debt owed to any affiliate of any Underwriter.

Any certificate signed by or on behalf of the Company and delivered to the Representatives or to counsel for the Underwriters shall be deemed to be a representation and warranty by the Company to each Underwriter as to the matters covered thereby. The Company has a reasonable basis for making each of the representations set forth in this Section 1. The Company acknowledges that the Underwriters and, for purposes of the opinions to be delivered pursuant to Section 6 hereof, counsel to the Company and counsel to the Underwriters, will rely upon the accuracy and truthfulness of the foregoing representations and hereby consents to such reliance.

Section 2. Purchase, Sale and Delivery of the Offered Shares.

(a) *The Firm Shares.* Upon the terms herein set forth, the Company agrees to issue and sell to the several Underwriters an aggregate of 17,162,472 Firm Shares. On the basis of the representations, warranties and agreements herein contained, and upon the terms but subject to the conditions herein set forth, the Underwriters agree, severally and not jointly, to purchase from the Company the respective number of Firm Shares set forth opposite their names on <u>Schedule A</u>. The purchase price per Firm Share to be paid by the several Underwriters to the Company shall be \$8.2156 per share.

(b) *The First Closing Date.* Delivery of the Firm Shares to be purchased by the Underwriters and payment therefor shall be made at the offices of Cooley LLP (or such other place as may be agreed to by the Company and the Representatives) at 9:00 a.m., New York City time, on February 16, 2024, or such other time and date not later than 1:30 p.m., New York City time, on February 16, 2024 as the Representatives shall designate by notice to the Company (the time and date of such closing are called the "**First Closing Date**"). The Company hereby acknowledges that circumstances under which the Representatives may provide notice to postpone the First Closing Date as originally scheduled include, but are not limited to, any determination by the Company or the Representatives to recirculate to the public copies of an amended or supplemented Prospectus or a delay as contemplated by the provisions of Section 11.

(c) *The Optional Shares; Option Closing Date.* In addition, on the basis of the representations, warranties and agreements herein contained, and upon the terms but subject to the conditions herein set forth, the Company hereby grants an option to the several Underwriters to purchase, severally and not jointly, up to an aggregate of 2,574,370 Optional Shares from the Company at the purchase price per share to be paid by the Underwriters for the Firm Shares, less an amount per share equal to any dividend or distribution declared by the Company and payable on the Firm Shares but not payable on Optional Shares. The option granted hereunder may be exercised at any time and from time to time in whole or in part upon notice by the Representatives to the Company, which notice may be given at any time within 30 days from the date of this Agreement. Such notice shall set forth (i) the aggregate number of Optional Shares as to which the Underwriters are exercising the option and (ii) the time, date and place at which the Optional Shares will be delivered (which time and date may be simultaneous with, but not earlier than, the First Closing Date; and in the event that such time and date are simultaneous with the First Closing Date, the term "**First Closing Date**" shall refer to the time and date of delivery of the Firm Shares and such Optional Shares are to be purchased, each Underwriter agrees, severally and not jointly, to purchase the number of Optional Shares (subject to such adjustments to eliminate fractional shares as the Representatives may determine) that bears the same proportion to the total number of Optional Shares to be purchased as the number of Firm Shares set forth on <u>Schedule A</u> opposite the name of such Underwriter bears to the total number of Firm Shares. The Representatives may cancel the option at any time prior to its expiration by giving written notice of such cancellation to the Company.

(d) *Public Offering of the Offered Shares.* The Representatives hereby advise the Company that the Underwriters intend to offer for sale to the public, initially on the terms set forth in the Registration Statement, the Time of Sale Prospectus and the Prospectus, their respective portions of the Offered Shares as soon after this Agreement has been executed as the Representatives, in their sole judgment, have determined is advisable and practicable.

(e) Payment for the Offered Shares.

(i) Payment for the Offered Shares shall be made at the First Closing Date (and, if applicable, at each Option Closing Date) by wire transfer of immediately available funds to the order of the Company.

(ii) It is understood that the Representatives have been authorized, for their own account and the accounts of the several Underwriters, to accept delivery of and receipt for, and make payment of the purchase price for, the Firm Shares and any Optional Shares the Underwriters have agreed to purchase. Each of Leerink Partners, Citi and Guggenheim, individually and not as the Representatives of the Underwriters, may (but shall not be obligated to) make payment for any Offered Shares to be purchased by any Underwriter whose funds shall not have been received by the Representatives by the First Closing Date or the applicable Option Closing Date, as the case may be, for the account of such Underwriter, but any such payment shall not relieve such Underwriter from any of its obligations under this Agreement.

(f) *Delivery of the Offered Shares.* The Company shall deliver, or cause to be delivered through the facilities of The Depository Trust Company ("DTC"), unless the Representative shall otherwise instruct, to the Representatives for the accounts of the several Underwriters the Firm Shares at the First Closing Date, against release of a wire transfer of immediately available funds for the amount of the purchase price therefor. The Company shall also deliver, or cause to be delivered through the facilities of DTC, unless the Representative shall otherwise instruct, to the Representatives for the accounts of the several Underwriters, the Optional Shares the Underwriters have agreed to purchase at the First Closing Date or the applicable Option Closing Date, as the case may be, against the release of a wire transfer of immediately available funds for the amount of the purchase price therefor. The Offered Shares shall be registered in such names and denominations as the Representatives shall have requested at least two full business days prior to the First Closing Date (or the applicable Option Closing Date, as the case may be). Time shall be of the essence, and delivery at the time and place specified in this Agreement is a further condition to the obligations of the Underwriters.

Section 3. Additional Covenants of the Company. The Company further covenants and agrees with each Underwriter as follows:

(a) Delivery of Registration Statement, Time of Sale Prospectus and Prospectus. The Company shall furnish, upon request, to the Representatives in New York City, without charge, prior to 10:00 a.m., New York City time, on the second business day succeeding the date of this Agreement and during the period when a prospectus relating to the Offered Shares is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) in connection with sales of the Offered Shares, as many copies of the Time of Sale Prospectus, the Prospectus and any supplements and amendments thereto or to the Registration Statement as the Representatives may reasonably request.

(b) *Representatives' Review of Proposed Amendments and Supplements.* During the period when a prospectus relating to the Offered Shares is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule), the Company (i) will furnish to the Representatives for review, a reasonable period of time prior to the proposed time of filing of any proposed amendment or supplement to the Registration Statement, a copy of

each such amendment or supplement and (ii) will not amend or supplement the Registration Statement (including any amendment or supplement through incorporation of any report filed under the Exchange Act) without the Representatives' prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed. Prior to amending or supplementing any preliminary prospectus, the Time of Sale Prospectus or the Prospectus (including any amendment or supplement through incorporation of any report filed under the Exchange Act), the Company shall furnish to the Representatives for review, a reasonable amount of time prior to the time of filing or use of the proposed amendment or supplement, a copy of each such proposed amendment or supplement. The Company shall not file or use any such proposed amendment or supplement without the Representatives' prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed. The Company shall file with the Commission within the applicable period specified in Rule 424(b) under the Securities Act any prospectus required to be filed pursuant to such Rule.

(c) Free Writing Prospectuses. The Company shall furnish to the Representatives for review, a reasonable amount of time prior to the proposed time of filing or use thereof, a copy of each proposed free writing prospectus or any amendment or supplement thereto prepared by or on behalf of, used by, or referred to by the Company, and the Company shall not file, use or refer to any proposed free writing prospectus or any amendment or supplement thereto without the Representatives' prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed. The Company shall furnish to each Underwriter, without charge, as many copies of any free writing prospectus prepared by or on behalf of, used by or referred to by the Company as such Underwriter may reasonably request. If at any time when a prospectus is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) in connection with sales of the Offered Shares (but in any event if at any time through and including the First Closing Date) there occurred or occurs an event or development as a result of which any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company conflicted or would conflict with the information contained in the Registration Statement or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at such time, not misleading, the Company shall promptly amend or supplement such free writing prospectus to eliminate or correct such conflict so that the statements in such free writing prospectus as so amended or supplemented will not include 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 prevailing at such time, not misleading, as the case may be; provided, however, that prior to amending or supplementing any such free writing prospectus, the Company shall furnish to the Representatives for review, a reasonable amount of time prior to the proposed time of filing or use thereof, a copy of such proposed amended or supplemented free writing prospectus, and the Company shall not file, use or refer to any such amended or supplemented free writing prospectus without the Representatives' prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed.

(d) *Filing of Underwriter Free Writing Prospectuses.* The Company shall not take any action that would result in an Underwriter or the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of such Underwriter that such Underwriter otherwise would not have been required to file thereunder.

(e) Amendments and Supplements to Time of Sale Prospectus. If the Time of Sale Prospectus is being used to solicit offers to buy the Offered Shares at a time when the Prospectus is not yet available to prospective purchasers, and any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Time of Sale Prospectus so that the Time of Sale Prospectus does not include 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 when delivered to a prospective purchaser, not

misleading, or if any event shall occur or condition exist as a result of which the Time of Sale Prospectus conflicts with the information contained in the Registration Statement, or if, in the opinion of counsel for the Underwriters, it is necessary to amend or supplement the Time of Sale Prospectus to comply with applicable law, the Company shall (subject to Section 3(b) and Section 3(c) hereof) promptly prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, either amendments or supplements to the Time of Sale Prospectus so that the statements in the Time of Sale Prospectus as so amended or supplemented will not include 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 when delivered to a prospective purchaser, not misleading or so that the Time of Sale Prospectus, as amended or supplemented, will no longer conflict with the information contained in the Registration Statement, or so that the Time of Sale Prospectus, as amended or supplemented, will comply with applicable law.

(f) Certain Notifications and Required Actions. After the date of this Agreement, the Company shall promptly advise the Representatives in writing (which may be by electronic mail) of: (i) the receipt of any comments of, or requests for additional or supplemental information from, the Commission; (ii) the time and date of any filing of any post-effective amendment to the Registration Statement or any amendment or supplement to any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus or the Prospectus; (iii) the time and date that any post-effective amendment to the Registration Statement or any post-effective; and (iv) the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto or any amendment or supplement to any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus or the Prospectus or of any order preventing or suspending the use of any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus or the Prospectus, or of any proceedings to remove, suspend or terminate from listing or quotation the Shares from any securities exchange upon which they are listed for trading or included or designated for quotation, or of the threatening or initiation of any proceedings for any of such purposes. If the Commission shall enter any such stop order at any time, the Company will use its best efforts to obtain the lifting of such order at the earliest possible moment. Additionally, the Company agrees that it shall comply with all applicable provisions of Rule 424(b), Rule 433 and Rule 430B under the Securities Act and will use its reasonable efforts to confirm that any filings made by the Company under Rule 424(b) or Rule 433 were received in a timely manner by the Commission.

(g) Amendments and Supplements to the Prospectus and Other Securities Act Matters. If any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Prospectus so that the Prospectus does not include 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 when the Prospectus is delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) to a purchaser, not misleading, or if in the opinion of the Representatives or counsel for the Underwriters it is otherwise necessary to amend or supplement the Prospectus to comply with applicable law, the Company agrees (subject to Section 3(b) and Section 3(c) hereof) to promptly prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, amendments or supplements to the Prospectus so that the statements in the Prospectus as so amended or supplemented will not include 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 when the Prospectus is delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) to a purchaser, not misleading or so that the Prospectus, as amended or supplemented will not include 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 when the Prospectus is delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule) to a purchaser, not misleading or so that the Prospectus, as amended or supplemented, will comply with applicable law. Neither the Representatives' consent to, nor delivery of, any such amendment or supplement shall constitute a waiver of any of the Company's obligations under Section 3(b)

(h) *Blue Sky Compliance.* The Company shall cooperate with the Representatives and counsel for the Underwriters to qualify or register the Offered Shares for sale under (or obtain exemptions from the application of) the state securities or blue sky laws or Canadian provincial securities laws (or other foreign laws) of those jurisdictions reasonably designated by the Representatives, shall comply with such laws and shall continue such qualifications, registrations and exemptions in effect so long as required for the distribution of the Offered Shares. The Company shall not be required to qualify as a foreign corporation or to take any action that would subject it to general service of process in any such jurisdiction where it is not presently qualified or where it would be subject to taxation as a foreign corporation. The Company will advise the Representatives promptly of the suspension of the qualification or registration of (or any such exemption relating to) the Offered Shares 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 reasonable efforts to obtain the withdrawal thereof at the earliest possible moment.

(i) Use of Proceeds. The Company shall apply the net proceeds from the sale of the Offered Shares sold by it in the manner described under the caption "Use of Proceeds" in the Registration Statement, the Time of Sale Prospectus and the Prospectus.

(j) Transfer Agent. The Company shall engage and maintain, at its expense, a registrar and transfer agent for the Shares.

(k) *Earnings Statement*. The Company will make generally available to its security holders and to the Representatives as soon as practicable an earnings statement (which need not be audited) covering a period of at least twelve months beginning with the first fiscal quarter of the Company commencing after the date of this Agreement that will satisfy the provisions of Section 11(a) of the Securities Act and the rules and regulations of the Commission thereunder, it being understood and agreed that such earning statement shall be deemed to have been made available by the Company if the Company is in compliance with its reporting obligations pursuant to the Exchange Act, if such compliance satisfies the conditions of Rule 158, and if such earnings statement is made available on EDGAR.

(1) Continued Compliance with Securities Laws. The Company will comply with the Securities Act and the Exchange Act so as to permit the completion of the distribution of the Offered Shares as contemplated by this Agreement, the Registration Statement, the Time of Sale Prospectus and the Prospectus. Without limiting the generality of the foregoing, the Company will, during the period when a prospectus relating to the Offered Shares is required by the Securities Act to be delivered (whether physically or through compliance with Rule 172 under the Securities Act or any similar rule), file on a timely basis with the Commission and Nasdaq all reports and documents required to be filed under the Exchange Act.

(m) Listing. The Company will use its best efforts to list, subject to notice of issuance, the Offered Shares on Nasdaq.

(n) Company to Provide Copy of the Prospectus in Form That May be Downloaded from the Internet. If requested by the Representatives, the Company shall cause to be prepared and delivered, at its expense, within one business day from the effective date of this Agreement, to the Representatives an "electronic Prospectus" to be used by the Underwriters in connection with the offering and sale of the Offered Shares. As used herein, the term "electronic Prospectus" means a form of Prospectus, and any amendment or supplement thereto, that meets each of the following conditions: (i) it shall be encoded in an electronic format, satisfactory to the Representatives, that may be transmitted electronically by the Representatives and the other Underwriters to offerees and purchasers of the Offered Shares; (ii) it shall disclose the same information as the paper Prospectus, except to the extent that graphic and image material

cannot be disseminated electronically, in which case such graphic and image material shall be replaced in the electronic Prospectus with a fair and accurate narrative description or tabular representation of such material, as appropriate; and (iii) it shall be in or convertible into a paper format or an electronic format, satisfactory to Leerink Partners, that will allow investors to store and have continuously ready access to the Prospectus at any future time, without charge to investors (other than any fee charged for subscription to the Internet as a whole and for on-line time). The Company hereby confirms that it has included or will include in the Prospectus filed pursuant to EDGAR or otherwise with the Commission and in the Registration Statement at the time it was declared effective an undertaking that, upon receipt of a request by an investor or his or her representative, the Company shall transmit or cause to be transmitted promptly, without charge, a paper copy of the Prospectus.

(o) Agreement Not to Offer or Sell Additional Shares. During the period commencing on and including the date hereof and continuing through and including the 60th day following the date of the Prospectus (such period, as extended as described below, being referred to herein as the "Lock-Up Period"), the Company will not, without the prior written consent of the Representatives (which consent may be withheld in their sole discretion), directly or indirectly; (i) sell, offer to sell, contract to sell or lend any Shares or Related Securities (each as defined below), including pursuant to the Sales Agreement, dated November 10, 2022, with Guggenheim as sales agent; (ii) effect any short sale, or establish or increase any "put equivalent position" (as defined in Rule 16a-1(h) under the Exchange Act) or liquidate or decrease any "call equivalent position" (as defined in Rule 16a-1(b) under the Exchange Act) of any Shares or Related Securities; (iii) pledge any Shares or Related Securities; (iv) in any other way transfer or dispose of any Shares or Related Securities; (v) enter into any swap, hedge or similar arrangement or agreement that transfers, in whole or in part, the economic risk of ownership of any Shares or Related Securities, regardless of whether any such transaction is to be settled in securities, in cash or otherwise; (vi) announce the offering of any Shares or Related Securities; (vii) submit or file any registration statement under the Securities Act in respect of any Shares or Related Securities (other than as contemplated by this Agreement with respect to the Offered Shares); (viii) effect a reverse stock split, recapitalization, share consolidation, reclassification or similar transaction affecting the outstanding Shares; or (ix) publicly announce the intention to do any of the foregoing; provided, however, that the Company may (A) effect the transactions contemplated hereby, (B) issue shares of Common Stock upon the exercise of an option or warrant, the vesting of restricted stock units, performance stock units or deferred stock units or the conversion or exchange of a security outstanding on the date hereof as referred to in the Registration Statement, the Time of Sale Prospectus and the Prospectus, (C) pursuant to the stock-based compensation plans of the Company and the Subsidiaries as referred to in the Registration Statement, the Time of Sale Prospectus and the Prospectus, or pursuant to any qualifying inducement award under Nasdaq Listing Rule 5635(c)(4), (D) issue shares of Common Stock or other securities issued in connection with a transaction with an unaffiliated third party that includes a bona fide commercial relationship (including joint ventures, marketing or distribution arrangements, collaboration agreements or intellectual property license agreements) or any acquisition of assets of not less than a majority or controlling portion of the equity of another entity, provided that the aggregate number of shares of Common Stock that the Company may sell or issue or agree to sell or issue shall not exceed 5% of the total number of shares of Common Stock issued and outstanding immediately following the issuance and sale of the Offered Shares pursuant to this Agreement, (E) file registration statements on Form S-8 or a successor form thereto relating to the shares of Common Stock granted pursuant to or reserved for issuance under the stock-based compensation plans of the Company and the Subsidiary referred to in clause (C), and (F) assist any stockholder of the Company in the establishment of a trading plan by such stockholder pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock, provided that such plan does not provide for the transfer of shares of Common Stock during the Lock-Up Period, the establishment of such plan does not require or otherwise result in any public filings or other public announcement of such plan during such Lock-Up Period and such plan is otherwise permitted to be implemented during the Lock-Up Period pursuant to the terms of a Lock-Up Agreement between such stockholder and the Underwriters in

connection with the offering contemplated by this Agreement. "**Related Securities**" shall mean any options or warrants or other rights to acquire Shares or any securities exchangeable or exercisable for or convertible into Shares, or to acquire other securities or rights ultimately exchangeable or exercisable for, or convertible into, Shares.

(p) *Future Reports to the Representatives.* During the period of five years hereafter, the Company will furnish to the Representatives, c/o Leerink Partners LLC, at 1301 Avenue of the Americas, 12th Floor, New York, New York 10019, Attention: Stuart R. Nayman, c/o Citigroup Global Markets Inc. at 388 Greenwich Street, New York, New York 10013, Attention: General Counsel and c/o Guggenheim Securities, LLC, 330 Madison Avenue, New York, New York 10017, Attention: Head of Equity Capital Markets: (i) as soon as practicable after the end of each fiscal year, copies of the Annual Report of the Company containing the balance sheet of the Company as of the close of such fiscal year and statements of income, stockholders' equity and cash flows for the year then ended and the opinion thereon of the Company's independent public or certified public accountants; (ii) as soon as practicable after the filing thereof, copies of each proxy statement, Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other report filed by the Company with the Commission, FINRA or any securities exchange; and (iii) as soon as available, copies of any report or communication of the Company furnished or made available generally to holders of its capital stock; *provided, however*, that the requirements of this Section 3(p) shall be satisfied to the extent that such reports, statement, communications, financial statements or other documents are available on EDGAR.

(q) *Investment Limitation*. The Company shall not invest or otherwise use the proceeds received by the Company from its sale of the Offered Shares in such a manner as would require the Company or any of its subsidiaries to register as an investment company under the Investment Company Act.

(r) No Stabilization or Manipulation; Compliance with Regulation M. The Company will not take, and will ensure that no affiliate of the Company will take, directly or indirectly, any action designed to or that could reasonably be expected to cause or result in stabilization or manipulation of the price of the Shares or any reference security with respect to the Shares, whether to facilitate the sale or resale of the Offered Shares or otherwise, and the Company will, and shall cause each of its affiliates to, comply with all applicable provisions of Regulation M.

(s) Enforce Lock-Up Agreements. During the Lock-up Period, the Company will enforce all agreements between the Company and any of its securityholders that restrict or prohibit, expressly or in operation, the offer, sale or transfer of Shares or Related Securities or any of the other actions restricted or prohibited under the terms of the form of Lock-Up Agreement (each, a "Lock-Up Agreement"). In addition, the Company will direct the transfer agent to place stop transfer restrictions upon any such securities of the Company that are bound by such Lock-Up Agreements for the duration of the periods contemplated in such agreements, including, without limitation, Lock-Up Agreements entered into by the Company's executive officers and directors and certain securityholders pursuant to Section 6(1) hereof.

(t) Company to Provide Interim Financial Statements. Prior to the First Closing Date and each applicable Option Closing Date, the Company will furnish the Underwriters, as soon as they have been prepared by or are available to the Company, a copy of any unaudited interim financial statements of the Company for any period subsequent to the period covered by the most recent financial statements appearing in the Registration Statement and the Prospectus.

Section 4. Payment of Expenses. The Company agrees to pay all costs, fees and expenses incurred 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 and delivery of

the Offered Shares (including all printing and engraving costs), (ii) all fees and expenses of the registrar and transfer agent of the Shares, (iii) all necessary issue, transfer and other stamp taxes in connection with the issuance and sale of the Offered Shares to the Underwriters, (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 Time of Sale Prospectus, the Prospectus, each free writing prospectus prepared by or on behalf of, used by, or referred to by the Company, and each preliminary prospectus, and all amendments and supplements thereto, and this Agreement, (vi) all filing fees, attorneys' fees and expenses incurred by the Company or the Underwriters in connection with qualifying or registering (or obtaining exemptions from the qualification or registration of) all or any part of the Offered Shares for offer and sale under the state securities or blue sky laws or the provincial securities laws of Canada, and, if requested by the Representatives, preparing and printing a "Blue Sky Survey" or memorandum and a "Canadian wrapper", and any supplements thereto, advising the Underwriters of such qualifications, registrations and exemptions, (vii) the costs, fees and expenses incurred by the Underwriters in connection with determining their compliance with the rules and regulations of FINRA related to the Underwriters' participation in the offering and distribution of the Offered Shares, including any related filing fees and the legal fees of, and disbursements by, counsel to the Underwriters; provided, however, that such legal fees, taken together with the legal fees described in clause (vi) above, shall not exceed \$50,000 in the aggregate, (viii) the costs and expenses of the Company relating to investor presentations on any "road show", including, without limitation, expenses associated with the preparation or dissemination of any electronic road show, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations with the prior approval of the Company, travel and lodging expenses of the representatives, employees and officers of the Company and any such consultants (it being understood that the Underwriters will pay or cause to be paid the travel and lodging expenses of their representatives), and one half of the cost of any aircraft chartered in connection with the road show (the remaining half of the cost to be paid by the Underwriters), (ix) the fees and expenses associated with listing the Offered Shares on Nasdaq, and (x) all other fees, costs and expenses of the nature referred to in Item 14 of Part II of the Registration Statement; provided, that any expenses payable under clauses (vi) and (vii) above and any expenses relating to the one half of the cost of any aircraft chartered in connection with the road show described in clause (viii) above are invoiced in a reasonably timely manner. Except as provided in this Section 4 or in Section 7, Section 9 or Section 10 hereof, the Underwriters shall pay their own expenses, including the fees and disbursements of their counsel.

Section 5. Covenant of the Underwriters. Each Underwriter severally and not jointly covenants with the Company not to take any action that would result in the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of such Underwriter that otherwise would not, but for such actions, be required to be filed by the Company under Rule 433(d).

Section 6. Conditions of the Obligations of the Underwriters. The respective obligations of the several Underwriters hereunder to purchase and pay for the Offered Shares as provided herein on the First Closing Date and, with respect to the Optional Shares, each Option Closing Date, shall be subject to the accuracy of the representations and warranties on the part of the Company set forth in Section 1 hereof as of the date hereof and as of the First Closing Date as though then made and, with respect to the Optional Shares, as of each Option Closing Date as though then made, to the timely performance by the Company of its covenants and other obligations hereunder, and to each of the following additional conditions:

(a) Comfort Letter. On the date hereof, the Representatives shall have received from PricewaterhouseCoopers LLP, independent registered public accountants for the Company, a letter dated

the date hereof addressed to the Underwriters, in form and substance satisfactory to the Representatives, containing statements and information of the type ordinarily included in accountant's "comfort letters" to underwriters, delivered according to Statement of Auditing Standards No. 72 (or any successor bulletin), with respect to the audited and unaudited financial statements and certain financial information contained in the Registration Statement, the Time of Sale Prospectus, and each free writing prospectus, if any.

(b) Compliance with Registration Requirements; No Stop Order; No Objection from FINRA. For the period from and after the date of this Agreement and through and including the First Closing Date and, with respect to any Optional Shares purchased after the First Closing Date, each Option Closing Date:

(i) The Company shall have filed the Prospectus with the Commission (including the information previously omitted from the Registration Statement pursuant to Rule 430B under the Securities Act) in the manner and within the time period required by Rule 424(b) under the Securities Act; or the Company shall have filed a post-effective amendment to the Registration Statement containing the information previously omitted from the Registration Statement pursuant to such Rule 430B, and such post-effective amendment shall have become effective.

(ii) No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment to the Registration Statement shall be in effect, and no proceedings for such purpose shall have been instituted or threatened by the Commission.

(iii) If a filing has been made with FINRA, FINRA shall have raised no objection to the fairness and reasonableness of the underwriting terms and arrangements.

(c) No Material Adverse Effect or Ratings Agency Change. For the period from and after the date of this Agreement and through and including the First Closing Date and, with respect to any Optional Shares purchased after the First Closing Date, each Option Closing Date:

(i) in the judgment of the Representatives there shall not have occurred any Material Adverse Effect; and

(ii) there shall be no debt securities issued or guaranteed by the Company or any of its Subsidiaries by any "nationally recognized statistical rating organization" as that term is used in Rule $15c_3-1(c)(2)(vi)(F)$ under the Exchange Act.

(d) *Opinion of Counsel for the Company*. On each of the First Closing Date and each Option Closing Date the Representatives shall have received the opinion and negative assurance letter of Goodwin Procter LLP, counsel for the Company, dated as of such date, in form and substance reasonably satisfactory to the Representatives.

(e) *Opinion of Hyman, Phelps & McNamara, P.C.* On each of the First Closing Date and each Option Closing Date, the Representatives shall have received the opinion of Hyman, Phelps & McNamara, P.C., regulatory counsel for the Company, dated as of such date, in form and substance reasonably satisfactory to the Representatives.

(f) Opinion of McCarter & English, LLP. On each of the First Closing Date and each Option Closing Date, the Representatives shall have received the opinion of McCarter & English, LLP, intellectual property counsel for the Company, dated as of such date, in form and substance reasonably satisfactory to the Representatives.

(g) *Opinion of Counsel for the Underwriters.* On each of the First Closing Date and each Option Closing Date the Representatives shall have received the opinion and negative assurance letter of Cooley LLP, counsel for the Underwriters in connection with the offer and sale of the Offered Shares, dated as of such date, in form and substance reasonably satisfactory to the Representatives.

(h) *Officers' Certificate*. On each of the First Closing Date and each Option Closing Date, the Representatives shall have received a certificate executed by the Chief Executive Officer or President of the Company and the Chief Financial Officer of the Company, dated as of such date, to the effect set forth in Section 6(b)(ii) and further to the effect that:

(i) for the period from and including the date of this Agreement through and including such date, there has not occurred any Material Adverse Effect;

(ii) the representations, warranties and covenants of the Company set forth in Section 1 of this Agreement are true and correct with the same force and effect as though expressly made on and as of such date; and

(iii) the Company has complied with all the agreements hereunder and satisfied all the conditions on its part to be performed or satisfied hereunder at or prior to such date.

(i) *Bring-down Comfort Letter*. On each of the First Closing Date and each Option Closing Date the Representatives shall have received from PricewaterhouseCoopers LLP, independent registered public accountants for the Company, a letter dated such date, in form and substance satisfactory to the Representatives, which letter shall: (i) reaffirm the statements made in the letter furnished by them pursuant to Section 6(a), except that the specified date referred to therein for the carrying out of procedures shall be no more than three business days prior to the First Closing Date or the applicable Option Closing Date, as the case may be; and (ii) cover certain financial information contained in the Prospectus.

(j) Lock-Up Agreements. On or prior to the date hereof, the Company shall have furnished to the Representatives an agreement in the form of Exhibit B hereto from each of the persons listed on Exhibit C hereto, and each such agreement shall be in full force and effect on each of the First Closing Date and each Option Closing Date.

(k) *Rule 462(b) Registration Statement*. In the event that a Rule 462(b) Registration Statement is filed in connection with the offering contemplated by this Agreement, such Rule 462(b) Registration Statement shall have been filed with the Commission on the date of this Agreement and shall have become effective automatically upon such filing.

(1) *CFO Certificate*. On the date of this Agreement and on the First Closing Date or the applicable Option Closing Date, as the case may be, the Company shall have furnished to the Representatives a certificate, dated the respective dates of delivery thereof and addressed to the Underwriters, of its Chief Financial Officer with respect to certain financial data contained in the Time of Sale Prospectus and the Prospectus, providing "management comfort" with respect to such information, in form and substance reasonably satisfactory to the Representatives.

(m) *Approval of Listing*. On or before the First Closing Date, the Company shall have made all required submissions to Nasdaq regarding the Offered Shares and shall have not received any notice objecting to the listing of the Offered Shares from Nasdaq.

(n) Additional Documents. On or before each of the First Closing Date and each Option Closing Date, the Representatives and counsel for the Underwriters shall have received such information,

documents and opinions as they may reasonably request for the purposes of enabling them to pass upon the issuance and sale of the Offered Shares 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; and all proceedings taken by the Company in connection with the issuance and sale of the Offered Shares as contemplated herein and in connection with the other transactions contemplated by this Agreement shall be satisfactory in form and substance to the Representatives and counsel for the Underwriters.

If any condition specified in this Section 6 is not satisfied when and as required to be satisfied, this Agreement may be terminated by the Representatives by notice from Leerink Partners to the Company at any time on or prior to the First Closing Date and, with respect to the Optional Shares, at any time on or prior to the applicable Option Closing Date, which termination shall be without liability on the part of any party to any other party, except that Section 4, Section 7, Section 9 and Section 10 shall at all times be effective and shall survive such termination.

Section 7. Reimbursement of Underwriters' Expenses. If this Agreement is terminated by the Representatives pursuant to Section 6, Section 11 or Section 12, or if the sale to the Underwriters of the Offered Shares on the First Closing Date is not consummated because of any refusal, inability or failure on the part of the Company to perform any agreement herein or to comply with any provision hereof, the Company agrees to reimburse the Representatives and the other Underwriters (or such Underwriters as have terminated this Agreement with respect to themselves), severally, upon demand for all out-of-pocket expenses that shall have been reasonably incurred by the Representatives and the Underwriters in connection with the proposed purchase and the offering and sale of the Offered Shares, including, but not limited to, fees and disbursements of counsel, printing expenses, travel expenses, postage, facsimile and telephone charges. For the avoidance of doubt, it is understood that the Company will not pay or reimburse any costs, fees or expenses incurred by an Underwriter that defaults on its obligation to purchase the Offered Shares.

Section 8. Effectiveness of this Agreement. This Agreement shall become effective upon the execution and delivery hereof by the parties hereto.

Section 9. Indemnification.

(a) *Indemnification of the Underwriters.* The Company agrees to indemnify and hold harmless each Underwriter, its affiliates, directors, officers, employees and agents, and each person, if any, who controls any Underwriter within the meaning of the Securities Act or the Exchange Act against any loss, claim, damage, liability or expense, as incurred, to which such Underwriter or such affiliate, director, officer, employee, agent or controlling person may become subject, under the Securities Act, the Exchange Act, other federal or state statutory law or regulation, or the laws or regulations of foreign jurisdictions where Offered Shares have been offered or sold or at common law or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of the Company), insofar as such loss, claim, damage, liability or expense (or actions in respect thereof as contemplated below) arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, or any amendment thereto, or the omission or alleged omission to state therein a material fact included in any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus that the Company has used, referred to or filed, or is required to file, pursuant to Rule 433(d) of the Securities Act, any Marketing Material or the Prospectus (or any amendment or supplement to the foregoing), or the omission or alleged omission to state therein a material fact included in any preliminary prospectus, the therein a material fact necessary in order to make the statements, in the light of the circumstances under which they were made, not misleading; or (ii) any act or failure to act or any alleged act or failure to

act by any Underwriter in connection with, or relating in any manner to, the Shares or the offering contemplated hereby, and which is included as part of or referred to in any loss, claim, damage, liability or action arising out of or based upon any matter covered by clause (i) or (ii) above; and to reimburse each Underwriter and each such affiliate, director, officer, employee, agent and controlling person for any and all reasonable expenses (including the reasonable fees and disbursements of counsel) as such expenses are incurred by such Underwriter or such affiliate, director, officer, employee, agent or controlling person in connection with investigating, defending, settling, compromising or paying any such loss, claim, damage, liability, expense or action; *provided, however*, that the foregoing indemnity agreement shall not apply to any loss, claim, damage, liability or expense to the extent, but only to the extent, arising out of or based upon any untrue statement or alleged untrue statement or omission or alleged omission made in reliance upon and in conformity with information relating to any Underwriter furnished to the Company by the Representatives in writing expressly for use in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, any such free writing prospectus, any Marketing Material or the Prospectus (or any amendment or supplement thereto), it being understood and agreed that the only such information consists of the information described in Section 9(b) below. The indemnity agreement set forth in this Section 9(a) shall be in addition to any liabilities that the Company may otherwise have.

(b) Indemnification of the Company, its Directors and Officers. Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, each of its directors, each of its officers who signed the Registration Statement and each person, if any, who controls the Company within the meaning of the Securities Act or the Exchange Act, against any loss, claim, damage, liability or expense, as incurred, to which the Company, or any such director, officer or controlling person may become subject, under the Securities Act, the Exchange Act, or other federal or state statutory law or regulation, or at common law or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of such Underwriter), insofar as such loss, claim, damage, liability or expense (or actions in respect thereof as contemplated below) arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, or any amendment thereto, or any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading or (ii) any untrue statement or alleged untrue statement of a material fact included in any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus that the Company has used, referred to or filed, or is required to file, pursuant to Rule 433 of the Securities Act or the Prospectus (or any such amendment or supplement) or the omission or alleged omission to state therein a material fact necessary in order to make the statements, in the light of the circumstances under which they were made, not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, such preliminary prospectus, the Time of Sale Prospectus, such free writing prospectus or the Prospectus (or any such amendment or supplement), in reliance upon and in conformity with information relating to such Underwriter furnished to the Company by the Representatives in writing expressly for use therein; and to reimburse the Company, or any such director, officer or controlling person for any and all reasonable expenses (including the reasonable fees and disbursements of counsel) as such expenses are incurred by the Company, or any such director, officer or controlling person in connection with investigating, defending, settling, compromising or paying any such loss, claim, damage, liability, expense or action. The Company hereby acknowledges that the only information that the Representatives have furnished to the Company expressly for use in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, any free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) of the Securities Act or the Prospectus (or any amendment or supplement to the foregoing) are the statements set forth in (i) the sentences and figure relating to selling concession appearing in the first paragraph under the heading "Underwriting-Discounts and Commissions" and (ii) the statements concerning the Underwriters contained in the second and third paragraphs under the heading "Underwriting-Price Stabilization, Short Positions and Penalty Bids." each under the caption "Underwriting" in the Preliminary Prospectus Supplement and the Final

Prospectus Supplement. The indemnity agreement set forth in this Section 9(b) shall be in addition to any liabilities that each Underwriter may otherwise have.

(c) Notifications and Other Indemnification Procedures. Promptly after receipt by an indemnified party under this Section 9 of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against an indemnifying party under this Section 9, notify the indemnifying party in writing of the commencement thereof, but the omission to so notify the indemnifying party will not relieve the indemnifying party from any liability which it may have to any indemnified party to the extent the indemnifying party is not materially prejudiced as a proximate result of such failure and shall not in any event relieve the indemnifying party from any liability that it may have otherwise than on account of this indemnity agreement. In case any such action is brought against any indemnified party and such indemnified party seeks or intends to seek indemnity from an indemnifying party, the indemnifying party will be entitled to participate in, and, to the extent that it shall elect, jointly with all other indemnifying parties similarly notified, by written notice delivered to the indemnified party promptly after receiving the aforesaid notice from such indemnified party, to assume the defense thereof with coursel reasonably satisfactory to such indemnified party; provided, however, that if the defendants in any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded that a conflict may arise between the positions of the indemnifying party and the indemnified party in conducting the defense of any such action or that there may be legal defenses available to it and/or other indemnified parties which are different from or additional to those available to the indemnifying party, the indemnified party or parties shall have the right to select separate counsel to assume such legal defenses and to otherwise participate in the defense of such action on behalf of such indemnified party or parties. Upon receipt of notice from the indemnifying party to such indemnified party of such indemnifying party's election to so assume the defense of such action and approval by the indemnified party of counsel, the indemnifying party will not be liable to such indemnified party under this Section 9 for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof unless (i) the indemnified party shall have employed separate counsel in accordance with the proviso to the preceding sentence (it being understood, however, that the indemnifying party shall not be liable for the fees and expenses of more than one separate counsel (together with one local counsel in each relevant jurisdiction), representing the indemnified parties who are parties to such action), which counsel (together with one local counsel in each relevant jurisdiction) for the indemnified parties shall be selected by Leerink Partners (in the case of counsel for the indemnified parties referred to in Section 9(a) above) or by the Company (in the case of counsel for the indemnified parties referred to in Section 9(b) above) or (ii) the indemnifying party shall not have employed counsel satisfactory to the indemnified party to represent the indemnified party within a reasonable time after notice of commencement of the action or (iii) the indemnifying party has authorized in writing the employment of counsel for the indemnified party at the expense of the indemnifying party, in each of which cases the fees and expenses of counsel shall be at the expense of the indemnifying party and shall be paid as they are incurred.

(d) *Settlements.* The indemnifying party under this Section 9 shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party against any loss, claim, damage, liability or expense by reason of such settlement or judgment. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for the reasonable and documented fees and expenses of counsel as contemplated by Section 9(c) hereof, the indemnifying party shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than 30 days after receipt by such indemnifying party of the aforesaid request and (ii) such indemnifying party shall not have reimbursed the indemnified party in accordance with such request prior to the date of such settlement. No indemnifying party shall, without the prior written consent of the indemnified party,

effect any settlement, compromise or consent to the entry of judgment in any pending or threatened action, suit or proceeding in respect of which any indemnified party is or could have been a party and indemnity was or could have been sought hereunder by such indemnified party, unless such settlement, compromise or consent includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such action, suit or proceeding and does not include an admission of fault or culpability or a failure to act by or on behalf of such indemnified party.

Section 10. Contribution. If the indemnification provided for in Section 9 is for any reason held to be unavailable to or otherwise insufficient to hold harmless an indemnified party in respect of any losses, claims, damages, liabilities or expenses referred to therein, then each indemnifying party shall contribute to the aggregate amount paid or payable by such indemnified party, as incurred, as a result of any losses, claims, damages, liabilities or expenses referred to therein (i) in such proportion as is appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, from the offering of the Offered Shares pursuant to this Agreement or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company, on the one hand, and the Underwriters, on the other hand, in connection with the statements or omissions which resulted in such losses, claims, damages, liabilities or expenses, as well as any other relevant equitable considerations. The relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, in connection with the offering of the Offered Shares pursuant to this Agreement shall be deemed to be in the same respective proportions as the total proceeds from the offering of the Offered Shares pursuant to this Agreement (before deducting expenses) received by the Company, and the total underwriting discounts and commissions received by the Underwriters, in each case as set forth on the front cover page of the Prospectus, bear to the aggregate initial public offering price of the Offered Shares as set forth on such cover. The relative fault of the Company, on the one hand, and the Underwriters, on the other hand, shall be determined by reference to, among other things, whether any such untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company, on the one hand, or the Underwriters, on the other hand, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The amount paid or payable by a party as a result of the losses, claims, damages, liabilities and expenses referred to above shall be deemed to include, subject to the limitations set forth in Section 9(c), any legal or other fees or expenses reasonably incurred by such party in connection with investigating or defending any action or claim. The provisions set forth in Section 9(c) with respect to notice of commencement of any action shall apply if a claim for contribution is to be made under this Section 10; *provided, however*; that no additional notice shall be required with respect to any action for which notice has been given under Section 9(c) for purposes of indemnification.

The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 10 were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to in this Section 10.

Notwithstanding the provisions of this Section 10, no Underwriter shall be required to contribute any amount in excess of the underwriting discounts and commissions received by such Underwriter in connection with the Offered Shares underwritten by it and distributed to the public. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations to contribute pursuant to this Section 10 are several, and not joint, in proportion to their respective underwriting commitments as set forth opposite their respective names on <u>Schedule A</u>. For

purposes of this Section 10, each affiliate, director, officer, employee and agent of an Underwriter and each person, if any, who controls an Underwriter within the meaning of the Securities Act or the Exchange Act shall have the same rights to contribution as such Underwriter, and each director of the Company, each officer of the Company who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of the Securities Act and the Exchange Act shall have the same rights to contribution as the Company within the meaning of the Securities Act and the Exchange Act shall have the same rights to contribution as the Company.

Section 11. Default of One or More of the Several Underwriters. If, on the First Closing Date or any Option Closing Date any one or more of the several Underwriters shall fail or refuse to purchase Offered Shares that it or they have agreed to purchase hereunder on such date, and the aggregate number of Offered Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase does not exceed 10% of the aggregate number of the Offered Shares to be purchased on such date, the Representatives may make arrangements satisfactory to the Company for the purchase of such Offered Shares by other persons, including any of the Underwriters, but if no such arrangements are made by such date, the other Underwriters shall be obligated, severally and not jointly, in the proportions that the number of Firm Shares set forth opposite their respective names on Schedule A bears to the aggregate number of Firm Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as may be specified by the Representatives with the consent of the non-defaulting Underwriters, to purchase the Offered Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase on such date. If, on the First Closing Date or any Option Closing Date any one or more of the Underwriters shall fail or refuse to purchase Offered Shares and the aggregate number of Offered Shares with respect to which such default occurs exceeds 10% of the aggregate number of Offered Shares to be purchased on such date, and arrangements satisfactory to the Representatives and the Company for the purchase of such Offered Shares are not made within 48 hours after such default, this Agreement shall terminate without liability of any party to any other party except that the provisions of Section 4, Section 7, Section 9 and Section 10 shall at all times be effective and shall survive such termination. In any such case either the Representatives or the Company shall have the right to postpone the First Closing Date or the applicable Option Closing Date, as the case may be, but in no event for longer than seven days in order that the required changes, if any, to the Registration Statement and the Prospectus or any other documents or arrangements may be effected.

As used in this Agreement, the term "**Underwriter**" shall be deemed to include any person substituted for a defaulting Underwriter under this Section 11. Any action taken under this Section 11 shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

Section 12. Termination of this Agreement. Prior to the purchase of the Firm Shares by the Underwriters on the First Closing Date, this Agreement may be terminated by the Representatives by notice given to the Company if at any time: (i) trading or quotation in any of the Company's securities shall have been suspended or limited by the Commission or by Nasdaq, or trading in securities generally on either Nasdaq or the NYSE shall have been suspended or limited, or minimum or maximum prices shall have been generally established on any of such stock exchanges; (ii) a general banking moratorium shall have been declared by any of federal, New York, or Pennsylvania authorities; (iii) there shall have occurred any outbreak or escalation of national or international hostilities or any crisis or calamity, or any change in the United States or international financial markets, or any substantial change or development involving a prospective substantial change in United States' or international political, financial or economic conditions, as in the judgment of the Representatives is material and adverse and makes it impracticable to market the Offered Shares in the manner and on the terms described in the Time of Sale Prospectus or the Prospectus or to enforce contracts for the sale of securities; (iv) in the judgment of the Representatives there shall have occurred a Material Adverse Effect; or (v) the Company shall have sustained a loss by strike, fire, flood, earthquake, accident or other calamity of such character as in the

judgment of the Representatives may interfere materially with the conduct of the business and operations of the Company regardless of whether or not such loss shall have been insured. Any termination pursuant to this Section 12 shall be without liability on the part of (a) the Company to any Underwriter, except that the Company shall be obligated to reimburse the accountable and actually incurred expenses of the Representatives and the Underwriters pursuant to Section 4 or Section 7 hereof or (b) any Underwriter to the Company; *provided, however*; that the provisions of Section 9 and Section 10 shall at all times be effective and shall survive such termination.

Section 13. No Advisory or Fiduciary Relationship. The Company acknowledges and agrees that (a) the purchase and sale of the Offered Shares pursuant to this Agreement, including the determination of the public offering price of the Offered Shares and any related discounts and commissions, is an arm's-length commercial transaction between the Company, on the one hand, and the several Underwriters, on the other hand, and does not constitute a recommendation, investment advice, or solicitation of any action by the Underwriters, (b) in connection with the offering contemplated hereby and the process leading to such transaction, each Underwriter is and has been acting solely as a principal and is not the agent or fiduciary of the Company, or its stockholders, creditors, employees or any other party, (c) no Underwriter has assumed or will assume an advisory or fiduciary responsibility in favor of the Company with respect to the offering contemplated hereby or the process leading thereto (irrespective of whether such Underwriter has advised or is currently advising the Company on other matters) and no Underwriter has any obligation to the Company with respect to the offering contemplated hereby and the Underwriters and their respective affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Company (e) the Underwriters have not provided any legal, accounting, regulatory or tax advice with respect to the offering contemplated hereby and the Company has consulted its own legal, accounting, regulatory and tax advisors to the extent it deemed appropriate , and (f) none of the activities of the Underwriters in connection with the transactions contemplated herein constitutes a recommendation, investment advice or solicitation of any action by the Underwriters with respect to any entity or natural person.

Section 14. Representations and Indemnities to Survive Delivery. The respective indemnities, agreements, representations, warranties and other statements of the Company, of its officers and of the several Underwriters 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 any Underwriter or the Company or any of its or their partners, officers or directors or any controlling person, as the case may be, and, anything herein to the contrary notwithstanding, will survive delivery of and payment for the Offered Shares sold hereunder and any termination of this Agreement.

Section 15. Notices. All communications hereunder shall be in writing and shall be mailed, hand delivered or telecopied and confirmed to the parties hereto as follows:

If to the Representatives: Leerink Partners LLC 1301 Avenue of the Americas, 12th Floor New York, New York 10019 Attention: Stuart R. Nayman

> Citigroup Global Markets Inc. 388 Greenwich Street New York, New York 10013 Attention: General Counsel

	Guggenheim Securities, LLC 330 Madison Avenue New York, New York 10017 Attention: Head of Equity Capital Markets
with a copy to:	Cooley LLP 55 Hudson Yards New York, New York 10001 Attention: Eric Blanchard, Jean Park
If to the Company:	Larimar Therapeutics, Inc. Three Bala Plaza East, Suite 506 Bala Cynwyd, Pennsylvania Attention: Chief Executive Officer
with a copy to:	Goodwin Procter LLP 2005 Market St, 32nd floor Philadelphia, Pennsylvania 19103 Attention: Jennifer Porter

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

Section 16. Successors. This Agreement will inure to the benefit of and be binding upon the parties hereto, including any substitute Underwriters pursuant to Section 11 hereof, and to the benefit of the affiliates, directors, officers, employees, agents and controlling persons referred to in Section 9 and Section 10, and in each case their respective successors, and personal representatives, and no other person will have any right or obligation hereunder. The term "successors" shall not include any purchaser of the Offered Shares as such from any of the Underwriters merely by reason of such purchase.

Section 17. 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 18. Recognition of the U.S. Special Resolution Regimes.

(a) In the event that any Underwriter that is a Covered Entity (as defined below) becomes subject to a proceeding under a U.S. Special Resolution Regime (as defined below), the transfer from such Underwriter of this Agreement, and any interest and obligation in or under this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.

(b) In the event that any Underwriter that is a Covered Entity or a BHC Act Affiliate of such Underwriter becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Underwriter are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States.

For purposes of this Agreement, (A) "**BHC Act Affiliate**" has the meaning assigned to the term "affiliate" in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k); (B) "**Covered Entity**" means any of the following: (i) a "covered entity" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b); (ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b); (ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or (iii) a "covered FSI" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b); (C) "**Default Right**" has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. § 252.81, 47.2 or 382.1, as applicable; and (D) "U.S. Special Resolution Regime" means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

Section 19. Governing Law Provisions. This Agreement shall be governed by and construed in accordance with the internal laws of the State of New York applicable to agreements made and to be performed in such state. Any legal suit, action or proceeding arising out of or based upon this Agreement or the transactions contemplated hereby may be instituted in the federal courts of the United States of America located in the Borough of Manhattan in the City of New York or the courts of the State of New York in each case located in the Borough of Manhattan in the City of New York collectively, the "Specified Courts"), and each party irrevocably submits to the exclusive jurisdiction (except for proceedings instituted in regard to the enforcement of a judgment of any such court, as to which such jurisdiction is non-exclusive) of such courts in any such suit, action or proceeding. Service of any process, summons, notice or document by mail to such party's address set forth above shall be effective service of process for any suit, action or other proceeding in the Specified Courts and irrevocably and unconditionally waive and agree not to plead or claim in any such court that any such suit, action or other proceeding brought in any such court has been brought in an inconvenient forum.

Section 20. General Provisions. 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. 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. The section headings herein are for the convenience of the parties only and shall not affect the construction or interpretation of this Agreement.

Each of the parties hereto acknowledges that it is a sophisticated business person who was adequately represented by counsel during negotiations regarding the provisions hereof, including, without limitation, the indemnification provisions of Section 9 and the contribution provisions of Section 10, and is fully informed regarding said provisions. Each of the parties hereto further acknowledges that the provisions of Section 9 and Section 10 hereof fairly allocate the risks in light of the ability of the parties to investigate the Company, its affairs and its business in order to assure that adequate disclosure has been made in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, each free writing prospectus and the Prospectus (and any amendments and supplements to the foregoing), as contemplated by the Securities Act and the Exchange Act.

[remainder of page intentionally left blank]

If the foregoing is in accordance with your understanding of our agreement, kindly sign and return to the Company the enclosed copies hereof, whereupon this instrument, along with all counterparts hereof, shall become a binding agreement in accordance with its terms.

Very truly yours,

LARIMAR THERAPEUTICS, INC.

By: /s/ Michael Celano

Name: Michael Celano Title: Chief Financial Officer

[Signature Page to Underwriting Agreement]

The foregoing Underwriting Agreement is hereby confirmed and accepted by the Representatives in New York, New York as of the date first above written.

LEERINK PARTNERS LLC CITIGROUP GLOBAL MARKETS INC. GUGGENHEIM SECURITIES, LLC

Acting individually and as Representatives of the several Underwriters named in the attached <u>Schedule A</u>.

LEERINK PARTNERS LLC

By:/s/ Jon CivitareseName:Jon CivitareseTitle:Senior Managing Director

CITIGROUP GLOBAL MARKETS INC.

By: /s/ Max Riso Name: Max Riso Title: Director

GUGGENHEIM SECURITIES, LLC

By: /s/ Jordan Bliss

Name: Jordan Bliss

Title: Senior Managing Director

[Signature Page to Underwriting Agreement]

Schedule A

<u>Underwriters</u>	Number of Firm Shares to be Purchased
Leerink Partners LLC	6,521,739
Citigroup Global Markets Inc.	4,462,243
Guggenheim Securities, LLC	4,462,243
LifeSci Capital LLC	1,716,247
Total	17,162,472

Free Writing Prospectuses Included in the Time of Sale Prospectus

[None.]

<u>Subsidiaries</u>

Zafgen Australia Pty Limited

Form of Lock-Up Agreement

Leerink Partners LLC Citigroup Global Markets Inc. Guggenheim Securities, LLC

As Representatives of the several Underwriters

- c/o Leerink Partners LLC
 53 State Street, 40th Floor
 Boston, Massachusetts 02109
- c/o Citigroup Global Markets Inc.
 388 Greenwich Street
 New York, New York 10013
- c/o Guggenheim Securities, LLC 330 Madison Avenue New York, New York 10017

Re: Larimar Therapeutics, Inc. - Lock-Up Agreement

Ladies and Gentlemen:

This letter agreement (this "Agreement") relates to the proposed offering (the "Offering") by Larimar Therapeutics, Inc., a Delaware corporation (the "Company"), of its common stock, \$0.001 par value (the "Stock") and/or other equity securities of the Company, pursuant to an Underwriting Agreement (the "Underwriting Agreement") to be entered into by and among the Company and Leerink Partners LLC, Citigroup Global Markets Inc. and Guggenheim Securities, LLC, as representatives (the "Representatives") of the several underwriters named therein (the "Underwriters").

In order to induce you and the other Underwriters to underwrite the Offering, the undersigned hereby agrees that, without the prior written consent of the Representatives, during the period from the date hereof until 90 days from the date of the final prospectus supplement for the Offering (the "**Lock-Up Period**"), the undersigned will not (a) directly or indirectly, offer, sell, agree to offer or sell, solicit offers to purchase, effect any short sale, grant any call option or purchase any put option with respect to, pledge, borrow or otherwise dispose of, any Relevant Security (as defined below), (b) establish or increase any "put equivalent position" or liquidate or decrease any "call equivalent position" with respect to any Relevant Security (in each case within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), and the rules and regulations promulgated thereunder), (c) otherwise enter into any swap, hedge, derivative or other transaction or arrangement that transfers to another, in whole or in part, any economic consequence of ownership of a Relevant Security, whether or not such transaction is to be settled by delivery of Relevant Securities, other securities, cash or other consideration, or (d) publicly announce any intention to do any of the foregoing. As used herein "**Relevant Security**" means the Stock, any other equity security of the Company or any of its subsidiaries and any security convertible into, or exercisable or exchangeable for, any Stock or other such equity security.

The foregoing restrictions in this Agreement shall not apply to:

- (a) the transfer of Relevant Securities (i) as a bona fide gift or gifts, (ii) by will, other testamentary document or intestate succession, (iii) to a Family Member (as defined below), (iv) to a trust for the direct or indirect benefit of the undersigned and/or one or more Family Members, (v) by operation of law, including pursuant to a domestic order, divorce settlement, divorce decree, separation agreement or pursuant to an order of a court of competent jurisdiction enforcing such agreement, (vi) to a charitable trust or (vii) to a corporation, limited liability company or partnership wholly owned by the undersigned and/or one or more Family Members, (viii) to the undersigned's direct or indirect affiliates or to any investment fund or other entity controlled or managed by, controlling or managing, or under common control with, the undersigned (including, for the avoidance of doubt, where the undersigned is a partnership, to its general partner or a successor partnership or fund or any other funds managed by such partnership), or (ix) if the undersigned is a trust, to the beneficiary of such trust;
- (b) the transfer of Relevant Securities to the Company (i) as forfeitures to satisfy tax withholding obligations of the undersigned existing as of the date of the final prospectus supplement in connection with the vesting or exercise of equity awards, (ii) pursuant to a net exercise or cashless exercise (to satisfy exercise price or related withholding obligations) by the undersigned of outstanding equity awards existing as of the date of the final prospectus supplement, *provided* that any shares of Stock acquired upon the net exercise or cashless exercise of equity awards described in this clause (b) shall be subject to the restrictions set forth in this Agreement, or (iii) by an executive officer upon death, disability or termination of employment, in each case, of such executive officer;
- (c) distributions of Relevant Securities to limited partners, members or stockholders of the undersigned;
- (d) transactions relating to Relevant Securities acquired in the Offering or in open market transactions after the closing of the Offering; and
- (e) the transfer of Relevant Securities pursuant to a bona fide third-party tender offer for all outstanding shares of the Company, merger, consolidation or other similar transaction made to all holders of the Company's securities involving a change of control of the Company (including, without limitation, the entering into of any lock-up, voting or similar agreement pursuant to which the undersigned may agree to transfer, sell, tender or otherwise dispose of Relevant Securities in connection with such transaction, or vote any Relevant Securities in favor of any transaction), *provided* that in the event that such tender offer, merger, consolidation or other such transaction is not completed, such securities held by the undersigned shall remain subject to the provisions of this Agreement.

It shall be a further condition to any transfer or distribution pursuant to the preceding clauses (a), (b), (c), or (d) that no public disclosure or filing by any party (donor, donee, transferor or transferee) under the Exchange Act, or other public announcement shall be required or shall be made voluntarily in connection with such transfer or distribution (other than a filing on Form 5 made after the expiration of the Lock-up Period); *provided*, *however*, that in the case of any transfer or distribution pursuant to clauses (a), (b) or (c), to the extent the undersigned is required to file a report under Section 16 of the Exchange Act, the undersigned shall be permitted to file such report, *provided* the report clearly indicates in the footnotes thereto the nature of the transfer and no other public announcement shall be required or shall be made voluntarily in connection with such transfer.

It shall be a condition to any transfer or distribution pursuant to the preceding clauses (a) or (c) that (x) any such transfer shall not involve a disposition for value and (y) each resulting transferee or donee of Relevant Securities executes and delivers to you an agreement satisfactory to you in which such transferee agrees to be bound by the terms of this Agreement for the remainder of the Lock-Up Period.

For purposes of this Agreement, the term "Family Member" shall mean any relationship by blood, domestic partnership, marriage or adoption not more remote than first cousin.

In addition, the restrictions described in this Agreement shall not apply to the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act, *provided* that no transfers occur under such plan during the Lock-up Period and no public announcement or filing shall be required or voluntarily made by any person in connection therewith other than general disclosure in Company periodic reports to the effect that the Company directors and officers may enter into such trading plans from time to time.

The undersigned hereby authorizes the Company during the Lock-Up Period to cause any transfer agent for the Relevant Securities to decline to transfer, and to note stop transfer restrictions on the stock register and other records relating to, Relevant Securities for which the undersigned is the record holder and, in the case of Relevant Securities for which the undersigned is the beneficial but not the record holder, agrees during the Lock-Up Period to cause the record holder to cause the relevant transfer agent to decline to transfer, and to note stop transfer restrictions on the stock register and other records relating to, such Relevant Securities. The undersigned hereby further agrees that, without the prior written consent of the Representatives, during the Lock-Up Period the undersigned will not (x) file or participate in the filing with the U.S. Securities and Exchange Commission (the "SEC") of any registration statement, or circulate or participate in the circulation of any preliminary or final prospectus supplement or other disclosure document with respect to any proposed offering or sale of a Relevant Security, or (z) publicly announce any intention to do any of the foregoing.

It is understood that, if (i) the Company notifies the Underwriters that it does not intend to proceed with the Offering, (ii) the Underwriting Agreement does not become effective, (iii) the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Stock, or (iv) the closing of the Offering pursuant to the Underwriting Agreement has not occurred by February 29, 2024, the undersigned will be released from its obligations under this Agreement.

The understands that the Company and the Underwriters will proceed with the Offering in reliance on this Agreement.

Whether or not the Offering actually occurs depends on a number of factors, including market conditions. Any Offering will only be made pursuant to the Underwriting Agreement, the terms of which are subject to negotiation between the Company and the Underwriters.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Agreement and that this Agreement constitutes the legal, valid and binding obligation of the undersigned, enforceable in accordance with its terms. Upon request, the undersigned will execute any additional documents necessary in connection with enforcement hereof. Any obligations of the undersigned shall be binding upon the successors, heirs, personal representatives and assigns of the undersigned from the date first above written.

This Agreement shall be governed by and construed in accordance with the laws of the State of New York. This letter agreement may be delivered via facsimile, electronic mail (including pdf or any

electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com or www.echosign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

[remainder of page left intentionally blank]

Very truly yours,

Name of Security Holder (Print exact name)

By:

Signature

If not signing in an individual capacity:

Name of Authorized Signatory (Print)

Title of Authorized Signatory (Print)

(indicate capacity of person signing if signing as custodian, trustee, or on behalf of an entity)

Directors, Executive Officers and Others Signing Lock-Up Agreement

Directors:

- Carole S. Ben-Maimon, M.D.
- Thomas Hamilton
- Jonathan Leff
- Frank Thomas
- Joseph Truitt
- Jeffrey W. Sherman, M.D.

Executive Officers:

- Michael Celano
- Gopi Shankar, Ph.D., MBA, FAAPS
- Russell Clayton, DO

Others:

• Entities affiliated with Deerfield Management



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goodwinlaw.com +1 445 207 7800

February 16, 2024

Larimar Therapeutics, Inc.

Three Bala Plaza East, Suite 506 Bala Cynwyd, PA 19004

Re: Securities Registered under Registration Statement on Form S-3

We have acted as counsel to you in connection with the registration of the offer by Larimar Therapeutics, Inc., a Delaware corporation (the "Company"), of 19,736,842 shares (the "Shares") of Common Stock, \$0.001 par value per share (the "Common Stock"), of the Company, pursuant to the Registration Statement on Form S-3 (File No. 333-268312) filed by the Company with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), on November 10, 2022 and declared effective by the Commission on November 21, 2022 (the "Registration Statement"). Reference is made to the opinion letter from Troutman Pepper Hamilton Sanders LLP dated November 10, 2022 and included as Exhibit 5.1 to the Registration Statement. We are delivering this supplemental opinion letter in connection with the prospectus supplement (the "Prospectus Supplement") filed on February 14, 2024 by the Company with the Commission pursuant to Rule 424 under the Securities Act. The Prospectus Supplement relates to the offering by the Company of up to 19,736,842 Shares covered by the Registration Statement. The Shares include an over-allotment option granted to the underwriters of the offering to purchase 2,574,370 Shares. The Shares are being sold to the several underwriters named in, and pursuant to, an underwriting agreement among the Company and such underwriters (the "Underwriting Agreement").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinion set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinion set forth below, on certificates of officers of the Company.

The opinion set forth below is limited to the Delaware General Corporation Law.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, when delivered and paid for in accordance with the terms of the Underwriting Agreement, will be validly issued, fully paid and non-assessable.

Larimar Therapeutics, Inc. February 16, 2024 Page 2

This opinion letter and the opinion it contains shall be interpreted in accordance with the Core Opinion Principles as published in 74 *Business Lawyer* 815 (Summer 2019).

This opinion is being furnished to you for submission to the Commission as an exhibit to the Company's Current Report on Form 8-K (the "Current Report") relating to the Shares, which is incorporated by reference in the Registration Statement. We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Current Report and to the references to our firm under the caption "Legal Matters" in the Prospectus Supplement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ Goodwin Procter LLP

GOODWIN PROCTER LLP