

**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): April 1, 2024**

**Gritstone bio, Inc.**

(Exact name of Registrant as Specified in Its Charter)

**Delaware**  
(State or Other Jurisdiction  
of Incorporation)

**001-38663**  
(Commission  
File Number)

**47-4859534**  
(IRS Employer  
Identification No.)

**5959 Horton Street, Suite 300**  
**Emeryville, California**  
(Address of Principal Executive Offices)

**94608**  
(Zip Code)

**Registrant's Telephone Number, Including Area Code: 510 871-6100**

(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:

- 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:**

| Title of each class                        | Trading<br>Symbol(s) | Name of each exchange<br>on which registered |
|--|----------------------|--|
| Common Stock, \$0.0001 par value per share | GRTS                 | The Nasdaq Stock Market LLC                  |

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

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

**Item 1.01. Entry into a Material Definitive Agreement.**

On April 1, 2024, Gritstone bio, Inc. (the “Company”) entered into an underwriting agreement (the “Underwriting Agreement”) with TD Securities (USA) LLC and Evercore Group L.L.C., as representatives of the several underwriters named therein (the “Underwriters”), pursuant to which the Company agreed to issue and sell (i) 8,333,333 shares of common stock (“Shares”) and accompanying common warrants (the “Accompanying Warrants”) to purchase up to 8,333,333 shares of common stock at a per share exercise price of \$1.65 (the “Accompanying Warrant Shares”) (provided, however, that the purchaser may elect to exercise the Accompanying Warrants for pre-funded warrants (the “Accompanying Pre-Funded Warrants”) to purchase shares of common stock (the “Accompanying Pre-Funded Warrant Shares”) in lieu of shares of common stock at an exercise price of \$1.65 minus \$0.0001, the exercise price of each Accompanying Pre-Funded Warrant), at a combined purchase price of \$1.50 per Share and Accompanying Warrant, and (ii) to a certain investor in lieu of common stock, pre-funded warrants to purchase up to 13,334,222 shares of common stock at a per share exercise price of \$0.0001 (the “Initial Pre-Funded Warrants” and together with the Accompanying Warrants and Accompanying Pre-Funded Warrants, the “Warrants” and collectively with the Shares, Accompanying Warrant Shares and Accompanying Pre-Funded Warrant Shares, the “Securities”) and Accompanying Warrants to purchase up to 13,334,222 Accompanying Shares or up to 13,334,222 Accompanying Pre-Funded Warrants, at a combined purchase price of \$1.4999 per Initial Pre-Funded Warrant and Accompanying Warrant, which represents the per share combined purchase price for the Shares and Accompanying Warrants less the \$0.0001 per share exercise price for each such Initial Pre-Funded Warrant.

The Accompanying Warrants are immediately exercisable and will expire on the twelve-month anniversary of the date of issuance. The Initial Pre-Funded Warrants and Accompanying Pre-Funded Warrants are exercisable at any time after the date of issuance and each expire on the date such warrant is exercised in full. A holder of Initial Pre-Funded Warrants or Accompanying Pre-Funded Warrants may not exercise the warrant if the holder, together with its affiliates, would beneficially own more than 9.99% of the number of shares of Common Stock outstanding immediately after giving effect to such exercise. A holder of the Accompanying Warrants may not exercise the warrant if the holder, together with its affiliates, would beneficially own more than 4.99% of the number of shares of Common Stock outstanding immediately after giving effect to such exercise. A holder of Warrants may increase or decrease these percentages by providing at least 61 days’ prior notice to the Company.

The Underwriting Agreement contains customary representations and warranties, conditions to closing, market standoff provisions, termination provisions and indemnification obligations, including for liabilities under the Securities Act of 1933, as amended. The Offering is being made pursuant to the registration statement on Form S-3 (File No. 333-263455) (the “Registration Statement”) that was filed by the Company with the Securities and Exchange Commission (the “SEC”) on March 10, 2022 and declared effective on May 6, 2022, and a related prospectus supplement.

The Company estimates that the gross proceeds from the Offering will be approximately \$32.5 million, before deducting underwriting discounts and commissions and estimated Offering expenses. The Company expects the Offering to close on April 4, 2024, subject to customary closing conditions.

The Underwriting Agreement is filed as Exhibit 1.1 to this Current Report on Form 8-K, and the foregoing description of the terms of the Underwriting Agreement is qualified in its entirety by reference to such exhibit. The forms of Accompanying Warrant and Initial Pre-Funded Warrant are filed as Exhibits 4.1 and 4.2, respectively, to this Current Report on Form 8-K, and the foregoing description of the terms of the Warrants is qualified in its entirety by reference to such exhibits. A copy of the opinion of Fenwick & West LLP, relating to the validity of the Securities in connection with the Offering, is filed as Exhibit 5.1 to this Current Report on Form 8-K and is incorporated by reference into the Registration Statement.

**Item 9.01. Financial Statements and Exhibits.**

(d) Exhibits.

| <u>Exhibit No.</u> | <u>Description</u>  |
|--------------------|---|
| 1.1                | <a href="#">Underwriting Agreement, dated April 1, 2024.</a>                  |
| 4.1                | <a href="#">Form of Common Stock Warrant.</a>                                 |
| 4.2                | <a href="#">Form of Pre-Funded Warrant.</a>                                   |
| 5.1                | <a href="#">Opinion of Fenwick &amp; West LLP.</a>                            |
| 23.1               | <a href="#">Consent of Fenwick &amp; West LLP (contained in Exhibit 5.1).</a> |
| 104                | Cover Page Interactive Data File (embedded within the Inline XBRL document).  |

**Forward-Looking Statements**

This Current Report on Form 8-K contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and other federal securities laws. Any statements contained herein that do not describe historical facts, including, but not limited to, statements regarding the expected gross proceeds of the Offering and the timing of the closing of the Offering, are forward-looking statements that involve risks and uncertainties that could cause actual results to differ materially from those discussed in such forward-looking statements. Such risks and uncertainties include, among others, the risks identified in the Company's filings with the SEC, including its Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on March 5, 2024, the prospectus supplement related to the Offering, and subsequent filings with the SEC. Any of these risks and uncertainties could materially and adversely affect the Company's results of operations, which would, in turn, have a significant and adverse impact on the Company's stock price. The Company cautions you not to place undue reliance on any forward-looking statements, which speak only as of the date they are made. The Company undertakes no obligation to update publicly any forward-looking statements to reflect new information, events or circumstances after the date they were made or to reflect the occurrence of unanticipated events.

**SIGNATURES**

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

**Gritstone bio, Inc.**

Date: April 2, 2024

By: /s/ Andrew Allen  
Andrew Allen  
President and Chief Executive Officer

**Gritstone bio, Inc.**  
**8,333,333 Shares of Common Stock, par value \$0.0001 per share**  
**Pre-Funded Warrants to Purchase 13,334,222 Shares of Common Stock**  
**Common Warrants to Purchase 21,667,555 Shares of Common Stock (or Pre-Funded Warrants in Lieu Thereof)**

---

**Underwriting Agreement**

April 1, 2024

TD Securities (USA) LLC  
Evercore Group L.L.C.

As representatives (the “Representatives”) of the several Underwriters named in Schedule I hereto

c/o TD Securities (USA) LLC  
1 Vanderbilt Avenue  
New York, New York 10017

c/o Evercore Group L.L.C.  
55 East 52nd Street  
New York, New York 10055

Ladies and Gentlemen:

Gritstone bio, Inc., a Delaware corporation (the “Company”), proposes, subject to the terms and conditions stated in this agreement (this “Agreement”), to issue and sell to the several Underwriters named in Schedule I hereto (the “Underwriters”) for whom you are acting as representatives (the “Representatives”) (i) an aggregate of 8,333,333 shares (the “Shares”) of the Company’s common stock, \$0.0001 par value per share (the “Common Stock”), (ii) pre-funded warrants to purchase 13,334,222 shares of Common Stock at an exercise price equal to \$0.0001 per share (the “Pre-Funded Warrants”) and (iii) common warrants to purchase 21,667,555 shares of Common Stock (or pre-funded warrants in lieu thereof) (the “Common Warrants”, together with the Pre-Funded Warrants, the “Offered Warrants”). The Shares and the Offered Warrants are collectively referred to as the “Offered Securities”. As used herein, “Warrant Shares” means the shares of Common Stock issuable upon exercise of the Offered Warrants. In the event that the Company has no subsidiaries, or only one subsidiary, then all references herein to “subsidiaries” of the Company shall be deemed to refer to no subsidiary, or such single subsidiary, *mutatis mutandis*.

Each Share is being sold together with a Common Warrant to purchase one share of Common Stock (or pre-funded warrant in lieu thereof). Each Pre-Funded Warrant is being sold together with a Common Warrant to purchase one share of Common Stock (or pre-funded warrant in lieu thereof).

1. The Company represents and warrants to, and agrees with, each of the Underwriters the following.

(a) The Company meets the requirements for use of Form S-3 under the Securities Act specified in Financial Industry Regulatory Authority, Inc. (“FINRA”) Conduct Rule 5110(B)(7)(C)(i). The documents incorporated or deemed to be incorporated by reference in the Registration Statement, the Pricing Prospectus and the Prospectus (each as defined below), at the time they were or hereafter are filed with the Securities and Exchange Commission (the “Commission”), or became effective under the Exchange Act of 1934, as amended (the “Exchange Act”), as the case may be, complied and will comply in all material respects with the requirements of the Exchange Act.

(b) A registration statement on Form S-3 (File No. 333-263455) (the “Initial Registration Statement”) in respect of the Offered Securities has been filed with the Commission; the Initial Registration Statement and any post-effective amendment thereto, each in the form heretofore delivered to you, have been declared effective by the Commission in such form; other than a registration statement, if any, increasing the size of the offering (a “Rule 462(b) Registration Statement”), filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended (the “Act”), which became effective upon filing, no other document with respect to the Initial Registration Statement or document incorporated by reference therein has been filed, or transmitted for filing, with the Commission (other than prospectuses filed pursuant to Rule 424(b) of the rules and regulations of the Commission under the Act, each in the form heretofore delivered to the Representatives); and no stop order suspending the effectiveness of the Initial Registration Statement, any post-effective amendment thereto or any part thereof or the Rule 462(b) Registration Statement, if any, has been issued and no proceeding for that purpose or pursuant to Section 8A of the Act has been initiated or, to the Company’s knowledge, threatened by the Commission (the base prospectus filed as part of the Initial Registration Statement, in the form in which it has most recently been filed with the Commission on or prior to the date of this Agreement relating to the Offered Securities, is hereinafter called the “Basic Prospectus”; any preliminary prospectus (including any preliminary prospectus supplement) relating to the Offered Securities filed with the Commission pursuant to Rule 424(b) under the Act is hereinafter called a “Preliminary Prospectus”; the various parts of the Initial Registration Statement and the Rule 462(b) Registration Statement, if any, including all exhibits thereto and including any prospectus supplement relating to the Offered Securities that is filed with the Commission and deemed by virtue of Rule 430B under the Act to be part of the Initial Registration Statement, each as amended at the time such part of the Initial Registration Statement became effective or such part of the Rule 462(b) Registration Statement, if any, became or hereafter becomes effective, are hereinafter collectively called the “Registration Statement”; the Basic Prospectus, as amended and supplemented immediately prior to the Applicable Time (as defined in Section 1(c) hereof), is hereinafter called the “Pricing Prospectus”; the form of the final

prospectus relating to the Offered Securities filed with the Commission pursuant to Rule 424(b) under the Act in accordance with Section 5(a) hereof is hereinafter called the “Prospectus”; any reference herein to the Basic Prospectus, the Pricing Prospectus, any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include the documents incorporated by reference therein pursuant to Item 12 of Form S-3 under the Act, as of the date of such prospectus; any reference to any amendment or supplement to the Basic Prospectus, any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include any post-effective amendment to the Registration Statement, any prospectus supplement relating to the Offered Securities filed with the Commission pursuant to Rule 424(b) under the Act and any documents filed under the Securities Exchange Act, and incorporated therein, in each case after the date of the Basic Prospectus, such Preliminary Prospectus or the Prospectus, as the case may be; any reference to any amendment to the Registration Statement shall be deemed to refer to and include any annual report of the Company filed pursuant to Section 13(a) or 15(d) of the Exchange Act after the effective date of the Registration Statement that is incorporated by reference in the Registration Statement; any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Act or Rule 163B under the Act is hereinafter called a “Testing-the-Waters Communication”; and any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Act is hereinafter called a “Written Testing-the-Waters Communication”; and any “issuer free writing prospectus” as defined in Rule 433 under the Act relating to the Offered Securities is hereinafter called an “Issuer Free Writing Prospectus”).

(c) (A) No order preventing or suspending the use of any Preliminary Prospectus or any Issuer Free Writing Prospectus has been issued by the Commission, and (B) any Preliminary Prospectus, at the time of filing thereof, conformed in all material respects to the requirements of the Act and the rules and regulations of the Commission thereunder, and did not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided, however,* that this representation and warranty shall not apply to any statements or omissions made in reliance upon and in conformity with the Underwriter Information (as defined in Section 9(b) of this Agreement).

(d) For the purposes of this Agreement, the “Applicable Time” is 9:30 p.m. (Eastern time) on the date of this Agreement. The Pricing Prospectus, as supplemented by the information listed on Schedule II(c) hereto, taken together (collectively, the “Pricing Disclosure Package”), as of the Applicable Time, did not, and as of the Time of Delivery (as defined in Section 4(a) of this Agreement) will not, include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; and each Issuer Free Writing Prospectus and each Written Testing-the-Waters Communication does not conflict with the information contained in the Registration Statement, the Pricing Prospectus or the Prospectus and each Issuer Free Writing Prospectus and each Written Testing-the-Waters Communication, as supplemented by and taken together with the Pricing Disclosure Package, as of the Applicable Time, did

not, and as of the Time of Delivery will not, include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that this representation and warranty shall not apply to statements or omissions made in an Issuer Free Writing Prospectus in reliance upon and in conformity with the Underwriter Information.

(e) The documents incorporated by reference in the Pricing Prospectus and the Prospectus, when they became effective or were filed with the Commission, as the case may be, conformed in all material respects to the requirements of the Act or the Exchange Act, as applicable, and the rules and regulations of the Commission thereunder, and none of such documents contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading; and any further documents so filed and incorporated by reference in the Pricing Prospectus and the Prospectus or any further amendment or supplement thereto, when such documents become effective or are filed with the Commission, as the case may be, will conform in all material respects to the requirements of the Act or the Exchange Act, as applicable, and the rules and regulations of the Commission thereunder and will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; provided, however, that this representation and warranty shall not apply to any statements or omissions made in reliance upon and in conformity with the Underwriter Information and no such or any other documents were filed with the Commission since the Commission's close of business on the business day immediately prior to the date of this Agreement and prior to the execution of this Agreement, except as set forth on Schedule II(b) hereto.

(f) The Registration Statement conforms, and the Prospectus and any further amendments or supplements to the Registration Statement and the Prospectus will conform, in all material respects to the requirements of the Act and the rules and regulations of the Commission thereunder and do not and will not, as of the applicable effective date as to each part of the Registration Statement, as of the applicable filing date as to the Prospectus and any amendment or supplement thereto, and as of the Time of Delivery, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; provided, however, that this representation and warranty shall not apply to any statements or omissions made in reliance upon and in conformity with the Underwriter Information.

(g) Neither the Company nor any of its subsidiaries has, since the date of the latest audited financial statements included or incorporated by reference in the Pricing Prospectus and the Prospectus, (i) sustained any material 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 or (ii) entered into any transaction or agreement (whether or not in the ordinary course of business) that is material to the Company and its subsidiaries taken as a whole or incurred any liability or obligation, direct or contingent, that is material to the Company and its subsidiaries taken as a whole, other than as set forth or contemplated in the Pricing



Prospectus and the Prospectus; and, since the respective dates as of which information is given in the Registration Statement and the Pricing Prospectus and the Prospectus, there has not been (x) any change in the long-term debt or capital stock of the Company or any of its subsidiaries (other than as a result of (i) the exercise, if any, of stock options or the award, if any, of stock options, restricted stock or other awards in the ordinary course of business pursuant to the Company's equity plans that are described in the Pricing Prospectus and the Prospectus or (ii) the issuance, if any, of shares of Common Stock upon conversion of Company securities as described in the Pricing Prospectus and the Prospectus), or (y) any Material Adverse Effect (as defined below); as used in this Agreement, "Material Adverse Effect" means a material adverse change or effect, or any development involving a prospective material adverse change or effect, in or affecting (i) the business, properties, general affairs, management, financial position, stockholders' equity, prospects or results of operations of the Company and its subsidiaries, taken as a whole, except as set forth or contemplated in the Pricing Prospectus, or (ii) the ability of the Company to perform its obligations under this Agreement, including the issuance and sale of the Offered Securities, or to consummate the transactions contemplated in the Pricing Prospectus and the Prospectus.

(h) Neither the Company nor any of its subsidiaries own any real property and the Company and its subsidiaries have good and marketable title to all personal property owned by it, in each case free and clear of all liens, encumbrances and defects except such as are described in the Pricing Prospectus and the Prospectus or such as do not materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company and its subsidiaries; and any real property and buildings held under lease by the Company and its subsidiaries are, to the Company's knowledge, held by the Company and its subsidiaries under valid, subsisting and enforceable leases with such exceptions as are not material and do not materially interfere with the use made and proposed to be made of such property and buildings by the Company and its subsidiaries.

(i) Each of the Company and each of its subsidiaries has been (i) duly organized and is validly existing and in good standing under the laws of its jurisdiction of organization, with power and authority (corporate and other) to own and/or lease its properties and conduct its business as described in the Pricing Prospectus and the Prospectus, and (ii) duly qualified as a foreign corporation for the transaction of business and is in good standing (where such concept exists) under the laws of each other jurisdiction in which it owns or leases properties or conducts any business so as to require such qualification, except, in the case of this clause (ii), where the failure to be so qualified or in good standing would not, individually or in the aggregate, have a Material Adverse Effect; and each subsidiary of the Company has been listed on Schedule III hereto.

(j) [Reserved].

(k) The Company has an authorized capitalization as set forth in the Pricing Prospectus and the Prospectus and all of the issued shares of capital stock of the Company have been duly and validly authorized and issued and are fully paid and non-assessable and conform to the description of the Common Stock contained in the Pricing Disclosure Package and the Prospectus; and all of the issued shares of capital stock of each subsidiary of the Company have been duly and validly authorized and issued, are fully paid and non-assessable and (except, in the case of any foreign subsidiary, for directors' qualifying shares) are owned directly or indirectly by the Company, free and clear of all liens, encumbrances, equities or claims.

(l) The Shares have been duly and validly authorized by the Company and, when issued and delivered against payment therefor as provided herein, will be duly and validly issued and fully paid and non-assessable and will conform to the description of the Common Stock contained in the Pricing Disclosure Package and the Prospectus; and the issuance of the Shares is not subject to any preemptive or similar rights that have not been complied with or otherwise effectively waived. The Offered Warrants have been duly and validly authorized by the Company and, when executed and delivered against payment therefor as provided herein, as applicable, will be valid and binding agreements of the Company, enforceable against the Company in accordance with their terms, except as the enforcement thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the rights and remedies of creditors or by general equitable principles and will conform to the description of the Pre-Funded Warrants and the Common Warrants, as applicable, contained in the Pricing Disclosure Package in all material respects, and the Prospectus. The Warrant Shares have been duly authorized and validly reserved for issuance upon exercise of the Offered Warrants in a number sufficient to meet the current exercise requirements. The Warrant Shares, when issued and delivered upon exercise of the Pre-Funded Warrants and the Common Warrants, as applicable, and in accordance therewith, will be validly issued, fully paid and nonassessable and will conform to the description of the Common Stock contained in the Pricing Disclosure Package and the Prospectus, and the issuance of the Warrant Shares is not subject to any preemptive or similar rights to subscribe for or purchase the Warrant Shares that have not been complied with or otherwise effectively waived.

(m) The issue and sale of the Offered Securities and the compliance by the Company with this Agreement and the consummation of the transactions contemplated in this Agreement and the Pricing Prospectus and the Prospectus will not conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, (A) any indenture, mortgage, deed of trust, loan agreement 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 bound or to which any of the property or assets of the Company or any of its subsidiaries is subject, (B) the certificate of incorporation or by-laws (or other applicable organizational document) of the Company or any of its subsidiaries, or (C) any statute or any judgment, order, 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, except, in the case of clauses (A) or (C), for such defaults, breaches, or violations that would not, individually or in the aggregate, have a Material Adverse Effect; and no consent, approval, authorization, order, registration or qualification of or with any such court or governmental agency or body is required for the issue and sale of the Offered Securities or the consummation by the Company of the transactions contemplated by this Agreement, except such as have been obtained under the Act, the approval by FINRA of the underwriting terms and arrangements and such consents, approvals, authorizations, registrations or qualifications as may be required under state securities or Blue Sky laws in connection with the purchase and distribution of the Offered Securities by the Underwriters.

(n) Neither the Company nor any of its subsidiaries is (i) in violation of its certificate of incorporation or by-laws (or other applicable organizational document), (ii) in violation of any statute or any judgment, order, 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 (iii) in default in the performance or observance of any obligation, agreement, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement, lease or other agreement or instrument to which it is a party or by which it or any of its properties may be bound, except, in the case of the foregoing clauses (ii) and (iii), for such defaults as would not, individually or in the aggregate, have a Material Adverse Effect.

(o) The statements set forth in the Pricing Prospectus and Prospectus under the captions “Description of Capital Stock” and “Description of Warrants”, as applicable, insofar as they purport to constitute a summary of the terms of the Common Stock, the Pre-Funded Warrants and the Common Warrants, are accurate, complete and fair in all material respects.

(p) Other than as set forth in the Pricing Prospectus and the Prospectus, there are no legal or governmental proceedings pending to which the Company or any of its subsidiaries is a party or of which any property of the Company or any of its subsidiaries is the subject which, if determined adversely to the Company or any of its subsidiaries (or such officer or director), would individually or in the aggregate have a Material Adverse Effect; and, to the Company’s knowledge, no such proceedings are threatened or contemplated by governmental authorities or others.

(q) The Company is not and, after giving effect to the offering and sale of the Offered Securities and the application of the proceeds thereof as described in the Pricing Prospectus and the Prospectus, will not be an “investment company”, as such term is defined in the Investment Company Act of 1940.

(r) At the time of filing the Registration Statement and any post-effective amendment thereto, at the earliest time thereafter that the Company or any offering participant made a bona fide offer (within the meaning of Rule 164(h)(2) under the Act) of the Offered Securities, and at the date hereof, the Company was not and is not an “ineligible issuer,” as defined in Rule 405 under the Act.

(s) Ernst & Young LLP, who have certified certain financial statements of the Company and its subsidiaries, is an independent registered public accounting firm as required by the Act and the rules and regulations of the Commission thereunder.

(t) The Company maintains a system of internal control over financial reporting (as such term is defined in Rule 13a-15(f) under the Exchange Act) that (i) has been designed by the Company's principal executive officer and principal financial officer, or under their supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and (ii) is sufficient to provide reasonable assurance that (A) transactions are executed in accordance with management's general or specific authorization, (B) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain accountability for assets, (C) access to assets is permitted only in accordance with management's general or specific authorization, (D) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences and (E) the interactive data in eXtensible Business Reporting Language, if any, included or incorporated by reference in the Registration Statement is accurate to the extent required. The Company is not aware of any material weaknesses in its internal control over financial reporting (it being understood that this subsection shall not require the Company to comply with Section 404 of the Sarbanes Oxley Act of 2002 as of an earlier date than it would otherwise be required to so comply under applicable law).

(u) Since the date of the latest audited financial statements included or incorporated by reference in the Pricing Prospectus and the Prospectus, there has been no change in the Company's internal control over financial reporting that has materially and adversely affected, or is reasonably likely to materially and adversely affect, the Company's internal control over financial reporting.

(v) The Company maintains disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the Exchange Act) that have been designed to ensure that material information relating to the Company and its subsidiaries is made known to the Company's principal executive officer and principal financial officer by others within those entities; and such disclosure controls and procedures are effective.

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

(x) Neither the Company nor any of its subsidiaries, nor, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person associated with or acting on behalf of the Company or any of its subsidiaries has (i) directly or indirectly made, offered, promised or authorized any unlawful payment, contribution, gift, entertainment or other unlawful benefit or expense; (ii) made, offered, promised or authorized any direct or indirect unlawful payment; or (iii) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended, the Bribery Act 2010 of the United Kingdom or any other applicable anti-bribery or anti-corruption law.

(y) The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with the requirements of applicable anti-money laundering laws, including, but not limited to, the Bank Secrecy Act of 1970, as amended by the USA PATRIOT ACT of 2001, and the rules and regulations promulgated thereunder, and the anti-money laundering laws of the various jurisdictions in which the Company and its subsidiaries conducts business (collectively, the "Money Laundering Laws") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(z) Neither the Company nor any of its subsidiaries, nor, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or any of its subsidiaries is currently the subject or the target of any sanctions administered or enforced by the U.S. Government, including, without limitation, the Office of Foreign Assets Control of the U.S. Department of the Treasury (“OFAC”), or the U.S. Department of State and including, without limitation, the designation as a “specially designated national” or “blocked person,” the European Union, His Majesty’s Treasury, the United Nations Security Council, or other relevant sanctions authority (collectively, “Sanctions”), for the past five years, the Company and its subsidiaries have not engaged in and are not now engaged in any dealings or transactions with any person or country that at the time of the dealing or transaction is or was the subject or the target of Sanctions, and the Company will not directly or indirectly use the proceeds of the offering of the Offered Securities hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity (i) to fund or facilitate any activities of or business with any person, or in any country or territory, that, at the time of such funding, is the subject or the target of Sanctions or (ii) in any other manner that will result in a violation by any person (including any person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions.

(aa) The financial statements included or incorporated by reference in the Registration Statement, the Pricing Prospectus and the Prospectus, together with the related schedules and notes, present fairly in all material respects the financial position of the Company and its subsidiaries at the dates indicated and the statement of operations, stockholders’ equity and cash flows of the Company and its subsidiaries for the periods specified; said financial statements have been prepared in conformity with U.S. generally accepted accounting principles (“GAAP”) applied on a consistent basis throughout the periods involved. The supporting schedules, if any, included or incorporated by reference in the Registration Statement, the Pricing Prospectus and the Prospectus present fairly in all material respects and in accordance with GAAP the information required to be stated therein. The selected financial data and the summary financial information included in the Registration Statement, the Pricing Prospectus and the Prospectus present fairly in all material respects the information shown therein and have been compiled on a basis consistent with that of the audited financial statements included therein. Except as included therein, no historical or pro forma financial statements or supporting schedules are required to be included in the Registration Statement, the Pricing Prospectus or the Prospectus under the Act or the rules and regulations promulgated thereunder.

(bb) [Reserved].

(cc) There are no persons with registration rights or other similar rights to have any securities registered pursuant to the Registration Statement or otherwise registered by the Company under the Act except as have been validly waived or complied with in connection with the offering of the Offered Securities.

(dd) (i) No labor disturbance by or dispute with current or former employees or officers of the Company or any of its subsidiaries exists or, to the Company's knowledge, is contemplated or threatened, and (ii) the Company is not aware of any existing or imminent labor disturbance by, or dispute with, the employees of any of the Company's principal suppliers, manufacturers or contractors. Neither the Company nor any of its subsidiaries is a party to any collective bargaining agreement.

(ee) The Company and its subsidiaries have insurance covering their properties, operations, personnel and business, including business interruption insurance, which insurance is in amounts and insures against such losses and risks as are reasonable and is ordinary and customary for comparable companies in the same or similar businesses; and neither the Company nor any of its subsidiaries (i) has received written 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 nor (ii) 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 at reasonable cost from similar insurers as may be necessary to continue its business.

(ff) Except as would not, individually or in the aggregate, have a Material Adverse Effect, the Company and its subsidiaries and their directors, officers and employees, and to the Company's knowledge, their agents, affiliates and representatives, are, and at all times have been, in compliance with all applicable Health Care Laws (defined herein), including, but not limited to, the rules and regulations of the Food and Drug Administration ("FDA"), the U.S. Department of Health and Human Services ("HHS") Office of Inspector General, the Centers for Medicare & Medicaid Services, the HHS Office for Civil Rights, the U.S. Department of Justice and any other governmental agency or body having jurisdiction over the Company or any of its subsidiaries or any of their properties, and has not engaged in any activities which are, as applicable, cause for false claims liability, civil penalties, or mandatory or permissive exclusion from Medicare, Medicaid, or any other local, state or federal healthcare program. For purposes of this Agreement, "Health Care Laws" means the federal Anti-kickback Statute (42 U.S.C. § 1320a-7b(b)), the Physician Payments Sunshine Act (42 U.S.C. § 1320a-7h), the civil False Claims Act (31 U.S.C. §§ 3729 et seq.), the criminal False Claims Act (42 U.S.C. § 1320a-7b(a)), all criminal laws relating to health care fraud and abuse, including but not limited to 18 U.S.C. Sections 286, 287 and 1349, and the health care fraud criminal provisions under the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. §§ 1320d et seq.) ("HIPAA"), the exclusions law (42 U.S.C. § 1320a-7), the civil monetary penalties law (42 U.S.C. § 1320a-7a), HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. §§ 17921 et seq.), the Federal Food, Drug, and Cosmetic Act (21 U.S.C. §§ 301 et seq.), the Public Health Service Act (42 U.S.C. §§ 262 et seq.), Medicare (Title XVIII of the Social Security Act), and Medicaid (Title XIX of the Social Security Act). Neither the Company nor any of

its subsidiaries is a party to or has any ongoing reporting obligations pursuant to any corporate integrity agreement, deferred prosecution agreement, monitoring agreement, consent decree, settlement order, plan of correction or similar agreement imposed by any governmental authority. Neither the Company nor any of its subsidiaries has received any written notification, correspondence or other communication, including, without limitation, any FDA Form 483, notice of adverse finding, warning letter or untitled letter from the FDA or any similar regulatory authority, or any notification of any pending or threatened claim, suit, proceeding, hearing, enforcement, investigation, arbitration or other action, from any governmental authority alleging potential or actual material non-compliance by, or material liability of, the Company or any of its subsidiaries under any Health Care Laws.

(gg) Each of the Company and its subsidiaries possesses, and is in compliance with the terms of, all applications, certificates, approvals, clearances, registrations, exemptions, franchises, licenses, permits, consents and other authorizations necessary to conduct its business (collectively, "Licenses"), issued by the appropriate Governmental Authorities, including, without limitation, all Licenses required by the FDA, or any component thereof, the National Institutes of Health ("NIH") and/or by any other U.S., state, local or foreign government or drug regulatory agency (collectively, the "Regulatory Agencies"), except where the failure to possess or comply with the same would not, individually or in the aggregate, have a Material Adverse Effect. All such Licenses are in full force and effect. Each of the Company and its subsidiaries has fulfilled and performed all of its material obligations with respect to such Licenses and, to the Company's knowledge, no event has occurred which allows, or after notice or lapse of time would allow, revocation or termination thereof or results in any other material impairment of the rights of the holder of any License. Neither the Company nor any of its subsidiaries has received any written notice of proceedings relating to the revocation or material adverse modification of any such Licenses and, to the Company's knowledge, no Regulatory Agency has taken any action to limit, suspend or revoke any such License possessed by the Company or any of its subsidiaries.

(hh) The pre-clinical studies and clinical trials that are described in the Registration Statement, the Pricing Prospectus and the Prospectus were and, if still pending, are being, conducted in all material respects in accordance with all applicable laws and regulations; neither the Company nor any of its subsidiaries is aware of any other pre-clinical studies or clinical trials, the results of which reasonably call into question the results described in the Registration Statement, the Pricing Prospectus and the Prospectus; and neither the Company nor any of its subsidiaries has received any written notices or correspondence from the FDA, any foreign, state or local governmental body exercising comparable authority or any Institutional Review Board requiring the termination, suspension, material adverse modification or clinical hold of any pre-clinical studies or clinical trials conducted by or on behalf of the Company or any of its subsidiaries.

(ii) Neither the Company, its subsidiaries nor any of their officers, employees, directors, or to the Company's knowledge, their agents or clinical investigators, has been excluded, suspended or debarred from participation in any U.S. federal health care program or human clinical research or, to the Company's knowledge, is subject to a governmental inquiry, investigation, proceeding, or other similar action that could reasonably be expected to result in any such debarment, suspension, or exclusion, or convicted of any crime or engaged in any conduct that would reasonably be expected to result in debarment under 21 U.S.C. § 335a or suspension or exclusion under 42 U.S.C. § 1320a-7.

(jj) Except as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, to the Company's knowledge, the Company and each of its subsidiaries owns or has valid, binding and enforceable licenses or other rights to practice and use all patents and patent applications, copyrights, trademarks, trademark registrations, service marks, service mark registrations, trade names, service names and know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures) and all other technology and intellectual property rights necessary for the conduct, or the proposed conduct, of the business of the Company and its subsidiaries in the manner described in the Pricing Prospectus and the Prospectus (collectively, the "Company Intellectual Property"), and the conduct of its business (the development and commercialization of the product candidates described in the Pricing Prospectus and the Prospectus) has not and will not infringe or misappropriate any intellectual property rights of others, except as would not, individually or in the aggregate, have a Material Adverse Effect. Other than as disclosed in the Pricing Prospectus and the Prospectus, there are no rights of third parties to any of the intellectual property owned by the Company or any of its subsidiaries, and such intellectual property is owned by the Company or its subsidiaries, as applicable, free and clear of all material liens, security interests, or encumbrances. To the knowledge of the Company, the patents, trademarks and copyrights held or licensed by the Company or any of its subsidiaries included within the Company Intellectual Property are valid, enforceable and subsisting. To the Company's knowledge, there is no infringement by third parties of any of the Company Intellectual Property. Other than as disclosed in the Pricing Prospectus and the Prospectus, (i) neither the Company nor any of its subsidiaries is obligated to pay a material royalty, grant a license, or provide other material consideration to any third party in connection with the Company Intellectual Property, (ii) no action, suit, claim or other proceeding is pending or, to the knowledge of the Company, is threatened, alleging that the Company or any of its subsidiaries is infringing, misappropriating, diluting or otherwise violating, or would, upon the commercialization of any product or service proposed in the Pricing Prospectus and the Prospectus to be conducted, infringe, misappropriate, dilute, or otherwise violate, any rights of others with respect to any of the Company's product candidates, processes or intellectual property, (iii) no action, suit, claim or other proceeding is pending or, to the knowledge of the Company, is threatened, challenging the validity, enforceability, scope, registration, ownership or use of any of the Company's Intellectual Property, (iv) no action, suit, claim or other proceeding is pending or, to the knowledge of the Company, is threatened, challenging the Company's or its subsidiaries' rights in or to any Company Intellectual Property, (v) neither the Company nor any of its subsidiaries has received written notice of any claim of infringement, misappropriation or conflict with any asserted rights of others with respect to any of the Company's products, proposed products, processes or Company Intellectual Property, (vi) to the knowledge of the Company, no employee of the Company or any of its subsidiaries is in or has ever been in violation in any material



respect of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company or any of its subsidiaries or actions undertaken while employed or engaged with the Company or any of its subsidiaries, and (vii) the Company and its subsidiaries have taken reasonable measures to protect their confidential information and trade secrets and to maintain and safeguard the Company's Intellectual Property, including the execution of appropriate nondisclosure and confidentiality agreements.

(kk) Except as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, all patents and patent applications owned by or licensed to the Company or any of its subsidiaries or under which the Company or any of its subsidiaries has rights have, to the knowledge of the Company, been duly and properly filed and maintained; to the knowledge of the Company, there are no material defects in any of the patents or patent applications disclosed in the Registration Statement and the Prospectus as being owned by the Company or any of its subsidiaries; to the knowledge of the Company, the parties prosecuting such applications have complied with their duty of candor and disclosure to the USPTO in connection with such applications; and neither the Company nor any of its subsidiaries is aware of any facts required to be disclosed to the USPTO that were not disclosed to the USPTO and which would preclude the grant of a patent in connection with any such application or could form the basis of a finding of invalidity with respect to any patents that have issued with respect to such applications.

(ll) Any statistical and market-related data included or incorporated by reference in the Pricing Prospectus and the Prospectus are based on or derived from sources that the Company believes to be reliable and accurate in all material respects, and, to the extent required by such sources, the Company has obtained the written consent to the use of such data from such sources.

(mm) Each of the Company and its subsidiaries possesses all licenses, certificates, permits and other authorizations issued by, and has made all declarations and filings with, the appropriate federal, state, local or foreign governmental or regulatory authorities having jurisdiction over the Company or its subsidiaries that are necessary for the ownership or lease of its properties or the conduct of its business as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, except where the failure to possess or make the same would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; and neither the Company nor any of its subsidiaries has received written notice of any revocation or modification of any such license, certificate, permit or authorization, except where such revocation or modification would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(nn) Each of the Company and its subsidiaries has filed all tax returns that are required to have been filed by them pursuant to applicable foreign, state and local law except insofar as the failure to file such returns would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, and has paid all material taxes due pursuant to such returns or pursuant to any assessment received by the Company and its subsidiaries, except for such taxes, if any, as are being contested in good faith and as to which adequate reserves have been provided. The charges, accruals and reserves on the books of the Company or any of its subsidiaries in respect of any income and corporation tax liability for any years not finally determined are adequate to meet any assessments or re-assessments for additional income tax for any years not finally determined, except to the extent of any inadequacy that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. No tax deficiency has been determined adversely to the Company or any of its subsidiaries which has had (nor does the Company or any of its subsidiaries have any written notice or knowledge of any tax deficiency which could reasonably be expected to be determined adversely to the Company or any of its subsidiaries and which would, individually or in the aggregate, reasonably be expected to have) a Material Adverse Effect.

(oo) The Company has not taken and will not take, directly or indirectly, without giving effect to activities by the Underwriters, any action that is designed to or that has constituted or might reasonably be expected to cause or result in stabilization or manipulation of the price of the Offered Securities.

(pp) The Company is not a party to any contract, agreement or understanding with any person (other than this Agreement) that would give rise to a valid claim against the Company or any Underwriter for a brokerage commission, finder's fee or like payment in connection with the offering and sale of the Offered Securities.

(qq) With respect to each Government Contract (as defined below) to which the Company or any of its subsidiaries is currently a party or has received final payment within three years prior to the date hereof and to each Government Bid (as defined below) and except as disclosed in the Pricing Prospectus: (i) the Company and each of its subsidiaries has complied and is in compliance in all material respects with all terms and conditions of each Government Contract and Government Bid, including all incorporated clauses, provisions, certifications, representations, requirements, schedules, attachments, regulations and applicable laws, including without limitation, FAR 52.204-24, Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment, FAR 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment, FAR 52.204-26, Covered Telecommunications Equipment or Services-Representation, the Truth in Negotiations Act, the Federal Acquisition Regulation ("FAR"), and the Cost Accounting Standards, as applicable; (ii) the Company and each of its subsidiaries has complied in all respects with all material requirements of statute, rule, regulation, order or agreements with the U.S. Government pertaining to, and as applicable, such Government Contract or Government Bid; (iii) neither the U.S. Government, nor any prime contractor, subcontractor or other person has notified the Company or any of its subsidiaries, in writing, that the Company or any of its subsidiaries has breached or violated any statute, rule, regulation, certification, representation, clause, provision or requirement in any material respect; and (iv) no reasonable basis exists to give rise to a material claim by a Governmental Authority for fraud (as such concept is defined under the state or federal laws of the United States) in connection with any such Government Contract; for the

purposes of this Agreement, “Governmental Authority” means any federal, state, local or foreign court or tribunal, governmental, judicial, arbitral, legislative, executive or regulatory body (or subdivision thereof), administrative agency, self-regulatory authority, instrumentality, agency commission or other governmental authority or body; “Government Bid” means any offer made by the Company or any of its affiliates (including its subsidiaries), which, if accepted, would result in a Government Contract; “Government Contract” means any contract, including any arrangement, joint venture, basic ordering agreement, pricing agreement, letter agreement or other similar arrangement of any kind, between the Company or any of its subsidiaries on the one hand, and (A) the United States Government, (B) any prime contractor to the United States Government in its capacity as a prime contractor, or (C) any subcontractor with respect to any contract described in clause (A) or clause (B) above, on the other hand. A task, purchase or delivery order under a Government Contract shall not constitute a separate Government Contract, for purposes of this definition, but shall be part of the Government Contract to which it relates.

(rr) The Company and its subsidiaries have not received any written notice of termination for cause, “show cause” or cure notice (that has resulted in a termination for cause) pertaining to any Government Contract; provided that this section (rr) shall not apply to any notice received more than three years prior to the date hereof. The Company and its subsidiaries have not received any written notice that the sponsoring or responsible Governmental Authority does not intend to continue funding (or intends to terminate) a Government Contract currently in effect.

(ss) To the knowledge of the Company, there is no charge, proceeding or investigation by any Governmental Authority with respect to a material violation by the Company of any applicable United States national customs or export control laws and regulations, including the Export Administration Regulations, the Arms Export Control Act, and the International Traffic in Arms Regulations (“Trade Controls”). The Company has not, in the past three years, made any mandatory or voluntary disclosure with respect to a possible violation of Trade Controls to any Governmental Authority.

(tt) Within the past three years, the Company has not entered into any consent order or administrative agreement relating directly or indirectly to any Government Contract or Government Bid that has had or would reasonably be expected to result in a Material Adverse Effect.

(uu) Except as disclosed in the Pricing Prospectus and the Prospectus, the Company has a written code of business ethics and conduct, a business ethics awareness and compliance program, and an internal control system that are in material compliance with all requirements of the Government Contracts of the Company and of applicable laws (including without limitation FAR 52.203-13, where applicable). Except as disclosed in the Pricing Prospectus and the Prospectus, within the past three years, the Company has not performed any activities under any Government Contract nor has it had any other relationship with any other person or entity that at the time constituted an “Organizational Conflict of Interest” (as defined by FAR 9.501) or a violation of the Procurement Integrity Act (41 U.S.C. §§ 2101-2107).

(vv) None of the Company nor, to the knowledge of the Company, any of its officers, employees, agents, nor any “Principal” (as defined in FAR 52.209-5) of the Company has been debarred, or suspended from participation in the award of contracts with any Governmental Authority, or been the subject of a debarment, suspension or exclusion from participation in programs funded by any Governmental Authority, nor to the knowledge of the Company has any such debarment, suspension or exclusion proceeding been initiated in the past three years. The Company is not, nor has it ever been, suspended or debarred from doing business with a Governmental Authority or, to the knowledge of the Company, proposed for suspension or debarment by a Governmental Authority and has not been the subject of a finding of non-responsibility or ineligibility for contracting with a Governmental Authority.

(ww) The Company has complied in all material respects with all applicable domestic preference statutes and regulations, including the Buy American Act and the Trade Agreements Act.

(xx) No Company Government Contract was awarded on the basis of the Company having preferential status (small business, small disadvantaged business, 8(a), woman-owned business, etc.).

(yy) Each of the Company and its subsidiaries is, and at all times has been, in compliance with all applicable data privacy and security laws and regulations (collectively, the “Privacy Laws”), including the European Union General Data Protection Regulation (EU 2016/679), and the California Consumer Privacy Act (CCPA), for which any non-compliance with Privacy Laws would not reasonably be expected to have a Material Adverse Effect. The Company and its subsidiaries have in place, materially comply with, and take appropriate steps reasonably designed to ensure compliance with their policies and procedures relating to data privacy and security and the collection, storage, use, disclosure, handling, and analysis of personal data that is subject to the Privacy Laws (collectively, the “Policies”). At all times since inception, the Company and its subsidiaries have provided notice of their Policies then in effect to their customers, employees, third-party vendors and representatives to the extent required by and in material compliance with applicable Privacy Laws. Neither the Company nor any of its subsidiaries (i) has received written notice from any Governmental Authority 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 not currently conducting or paying for, in whole or in part, any investigation, remediation, or other corrective action pursuant to any Privacy Law, and (iii) is not a party to any order or decree that imposes any obligation or liability under any Privacy Law.

(zz) 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 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 all personal data and sensitive, confidential or regulated data (collectively, the “Confidential Data”)) used in connection with their businesses, and 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 Confidential Data and to the protection of such IT Systems and Confidential Data from unauthorized use, access, misappropriation or modification.

(aaa) To the Company’s knowledge, no relationship, direct or indirect, exists between or among the Company or any of its subsidiaries, on the one hand, and the directors, officers, stockholders, customers or suppliers of the Company or any of its subsidiaries, on the other, that is required by the Act to be described in the Registration Statement and the Prospectus and that is not so described in such documents and in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

(bbb) The interactive data in eXtensible Business Reporting Language, if any, included in or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission’s rules and guidelines applicable thereto to the extent required.

2. Subject to the terms and conditions herein set forth, the Company agrees to issue and sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company, (i) at a combined purchase price for one Share and one accompanying Common Warrant of \$1.41 and (ii) at a combined purchase price for one Pre-Funded Warrant and one accompanying Common Warrant of \$1.409906, the number of Securities set forth opposite the name of such Underwriter in Schedule I hereto.

3. Upon the authorization by you of the release of the Offered Securities, the several Underwriters propose to offer the Offered Securities for sale upon the terms and conditions set forth in the Pricing Prospectus and the Prospectus. The Company acknowledges and agrees that the Underwriters may offer and sell the Offered Securities to or through any affiliate of an Underwriter.

4. (a) The Shares and the Common Warrants to be purchased by each Underwriter hereunder, in book-entry form, and in such authorized denominations and registered in such names as the Representatives may request upon at least forty-eight hours’ prior notice to the Company. The Shares shall be delivered by or on behalf of the Company to the Representatives, through the facilities of the Depository Trust Company (“DTC”), for the account of such Underwriter, against payment by or on behalf of such Underwriter of the combined purchase price therefor by wire transfer of Federal (same-

day) funds to the account specified by the Company to the Representatives at least forty-eight hours in advance. The accompanying Common Warrants shall be delivered to the purchasers of the Common Warrants in definitive form, registered in such names and in such denominations as the Representatives shall request in writing not later than the Time of Delivery. The Common Warrants will be made available for inspection by the Representatives on the business day prior to the Time of Delivery. The time and date of such delivery and payment shall be, with respect to the Offered Securities, 9:30 a.m., New York City time, on April 4, 2024 or such other time and date as the Representatives and the Company may agree upon in writing. Such time and date for delivery of the Offered Securities is herein called the “Time of Delivery”.

(b) The documents to be delivered at the Time of Delivery by or on behalf of the parties hereto pursuant to Section 8 hereof, including the cross receipt for the Offered Securities and any additional documents requested by the Underwriters pursuant to Section 8(m) hereof, will be delivered at the offices of Cooley LLP, 3 Embarcadero Ctr 20th Floor, San Francisco, CA 94111, or such other location as shall be agreed upon by the Representatives and the Company, and the Offered Securities will be delivered, all at the Time of Delivery. For the purposes of this Section 4, “New York Business Day” means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close.

(c) Notwithstanding the foregoing, the Company and the Representatives shall instruct the purchaser of the Pre-Funded Warrants to make payment for the Pre-Funded Warrants at the Time of Delivery to the Company by wire transfer in immediately available funds to the account specified by the Company at a combined purchase price of \$1.4999 per Pre-Funded Warrant and accompanying Common Warrant, and the Company shall deliver the Pre-Funded Warrants and accompanying Common Warrants to the purchaser at the Time of Delivery in definitive form against such payment, in lieu of the Company’s obligation to deliver such Pre-Funded Warrants and accompanying Common Warrants to the Underwriters; *provided* that, upon receipt by the Company of payment for the Pre-Funded Warrants and accompanying Common Warrants, either (i) the Company shall promptly (but in no event later than the Time of Delivery), pay \$0.089994 per such Pre-Funded Warrant and accompanying Common Warrant to the Underwriters by wire transfer in immediately available funds to the account specified by the Representatives or (ii) the Representatives shall withhold \$0.089994 per Pre-Funded Warrant and accompanying Common Warrant with respect to such Pre-Funded Warrants and accompanying Common Warrants as an offset against the payment owed by the Underwriters to the Company for the Shares and accompanying Common Warrants. In the event that the purchaser of the Pre-Funded Warrants and accompanying Common Warrants fail to make payment to the Company for all or part of the Pre-Funded Warrants and accompanying Common Warrants at the Time of Delivery, the Representatives may elect, by written notice to the Company, to purchase additional shares of Common Stock and accompanying Common Warrants in lieu of all or a portion of such Pre-Funded Warrants and accompanying Common Warrants, to be delivered to the Underwriters under this Agreement at the combined purchase price listed in Section 2(i).

5. The Company agrees with each of the Underwriters:

(a) To prepare the Prospectus in a form approved by you and to file such Prospectus pursuant to Rule 424(b) under the Act not later than the Commission's close of business on the second business day following the execution and delivery of this Agreement, or, if applicable, such earlier time as may be required under the Act; to make no further amendment or any supplement to the Registration Statement, the Basic Prospectus or the Prospectus prior to the Time of Delivery which shall be disapproved by you promptly after reasonable notice thereof; to advise you, promptly after it receives notice thereof, of the time when any amendment to the Registration Statement has been filed or becomes effective or any amendment or supplement to the Prospectus has been filed and to furnish you with copies thereof; to file promptly all material required to be filed by the Company with the Commission pursuant to Rule 433(d) under the Act; within the time required by such Rule; to file promptly all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the date of the Prospectus and for so long as the delivery of a prospectus (or in lieu thereof, the notice referred to in Rule 173(a) under the Act) is required in connection with the offering or sale of the Offered Securities; to advise you, promptly after it receives notice thereof, of the issuance by the Commission of any stop order or of any order preventing or suspending the use of the Registration Statement, any Preliminary Prospectus or other prospectus in respect of the Offered Securities, of the suspension of the qualification of the Offered Securities for offering or sale in any jurisdiction, of the initiation or threatening of any proceeding for any such purpose, or of any request by the Commission for the amending or supplementing of the Registration Statement or the Prospectus or for additional information; and, in the event of the issuance of any stop order or of any order preventing or suspending the use of any Preliminary Prospectus or other prospectus or suspending any such qualification, to promptly use its best efforts to obtain the withdrawal of such order; and in the event of any such issuance of a notice of objection, promptly to take such steps including, without limitation, amending the Registration Statement or filing a new registration statement, at its own expense, as may be necessary to permit offers and sales of the Offered Securities by the Underwriters (references herein to the Registration Statement shall include any such amendment or new registration statement);

(b) If required by Rule 430B(h) under the Act, to prepare a form of prospectus in a form approved by you and to file such form of prospectus pursuant to Rule 424(b) under the Act not later than may be required by Rule 424(b) under the Act; and to make no further amendment or supplement to such form of prospectus which shall be disapproved by you promptly after reasonable notice thereof;

(c) Promptly from time to time to take such action as you may reasonably request to qualify the Offered Securities for offering and sale under the securities laws of such jurisdictions as you may request and to comply with such laws so as to permit the continuance of sales and dealings therein in such jurisdictions for as long as may be necessary to complete the distribution of the Offered Securities, provided that in connection therewith the Company shall not be required to qualify as a foreign corporation or to file a general consent to service of process in any jurisdiction;

(d) If by the third anniversary (the “Renewal Deadline”) of the initial effective date of the Registration Statement, any of the Offered Securities remain unsold by the Underwriters, the Company will file, if it has not already done so and is eligible to do so, a new shelf registration statement relating to the Offered Securities, in a form satisfactory to you and will use its best efforts to cause such registration statement to be declared effective within 180 days after the Renewal Deadline. The Company will take all other action necessary or appropriate to permit the offering and sale of the Offered Securities to continue as contemplated in the expired registration statement relating to the Offered Securities. References herein to the Registration Statement shall include such new automatic shelf registration statement or such new shelf registration statement, as the case may be;

(e) Prior to 10:00 a.m., New York City time, on the New York Business Day next succeeding the date of this Agreement (or such other time as may be agreed to by the Representatives and the Company) and from time to time, to furnish the Underwriters with written and electronic copies of the Prospectus in New York City in such quantities as you may reasonably request, and, if the delivery of a prospectus (or in lieu thereof, the notice referred to in Rule 173(a) under the Act) is required at any time prior to the expiration of nine months after the time of issue of the Prospectus in connection with the offering or sale of the Offered Securities and if at such time any event shall have occurred as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made when such Prospectus (or in lieu thereof, the notice referred to in Rule 173(a) under the Act) is delivered, not misleading, or, if for any other reason it shall be necessary during such same period to amend or supplement the Prospectus or to file under the Exchange Act any document incorporated by reference in the Prospectus in order to comply with the Act or the Exchange Act, to notify you and upon your request to file such document and prepare and furnish without charge to each Underwriter and to any dealer in securities as many written and electronic copies as you may from time to time reasonably request of an amended Prospectus or a supplement to the Prospectus which will correct such statement or omission or effect such compliance; and in case any Underwriter is required to deliver a prospectus (or in lieu thereof, the notice referred to in Rule 173(a) under the Act) in connection with sales of any of the Offered Securities at any time nine months or more after the time of issue of the Prospectus, upon your request but at the expense of such Underwriter, to prepare and deliver to such Underwriter as many written and electronic copies as you may request of an amended or supplemented Prospectus complying with Section 10(a)(3) of the Act;

(f) To make generally available to its securityholders as soon as practicable (which may be satisfied by filing with the Commission’s Electronic Data Gathering, Analysis and Retrieval System (“EDGAR”)), but in any event not later than sixteen months after the effective date of the Registration Statement (as defined in Rule 158(c) under the Act), an earnings statement of the Company and its subsidiaries (which need not be audited) complying with Section 11(a) of the Act and the rules and regulations of the Commission thereunder (including, at the option of the Company, Rule 158);



(g) (i) During the period beginning from the date hereof and continuing to, and including, the 60th day after the date of the Prospectus (the “Lock-Up Period”), not to (i) offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise transfer or dispose of, directly or indirectly, or file with or confidentially submit to the Commission a registration statement under the Act relating to, any securities of the Company that are substantially similar to the Offered Securities, including but not limited to any options or warrants to purchase shares of Common Stock or any securities that are convertible into or exchangeable for, or that represent the right to receive, Stock or any such substantially similar securities, (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Common Stock or any such other securities (whether any such transaction described in clauses (i) or (ii) above is to be settled by delivery of Stock or such other securities, in cash or otherwise), or (iii) publicly disclose the intention to do any of the foregoing, in each case, without the prior written consent of the Representatives; provided, however, that the foregoing restrictions shall not apply to (1) the Offered Securities to be sold hereunder, (2) any shares of Common Stock or any securities or other awards (including without limitation options, restricted stock or restricted stock units) convertible into, exercisable for, or that represent the right to receive, shares of Common Stock pursuant to any stock option plan, incentive plan, inducement plan or stock purchase plan of the Company (collectively, “Company Stock Plans”) or otherwise in equity compensation arrangements described in the Registration Statement and the Prospectus, (3) any shares of Common Stock issued upon the conversion, exercise or exchange of convertible, exercisable or exchangeable securities outstanding on the date of this Agreement and described in the Registration Statement and the Prospectus, (4) the filing by the Company of any registration statement on Form S-8 or a successor form thereto relating to any Company Stock Plan described in the Registration Statement and the Prospectus, (5) shares of Common Stock sold by the Company pursuant to its existing “at-the-market” offering program as described in the Registration Statement and the Prospectus, provided no such sales shall occur until the 30th day after the date of the Prospectus, and (6) any shares of Common Stock or any securities convertible into or exchangeable for, or that represent the right to receive, shares of Common Stock issued in connection with any *bona fide* licensing, commercialization, joint venture, technology transfer or development collaboration agreement with an unaffiliated third party, provided that in the case of clause (6), the aggregate number of shares that the Company may sell or issue or agree to sell or issue pursuant to clause (6) shall not exceed 5.0% of the total number of shares of Common Stock issued and outstanding immediately following the completion of the transactions contemplated by this Agreement, and provided, further, that each newly appointed director or executive officer that is a recipient of any shares of Common Stock or securities or other awards issued pursuant to clauses (2) and (3) during the Lock-Up Period shall enter into an agreement substantially in the form of Annex I hereto;

(ii) To pay the required Commission filing fees relating to the Offered Securities within the time required by Rule 456(b)(1) under the Act without regard to the proviso therein and otherwise in accordance with Rules 456(b) and 457(r) under the Act

(h) During a period of three years from the effective date of the Registration Statement, for so long as the Company is subject to the reporting requirements of either Section 13 or Section 15(d) of the Exchange Act, to furnish to its stockholders as soon as practicable after the end of each fiscal year an annual report (including a balance sheet and statements of income, stockholders' equity and cash flows of the Company certified by independent public accountants) and, as soon as practicable after the end of each of the first three quarters of each fiscal year (beginning with the fiscal quarter ending after the effective date of the Registration Statement), to make available to its stockholders consolidated summary financial information of the Company for such quarter in reasonable detail, provided, that no reports, documents or other information needs to be furnished pursuant to this Section 5(h) to the extent they are available on EDGAR;

(i) During a period of three years from the effective date of the Registration Statement, to furnish to you copies of all reports or other communications (financial or other) furnished to stockholders, and to deliver to you (i) as soon as they are available, copies of any reports and financial statements furnished to or filed with the Commission or any national securities exchange on which any class of securities of the Company is listed; and (ii) such additional information concerning the business and financial condition of the Company as you may from time to time reasonably request (such financial statements to be on a consolidated basis to the extent the accounts of the Company are consolidated in reports furnished to its stockholders generally or to the Commission), provided, that no reports, documents or other information needs to be furnished pursuant to this Section 5(i) to the extent they are available on EDGAR;

(j) To use the net proceeds received by it from the sale of the Offered Securities pursuant to this Agreement in the manner specified in the Pricing Prospectus and the Prospectus under the caption "Use of Proceeds";

(k) To use its best efforts to list, subject to notice of issuance, the Shares and the Warrant Shares on the Nasdaq Global Select Market;

(l) If the Company elects to rely upon Rule 462(b), the Company shall file a Rule 462(b) Registration Statement with the Commission in compliance with Rule 462(b) by 10:00 p.m., Washington, D.C. time, on the date of this Agreement, and the Company shall at the time of filing either pay to the Commission the filing fee for the Rule 462(b) Registration Statement or give irrevocable instructions for the payment of such fee pursuant to Rule 111(b) under the Act;

(m) Upon request of any Underwriter, to furnish, or cause to be furnished, to such Underwriter an electronic version of the Company's trademarks, servicemarks and corporate logo for use on the website, if any, operated by such Underwriter for the purpose of facilitating the on-line offering of the Offered Securities (the "License"); provided, however, that the License shall be used solely for the purpose described above, is granted without any fee and may not be assigned or transferred;

(n) [Reserved];

- (o) To, at all times while the Company is subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act and any Offered Warrants are outstanding, use its best efforts to maintain a registration statement covering the issuance and sale of the Warrant Shares; and
- (p) To, at all times while any Offered Warrants are outstanding, reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved shares of Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of such Offered Warrants, the number of Warrant Shares that are initially issuable and deliverable upon the exercise of the then-outstanding Offered Warrants.
6. (a) The Company represents and agrees that, without the prior consent of the Representatives, it has not made and will not make any offer relating to the Offered Securities that would constitute a “free writing prospectus” as defined in Rule 405 under the Act; each Underwriter represents and agrees that, without the prior consent of the Company and the Representatives, it has not made and will not make any offer relating to the Offered Securities that would constitute a free writing prospectus required to be filed with the Commission; any such free writing prospectus the use of which has been consented to by the Company and the Representatives is listed on Schedule II(a) hereto;
- (b) The Company has complied and will comply with the requirements of Rule 433 under the Act applicable to any Issuer Free Writing Prospectus, including timely filing with the Commission or retention where required and legending; and the Company represents that it has satisfied and agrees that it will satisfy the conditions under Rule 433 under the Act to avoid a requirement to file with the Commission any electronic road show;
- (c) The Company agrees that if at any time following issuance of an Issuer Free Writing Prospectus or any Written Testing-the-Waters Communication prepared or authorized by it any event occurred or occurs as a result of which such Issuer Free Writing Prospectus or Written Testing-the-Waters Communication prepared or authorized by it would conflict with the information in the Registration Statement, the Pricing Prospectus or the Prospectus or would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances then prevailing, not misleading, the Company will give prompt notice thereof to the Representatives and, if requested by the Representatives, will prepare and furnish without charge to each Underwriter an Issuer Free Writing Prospectus, Written Testing-the-Waters Communication or other document which will correct such conflict, statement or omission; provided, however, that this representation and warranty shall not apply to any statements or omissions in an Issuer Free Writing Prospectus or Written Testing-the-Waters Communication prepared or authorized by it made in reliance upon and in conformity with the Underwriter Information;
- (d) The Company represents and agrees that (i) it has not engaged in, or authorized any other person to engage in, any Testing-the-Waters Communications, other than Testing-the-Waters Communications with the prior consent of the Representatives with entities that are qualified institutional buyers as defined in Rule 144A under the Act or institutions that are accredited investors as defined in Rule 501(a) under the Act; and (ii) it has not distributed, or authorized any other person to distribute, any Written Testing-the-Waters Communications, other than those distributed with the prior consent of the Representatives; and the Company reconfirms that the Underwriters have been authorized to act on its behalf in engaging in Testing-the-Waters Communications; and

(e) Each Underwriter represents and agrees that any Written Testing-the-Waters Communications undertaken by it were with entities that such Underwriter reasonably believes are qualified institutional buyers as defined in Rule 144A under the Act or institutions that are accredited investors as defined in Rule 501(a) under the Act.

7. The Company covenants and agrees with the several Underwriters that the Company will pay or cause to be paid the following: (i) the fees, disbursements and expenses of the Company's counsel and accountants in connection with the registration of the Offered Securities under the Act and all other expenses in connection with the preparation, printing, reproduction and filing of the Registration Statement, the Basic Prospectus, any Preliminary Prospectus, any Written Testing-the-Waters Communication, any Issuer Free Writing Prospectus and the Prospectus and amendments and supplements thereto and the mailing and delivering of copies thereof to the Underwriters and dealers; (ii) the cost of printing or producing any Agreement among Underwriters, this Agreement, the Blue Sky Memorandum, closing documents (including any compilations thereof) and any other documents in connection with the offering, purchase, sale and delivery of the Offered Securities; (iii) all expenses in connection with the qualification of the Offered Securities for offering and sale under state securities laws as provided in Section 5(b) hereof, including the fees and disbursements of counsel for the Underwriters in connection with such qualification and in connection with the Blue Sky survey; (iv) all fees and expenses in connection with listing the Shares and the Warrant Shares on the Nasdaq Global Select Market; (v) the filing fees incident to, and the fees and disbursements of counsel for the Underwriters in connection with, any required review by FINRA of the terms of the sale of the Offered Securities; (vi) the cost of preparing stock certificates; (vii) the cost and charges of any transfer agent or registrar; and (viii) all other costs and expenses incident to the performance of its obligations hereunder which are not otherwise specifically provided for in this Section; provided, however, that the amounts payable by the Company pursuant to clauses (iii) and (iv) and for fees and disbursements of counsel to the Underwriters described in clauses (iii) and (v) shall not exceed \$25,000 in the aggregate. It is understood, however, that, (x) except as provided in this Section, and Sections 9 and 12 hereof, the Underwriters will pay all of their own costs and expenses, including the fees of their counsel, stock transfer taxes on resale of any of the Offered Securities by them, and any advertising expenses connected with any offers they may make and all travel and lodging expenses of the Underwriters and their representatives and counsel; and (y) subject to the Company's and Representatives' prior written approval of each such expense, the Underwriters and the Company shall each pay 50% of the cost of chartering any aircraft to be used in connection with the road show by the Company and the Underwriters.

8. The obligations of the Underwriters hereunder, as to the Offered Securities to be delivered at the Time of Delivery, shall be subject, in their discretion, to the condition that all representations and warranties and other statements of the Company herein are, at and as of the Applicable Time and the Time of Delivery, true and correct, the condition that the Company shall have performed all of its obligations hereunder theretofore to be performed, and the following additional conditions:

(a) The Prospectus shall have been filed with the Commission pursuant to Rule 424(b) under the Act within the applicable time period prescribed for such filing by the rules and regulations under the Act and in accordance with Section 5(a) hereof; all material required to be filed by the Company pursuant to Rule 433(d) under the Act shall have been filed with the Commission within the applicable time period prescribed for such filing by Rule 433; if the Company has elected to rely upon Rule 462(b) under the Act, the Rule 462(b) Registration Statement shall have become effective by 10:00 p.m., Washington, D.C. time, on the date of this Agreement; no stop order suspending the effectiveness of the Registration Statement or any part thereof shall have been issued and no proceeding for that purpose or pursuant to Section 8A of the Act shall have been initiated or threatened by the Commission; no stop order suspending or preventing the use of the Pricing Prospectus, Prospectus or any Issuer Free Writing Prospectus shall have been initiated or threatened by the Commission; and all requests for additional information on the part of the Commission shall have been complied with to your reasonable satisfaction;

(b) Cooley LLP, counsel for the Underwriters, shall have furnished to you such written opinion and negative assurance letter, dated the Time of Delivery, in form and substance satisfactory to the Representatives, with respect to such matters as the Representatives may reasonably request, and such counsel shall have received such papers and information as they may reasonably request to enable them to pass upon such matters;

(c) Fenwick & West LLP, counsel for the Company, shall have furnished to the Representatives their written opinion and negative assurance letter, dated the Time of Delivery, in form and substance satisfactory to the Representatives;

(d) Goodwin Procter LLP, intellectual property counsel for the Company, shall have furnished to the Representatives their written opinion, dated the Time of Delivery, in form and substance satisfactory to the Representatives;

(e) The Executive Vice President and Chief Operating Officer of the Company, shall have furnished to the Representatives a regulatory certificate, dated the Time of Delivery, in form and substance satisfactory to the Representatives;

(f) On the date of the Prospectus, at 9:30 a.m., New York City time, on the effective date of any post-effective amendment to the Registration Statement filed subsequent to the date of this Agreement and also at the Time of Delivery, Ernst & Young LLP shall have furnished to the Representatives a letter or letters, dated the respective dates of delivery thereof, in form and substance satisfactory to the Representatives;

(g) (i) Neither the Company nor any of its subsidiaries shall have sustained since the date of the latest audited financial statements included or incorporated by reference in the Pricing Prospectus 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, otherwise than as set forth or contemplated in the Pricing Prospectus, and (ii) since the respective dates as of which information is given in the Pricing Prospectus there shall not have been any change in the capital stock (other than as a result of the exercise of stock options or the award of stock options or restricted stock in the ordinary course of business pursuant to the Company's equity plans that are described in the Pricing Prospectus) or long-term debt of the Company and its subsidiaries taken as a whole or any change or effect, or any development involving a prospective change or effect, in or affecting (x) the business, properties, general affairs, management, financial position, stockholders' equity or results of operations of the Company or any of its subsidiaries, taken as a whole, or (y) the ability of the Company to perform its obligations under this Agreement, including the issuance and sale of the Offered Securities, or to consummate the transactions contemplated in the Pricing Prospectus and the Prospectus, the effect of which, in any such case described in clause (i) or (ii), is in your judgment so material and adverse as to make it impracticable or inadvisable to proceed with the offering or the delivery of the Offered Securities being delivered at the Time of Delivery on the terms and in the manner contemplated in the Pricing Prospectus and the Prospectus;

(h) On or after the Applicable Time (i) no downgrading shall have occurred in the rating accorded the Company's debt securities by any "nationally recognized statistical rating organization", as that term is defined by the Commission for purposes of Rule 436(g)(2) under the Act, and (ii) no such organization shall have publicly announced that it has under surveillance or review, with possible negative implications, its rating of any of the Company's debt securities;

(i) On or after the Applicable Time there shall not have occurred any of the following: (i) a suspension or material limitation in trading in securities generally on the New York Stock Exchange or on the Nasdaq Global Select Market; (ii) a suspension or material limitation in trading in the Company's securities on the Nasdaq Global Select Market; (iii) a general moratorium on commercial banking activities declared by either Federal, California State or New York State authorities or a material disruption in commercial banking or securities settlement or clearance services in the United States; (iv) the outbreak or escalation of hostilities involving the United States or the declaration by the United States of a national emergency or war or (v) the occurrence of any other calamity or crisis or any change in financial, political or economic conditions in the United States or elsewhere, if the effect of any such event specified in clause (iv) or (v) in your judgment makes it impracticable or inadvisable to proceed with the offering or the delivery of the Offered Securities being delivered at the Time of Delivery on the terms and in the manner contemplated in the Pricing Prospectus and the Prospectus;

(j) The Shares and the Warrant Shares shall have been duly listed on the Nasdaq Global Select Market;

(k) The Company shall have obtained and delivered to the Underwriters executed copies of an agreement from each director and officer of the Company, substantially to the effect set forth in Annex I hereto;

(l) The Company shall have complied with the provisions of Section 5(c) hereof with respect to the furnishing of prospectuses on the New York Business Day next succeeding the date of this Agreement (or such other time as may be agreed to by the Representatives and the Company);

(m) [Reserved];

(n) The Company shall have delivered to the Representatives a form of Pre-Funded Warrant and Common Warrant, each in form and substance reasonably acceptable to the Representatives; and

(o) The Company shall have furnished or caused to be furnished to you at the Time of Delivery certificates of officers of the Company satisfactory to you as to the accuracy of the representations and warranties of the Company herein at and as of the Time of Delivery, as to the performance by the Company of all of its obligations hereunder to be performed at or prior to the Time of Delivery, as to the matters set forth in subsections (a) and (f) of this Section and as to such other matters as you may reasonably request.

9. (a) The Company will indemnify and hold harmless each Underwriter against any losses, claims, damages or liabilities, joint or several, to which such Underwriter may become subject, under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, the Basic Prospectus, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, any Issuer Free Writing Prospectus, any "roadshow" as defined in Rule 433(h) under the Act (a "roadshow"), any "issuer information" filed or required to be filed pursuant to Rule 433(d) under the Act, or any Written Testing-the-Waters Communication, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse each Underwriter for any documented legal or other expenses reasonably incurred by such Underwriter in connection with investigating or defending any such action or claim as such expenses are incurred; *provided, however*, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in the Registration Statement, the Basic Prospectus, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus, any roadshow or any Written Testing-the-Waters Communication, in reliance upon and in conformity with the Underwriter Information.

(b) Each Underwriter, severally and not jointly, will indemnify and hold harmless the Company against any losses, claims, damages or liabilities to which the Company may become subject, under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, the Basic Prospectus, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus, or any roadshow, or any Written Testing-the-Waters Communication, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, the Basic Prospectus, any Preliminary Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus, or any roadshow or any Written Testing-the-Waters Communication, in reliance upon and in conformity with the Underwriter Information; and will reimburse the Company for any documented legal or other expenses reasonably incurred by the Company in connection with investigating or defending any such action or claim as such expenses are incurred. As used in this Agreement with respect to an Underwriter and an applicable document, "Underwriter Information" means the written information furnished to the Company by such Underwriter through the Representatives expressly for use therein; it being understood and agreed upon that the only such information furnished by any Underwriter consists of the following information in the Prospectus furnished on behalf of each Underwriter: the concession and reallowance figures appearing in the seventh paragraph under the caption "Underwriting", and the information contained in the ninth paragraph under the caption "Underwriting".

(c) Promptly after receipt by an indemnified party under subsection (a) or (b) of this Section 9 of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify the indemnifying party in writing of the commencement thereof; provided that the failure to notify the indemnifying party shall not relieve it from any liability that it may have under the preceding paragraphs of this Section 9 except to the extent that it has been materially prejudiced (through the forfeiture of substantive rights or defenses) by such failure; and provided further that the failure to notify the indemnifying party shall not relieve it from any liability that it may have to an indemnified party otherwise than under the preceding paragraphs of this Section 9. In case any such action shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel satisfactory to such indemnified party (who shall not, except with the consent of the indemnified party, be counsel to the indemnifying party), and, after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such subsection for any legal expenses of other counsel or any other expenses, in each case subsequently incurred by such indemnified party, in connection with the defense thereof other than reasonable costs of investigation. No



indemnifying party shall, without the written consent of the indemnified party, effect the settlement or compromise of, or consent to the entry of any judgment with respect to, any pending or threatened action or claim in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified party is an actual or potential party to such action or claim) unless such settlement, compromise or judgment (i) includes an unconditional release of the indemnified party from all liability arising out of such action or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of any indemnified party.

(d) If the indemnification provided for in this Section 9 is unavailable to or insufficient to hold harmless an indemnified party under subsection (a) or (b) above in respect of any losses, claims, damages or liabilities (or actions in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (or actions in respect thereof) 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 from the offering of the Offered Securities. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law, then each indemnifying party shall contribute to such amount paid or payable by such indemnified party in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and the Underwriters on the other in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities (or actions in respect thereof), 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 shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company bear to the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover page of the Prospectus. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the 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 and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this subsection (d) 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 above in this subsection (d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions in respect thereof) referred to above in this subsection (d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this subsection (d), no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Offered Securities underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages which such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations in this subsection (d) to contribute are several in proportion to their respective underwriting obligations and not joint.

(e) The obligations of the Company under this Section 9 shall be in addition to any liability which the Company may otherwise have and shall extend, upon the same terms and conditions, to each employee, officer and director of each Underwriter and each person, if any, who controls any Underwriter within the meaning of the Act and each broker-dealer or other affiliate of any Underwriter; and the obligations of the Underwriters under this Section 9 shall be in addition to any liability which the respective Underwriters may otherwise have and shall extend, upon the same terms and conditions, to each officer and director of the Company and to each person, if any, who controls the Company within the meaning of the Act.

10. (a) If any Underwriter shall default in its obligation to purchase the Offered Securities which it has agreed to purchase hereunder at the Time of Delivery, you may in your discretion arrange for you or another party or other parties to purchase such Shares on the terms contained herein. If within thirty-six hours after such default by any Underwriter you do not arrange for the purchase of such Shares, then the Company shall be entitled to a further period of thirty-six hours within which to procure another party or other parties satisfactory to you to purchase such Shares on such terms. In the event that, within the respective prescribed periods, you notify the Company that you have so arranged for the purchase of such Shares, or the Company notifies you that it has so arranged for the purchase of such Shares, you or the Company shall have the right to postpone the Time of Delivery for a period of not more than seven days, in order to effect whatever changes may thereby be made necessary in the Registration Statement or the Prospectus, or in any other documents or arrangements, and the Company agrees to file promptly any amendments or supplements to the Registration Statement or the Prospectus which in your opinion may thereby be made necessary. The term "Underwriter" as used in this Agreement shall include any person substituted under this Section with like effect as if such person had originally been a party to this Agreement with respect to such Shares.

(b) If, after giving effect to any arrangements for the purchase of the Offered Securities of a defaulting Underwriter or Underwriters by you and the Company as provided in subsection (a) above, the aggregate number of such Shares which remains unpurchased does not exceed one-eleventh of the aggregate number of all the Offered Securities to be purchased at the Time of Delivery, then the Company shall have the right to require each non-defaulting Underwriter to purchase the number of shares which such Underwriter agreed to purchase hereunder at the Time of Delivery and, in addition, to require each non-defaulting Underwriter to purchase its pro rata share (based on the number of Shares which such Underwriter agreed to purchase hereunder) of the Offered Securities of such defaulting Underwriter or Underwriters for which such arrangements have not been made; but nothing herein shall relieve a defaulting Underwriter from liability for its default.

(c) If, after giving effect to any arrangements for the purchase of the Offered Securities of a defaulting Underwriter or Underwriters by you and the Company as provided in subsection (a) above, the aggregate number of such Offered Securities which remains unpurchased exceeds one-eleventh of the aggregate number of all the Offered Securities to be purchased at the Time of Delivery, or if the Company shall not exercise the right described in subsection (b) above to require non-defaulting Underwriters to purchase Shares of a defaulting Underwriter or Underwriters, then this Agreement shall thereupon terminate, without liability on the part of any non-defaulting Underwriter or the Company, except for the expenses to be borne by the Company and the Underwriters as provided in Section 7 hereof and the indemnity and contribution agreements in Section 9 hereof; but nothing herein shall relieve a defaulting Underwriter from liability for its default.

11. The respective indemnities, rights of contribution, agreements, representations, warranties and other statements of the Company and the several Underwriters, as set forth in this Agreement or made by or on behalf of them, respectively, pursuant to this Agreement, shall remain in full force and effect, regardless of any investigation (or any statement as to the results thereof) made by or on behalf of any Underwriter or any controlling person of any Underwriter, or the Company, or any officer or director or controlling person of the Company, and shall survive delivery of and payment for the Offered Securities.

12. If this Agreement shall be terminated pursuant to Section 10 hereof, the Company shall not then be under any liability to any Underwriter except as provided in Sections 7 and 9 hereof; but, if for any other reason, any Shares are not delivered by or on behalf of the Company as provided herein, the Company will reimburse the Underwriters through you for all out-of-pocket expenses approved in writing by you, including fees and disbursements of counsel, reasonably incurred by the Underwriters in making preparations for the purchase, sale and delivery of the Offered Securities not so delivered, but the Company shall then be under no further liability to any Underwriter except as provided in Sections 7 and 9 hereof.

13. In all dealings hereunder, you shall act on behalf of each of the Underwriters, and the parties hereto shall be entitled to act and rely upon any statement, request, notice or agreement on behalf of any Underwriter made or given by you jointly or by the Representatives on behalf of the Underwriters.

All statements, requests, notices and agreements hereunder shall be in writing, and (A) if to the Underwriters shall be delivered or sent by mail, telex or facsimile transmission to you as the representatives (i) in care of TD Securities (USA) LLC Attention: Head of Equity Capital Markets, Fax 646-562-1249 with a copy to the General Counsel, Fax 646-562-1130 and (ii) in care of Evercore Group L.L.C., Attention: ECM General Counsel, Fax 212-857-3101; and (B) if to the Company shall be delivered or sent by mail, telex or facsimile transmission to the address of the Company set forth on the cover of the Registration Statement, Attention: General Counsel; provided, however, that any notice to an Underwriter pursuant to Section 9(c) hereof shall be delivered or sent by mail, telex or facsimile transmission to such Underwriter at its address set forth in its Underwriters' Questionnaire, or telex constituting such Questionnaire, which address will be supplied to the Company by you upon request. Any such statements, requests, notices or agreements shall take effect upon receipt thereof.

In accordance with the requirements of the USA Patriot Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)), the Underwriters are required to obtain, verify and record information that identifies their respective clients, including the Company, which information may include the name and address of their respective clients, as well as other information that will allow the Underwriters to properly identify their respective clients.

14. This Agreement shall be binding upon, and inure solely to the benefit of, the Underwriters, the Company and, to the extent provided in Sections 9 and 11 hereof, the officers and directors of the Company and each person who controls the Company or any Underwriter, and their respective heirs, executors, administrators, successors and assigns, and no other person shall acquire or have any right under or by virtue of this Agreement. No purchaser of any of the Offered Securities from any Underwriter shall be deemed a successor or assign by reason merely of such purchase.

15. Time shall be of the essence of this Agreement. As used herein, the term "business day" means any day when the Commission's office in Washington, D.C. is open for business.

16. The Company acknowledges and agrees that (i) the purchase and sale of the Offered Securities pursuant to this Agreement is an arm's-length commercial transaction between the Company, on the one hand, and the several Underwriters, on the other, (ii) in connection therewith and with the process leading to such transaction each Underwriter is acting solely as a principal and not the agent or fiduciary of the Company, (iii) no Underwriter has assumed 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) or any other obligation to the Company except the obligations expressly set forth in this Agreement and (iv) the Company has consulted its own legal and financial advisors to the extent it deemed appropriate, and (v) 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. The Company agrees that it will not claim that the Underwriters, or any of them, has rendered advisory services of any nature or respect, or owes a fiduciary or similar duty to the Company, in connection with such transaction or the process leading thereto.

17. This Agreement supersedes all prior agreements and understandings (whether written or oral) between the Company and the Underwriters, or any of them, with respect to the subject matter hereof.

18. This Agreement and any transaction contemplated by this Agreement shall be governed by and construed in accordance with the laws of the State of New York without regard to principles of conflict of laws that would result in the application of any other law than the laws of the State of New York. The Company agrees that any suit or proceeding arising in respect of this Agreement or any transaction contemplated by this Agreement will be tried exclusively in the U.S. District Court for the Southern District of New York or, if that court does not have subject matter jurisdiction, in any state court located in The City and County of New York and the Company agrees to submit to the jurisdiction of, and to venue in, such courts.

19. The Company and each of the Underwriters hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

20. This Agreement may be executed by any one or more of the parties hereto in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including any electronic signature covered by the U.S. federal E-SIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., [www.docusign.com](http://www.docusign.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.

21. Notwithstanding anything herein to the contrary, the Company is authorized to disclose to any persons the U.S. federal and state income tax treatment and tax structure of the potential transaction and all materials of any kind (including tax opinions and other tax analyses) provided to the Company relating to that treatment and structure, without the Underwriters imposing any limitation of any kind. However, any information relating to the tax treatment and tax structure shall remain confidential (and the foregoing sentence shall not apply) to the extent necessary to enable any person to comply with securities laws. For this purpose, "tax structure" is limited to any facts that may be relevant to that treatment.

22. Recognition of the U.S. Special Resolution Regimes.

(a) In the event that any Underwriter that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, 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.

(c) As used in this section:

“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).

“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. § 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).

“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.

“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.

*[signature page follows]*

If the foregoing is in accordance with your understanding, please sign and return to us one for the Company and each of the Representatives plus one for each counsel counterparts hereof, and upon the acceptance hereof by you, on behalf of each of the Underwriters, this letter and such acceptance hereof shall constitute a binding agreement between each of the Underwriters and the Company. It is understood that your acceptance of this letter on behalf of each of the Underwriters is pursuant to the authority set forth in a form of Agreement among Underwriters, the form of which shall be submitted to the Company for examination upon request, but without warranty on your part as to the authority of the signers thereof.

Very truly yours,

**GRITSTONE BIO, INC.**

By: /s/ Andrew Allen

Name: Andrew Allen

Title: President and Chief Executive Officer

*[Signature Page to Underwriting Agreement]*

Accepted as of the date hereof:

**TD SECURITIES (USA) LLC**

By: /s/ Bill Follis  
Name: Bill Follis  
Title: Managing Director

**EVERCORE GROUP L.L.C.**

By: /s/ Gloria Tang  
Name: Gloria Tang  
Title: Managing Director

On behalf of each of the Underwriters



**SCHEDULE I**

| <b><u>Underwriter</u></b> | <b><u>Number of<br/>Shares<br/>to be<br/>Purchased</u></b> | <b><u>Number of<br/>Pre-Funded<br/>Warrants<br/>to be<br/>Purchased</u></b> |
|---------------------------|--|---|
| TD Securities (USA) LLC   | 4,479,167  | 7,167,145   |
| Evercore Group L.L.C.     | 3,854,166  | 6,167,077   |
| Total                     | <u>8,333,333</u>   | <u>13,334,222</u>   |

**SCHEDULE II**

(a) Issuer Free Writing Prospectuses not included in the Pricing Disclosure Package:

None.

(b) Additional Documents Incorporated by Reference:

None.

(c) Information other than the Pricing Prospectus that comprise the Pricing Disclosure Package:

The public offering price per Share and accompanying Common Warrant is \$1.50.

The public offering price per Pre-Funded Warrant and accompanying Common Warrant is \$1.4999.

The number of Shares purchased by the Underwriters is 8,333,333.

The number of Pre-Funded Warrants purchased by the Underwriters is 13,334,222.

The number of shares of Common Stock underlying the Common Warrants is 21,667,555; exercise price of \$1.65 per underlying share of Common Stock (or Pre-Funded Warrant in lieu thereof); 12-month term.

(d) Written Testing-the-Waters Communications:

None.

---

**SCHEDULE III**

**Subsidiaries**

Gritstone Biopharmaceuticals, UK Ltd.

ANNEX I

**Form of Lock-Up Agreement**

**Gritstone bio, Inc.**

\_\_\_\_\_, 2024

Cowen and Company, LLC  
Evercore Group L.L.C.

c/o Cowen and Company, LLC (“**Cowen**”)  
599 Lexington Avenue  
New York, NY 10022

c/o Evercore Group L.L.C. (“**Evercore**”)  
55 East 52nd Street  
New York, NY 10055

Re: Gritstone bio, Inc. - Lock-Up Agreement

Ladies and Gentlemen:

The undersigned understands that you propose to assist Gritstone bio, Inc., a Delaware corporation (the “**Company**”), in conducting an offering of shares (the “**Shares**”) of the Company’s common stock, par value \$0.0001 per share (the “**Common Stock**”), pursuant to a Registration Statement on Form S-3 (the “**Registration Statement**”) filed with the U.S. Securities and Exchange Commission (the “**Offering**”) or a private placement of the Shares (such transaction, the “**Transaction**”).

In consideration of the foregoing, and of other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the undersigned agrees that, during the period beginning on the date hereof and continuing to, and including, the date 60 days after the date of execution of the definitive agreement in connection with the Transaction (the “**Lock-Up Period**”), the undersigned shall not, and shall not cause or direct any of its affiliates to, without the prior written consent of Cowen and Evercore, and subject to the exceptions set forth in this Lock-Up Agreement, (i) offer, sell, contract to sell, pledge, grant any option to purchase, lend or otherwise dispose of any shares of Common Stock, or any options or warrants to purchase any shares of Common Stock, or any securities convertible into, exchangeable for or that represent the right to receive shares of Common Stock (such options, warrants or other securities, collectively, “**Derivative Instruments**”), including without limitation any such shares or Derivative Instruments now owned or hereafter acquired by the undersigned, (ii) engage in any hedging or other transaction or arrangement (including, without limitation, any short sale or the purchase or sale of, or entry into, any put or call option, or combination thereof, forward, swap or any other derivative transaction or instrument, however described or defined) which is designed to or which reasonably could be expected to lead to or result in a sale, loan, pledge or other disposition (whether by the undersigned or someone other than the undersigned), or transfer of any of the economic consequences of ownership, in whole or in part, directly or indirectly, of any shares of Common Stock or Derivative Instruments, whether any such transaction or arrangement (or instrument provided for thereunder) would be settled by delivery of Common Stock or other securities, in cash or otherwise (any such sale, loan, pledge or other disposition, or transfer of economic consequences, a “**Transfer**”) or (iii) otherwise

publicly announce any intention to engage in or cause any action or activity described in clause (i) above or transaction or arrangement described in clause (ii) above. The undersigned represents and warrants that the undersigned is not, and has not caused or directed any of its affiliates to be or become, currently a party to any agreement or arrangement that provides for, is designed to or which reasonably could be expected to lead to or result in any Transfer during the Lock-Up Period. For the avoidance of doubt, the undersigned agrees that the foregoing provisions shall be equally applicable to any Shares the undersigned may purchase in the Transaction.

If the undersigned is not a natural person, the undersigned represents and warrants that no single natural person, entity or “group” (within the meaning of Section 13(d)(3) of the Securities Exchange Act of 1934, as amended (the “*Exchange Act*”), other than a natural person, entity or “group” (as described above) that has executed a Lock-Up Agreement in substantially the same form as this Lock-Up Agreement, beneficially owns, directly or indirectly, 50% or more of the common equity interests, or 50% or more of the voting power, in the undersigned.

Notwithstanding the foregoing, the undersigned may, without the consent of Cowen and Evercore:

(a) Transfer or dispose of the undersigned’s Shares:

- (i) as a *bona fide* gift or gifts, provided that the donee or donees thereof agree to be bound in writing by the restrictions set forth herein;
- (ii) to any trust for the direct or indirect benefit of the undersigned or the immediate family (as defined below) of the undersigned, provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and provided further that any such transfer shall not involve a disposition for value;
- (iii) if the undersigned is a corporation, partnership, limited liability company, trust or other business entity (A) to another corporation, partnership, limited liability company, trust or other business entity that is an affiliate (as defined in Rule 405 promulgated under the Securities Act of 1933, as amended) of the undersigned or the immediate family of the undersigned, or to any investment fund or other entity controlled or managed by the undersigned, or (B) as part of a distribution, transfer or disposition without consideration by the undersigned to its stockholders, partners, members, beneficiaries or other equity holders; provided, however, that in the case of any transfer or disposition contemplated by clauses (A) or (B) of this paragraph (iii), (x) it shall be a condition to the transfer or disposition that the transferee execute an agreement stating that the transferee is receiving and holding such securities subject to the restrictions on transfer set forth in this Lock-Up Agreement and there shall be no further transfer of such securities except in accordance with this Lock-Up Agreement, and (y) any such transfer shall not involve a disposition for value; or
- (iv) by will, other testamentary document or intestate succession upon the death of the undersigned, provided (x) that the legatee, heir or other transferee agrees to be bound in writing by the restrictions on transfer set forth in this Lock-Up Agreement, and (y) any such transfer shall not involve a disposition for value;

- (b) exercise on a cash basis an option to purchase shares of Common Stock granted under the Company's 2015 Equity Incentive Plan, as amended, 2018 Incentive Award Plan, 2018 Employee Stock Purchase Plan, 2021 Employment Inducement Incentive Plan or any stock incentive plan or stock purchase plan of the Company described in the Company's filings under the Exchange Act (such plans, collectively, "**Equity Plans**"), provided that the underlying shares of Common Stock shall continue to be subject to the restrictions on transfer set forth in this Lock-Up Agreement, and provided if the undersigned is required to file a report under Section 16 of the Exchange Act, reporting a change in the beneficial ownership of the Undersigned's Shares during the Lock-Up Period, the undersigned shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this paragraph (b) and no other public filing or announcement shall be required or shall be made voluntarily in connection with such exercise;
- (c) establish a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of the undersigned's Shares, provided that such plan does not provide for any transfers of Common Stock during the Lock-Up Period and any required public disclosure, announcement or filing under the Exchange Act made by the Company or any person regarding the establishment or amendment of such plan during the Lock-Up Period shall include a statement that the undersigned is not permitted to transfer, sell or otherwise dispose of securities under such plan during the Lock-Up Period in contravention of this Lock-Up Agreement, and no public announcement, report or filing under the Exchange Act, or any other public filing, report or announcement, shall be voluntarily made regarding the establishment or amendment of such plan during the Lock-Up Period;
- (d) transfer or dispose of the undersigned's Shares under a trading plan pursuant to Rule 10b5-1 under the Exchange Act that is existing on the date hereof which has been provided or otherwise disclosed to Cowen and Evercore or their legal counsel, provided that, if the undersigned is required to file a report under Section 16 of the Exchange Act reporting a change in the beneficial ownership of the Undersigned's Shares during the Lock-Up Period, the undersigned shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this clause (d) and no other public filing or announcement shall be required or shall be made voluntarily in connection with such transfer;
- (e) transfer or dispose of the undersigned's Shares (i) acquired in the Transaction if the undersigned is not an officer or director of the Company, or (ii) on the open market following the Transaction, provided that no filing under the Exchange Act or other public announcement shall be required or shall be made voluntarily in connection with such transfer or disposition during the Lock-Up Period;
- (f) transfer or surrender to the Company the undersigned's Shares (i) pursuant to any contractual arrangement that provides the Company with an option to repurchase such shares of Common Stock in connection with the termination of the undersigned's employment or other service relationship with the Company, provided if the undersigned is required to file a report under Section 16 of the Exchange Act reporting a change in the beneficial ownership of the Undersigned's Shares during the Lock-Up Period, the undersigned shall clearly indicate in the footnotes thereto that the filing relates to the termination of the undersigned's employment or other services, and provided further that such contractual arrangement (or a form thereof)

is described in or filed as an exhibit to the Company's filings under the Exchange Act (and in the Registration Statement, or any other document incorporated by reference in the Registration Statement, in event of an Offering); (ii) to cover tax withholdings upon a vesting event of any equity award granted under any Equity Plan, provided that any shares of Common Stock issued upon vesting of such equity award (other than shares withheld to cover tax withholdings) shall continue to be subject to the restrictions set forth herein until the expiration of the Lock-Up Period and any required filing under Section 16 of the Exchange Act shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this clause (ii) and no other public filing or announcement shall be required or shall be made voluntarily in connection with such transfer or surrender; or (iii) in connection with the "cashless" exercise by the undersigned of an option to purchase shares of Common Stock granted under any Equity Plan (the term "cashless" exercise meaning the surrender of a portion of the option shares to the Company to cover payment of the exercise price), provided that any shares of Common Stock issued upon exercise of such option (other than the shares surrendered to cover payment of the exercise price) shall continue to be subject to the restrictions set forth herein until the expiration of the Lock-Up Period, and provided if the undersigned is required to file a report under Section 16 of the Exchange Act reporting a change in the beneficial ownership of the Undersigned's Shares during the Lock-Up Period, the undersigned shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this clause (iii) and no other public filing or announcement shall be required or shall be made voluntarily in connection with such exercise; and

- (g) transfer or dispose of the undersigned's Shares by operation of law pursuant to a qualified domestic order or in connection with a divorce settlement or other court order, provided that the recipient of such securities shall execute and deliver to Cowen and Evercore a lock-up letter in substantially the form of this Lock-Up Agreement, and provided further that any required filing under Section 16 of the Exchange Act shall indicate in the footnotes thereto that the filing relates to the circumstances described in this paragraph (g) and no other public announcement shall be required or shall be made voluntarily in connection with such transfer or disposition.

In addition, with respect to paragraphs (a)(i)-(iv) above, it shall be a condition to such transfer or disposition that no filing under the Exchange Act nor any other public filing or disclosure of such transfer or disposition by or on behalf of the undersigned, reporting a change in the beneficial ownership of the undersigned's Shares, shall be required or made until after the expiration of the Lock-Up Period (other than a filing on Schedule 13F or 13G that is required to be filed during the Lock-Up Period).

Further, this Lock-Up Agreement shall not restrict any sale, disposal or transfer of the undersigned's Shares to a *bona fide* third party pursuant to a tender offer for securities of the Company or any merger, consolidation or other business combination involving a Change of Control (as defined below) of the Company occurring after the settlement of the Transaction, that, in each case, has been approved by the board of directors of the Company; provided that all of the undersigned's Shares subject to this Lock-Up Agreement that are not so transferred, sold, tendered or otherwise disposed of remain subject to this Lock-Up Agreement; and provided, further, that it shall be a condition of transfer, sale, tender or other disposition that if such tender offer or other transaction is not completed, any of the undersigned's Shares subject to this Lock-Up Agreement

shall remain subject to the restrictions set forth herein. For the purposes of this paragraph, “**Change of Control**” means the consummation of any *bona fide* third party tender offer, merger, consolidation or other similar transaction, the result of which is that any “person” (as defined in Section 13(d)(3) of the Exchange Act), or group of persons, other than the Company or its subsidiaries, becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 of the Exchange Act) of at least 100% of the total voting power of the voting share capital of the Company.

For purposes of this Lock-Up Agreement, “**immediate family**” means any relationship by blood, marriage or adoption, not more remote than first cousin.

The undersigned now has, and, except as contemplated by paragraphs (a) through (f) above, for the duration of this Lock-Up Agreement will have, good and marketable title to the undersigned’s Shares, free and clear of all liens, encumbrances, and claims whatsoever. The undersigned also agrees and consents to the entry of stop transfer instructions with the Company’s transfer agent and registrar against the transfer of the undersigned’s Shares except in compliance with the foregoing restrictions.

Notwithstanding anything to the contrary contained herein, this Lock-Up Agreement will automatically terminate and the undersigned will be released from all of his, her or its obligations hereunder upon the earliest to occur, if any, of (i) prior to the execution of the definitive agreement in connection with the Transaction, the Company advises Cowen and Evercore in writing that it has determined not to proceed with the Transaction, (ii) in event of an Offering, the Company files an application to withdraw the registration statement related to the Offering, (iii) the definitive agreement in connection with the Transaction is executed but is terminated (other than the provisions thereof which survive termination) prior to payment for and delivery of the Shares to be sold thereunder, or (iv) April 30, 2024, in the event that the definitive agreement in connection with the Transaction has not been executed by such date.

The undersigned acknowledges and agrees that Cowen and Evercore, have not provided any recommendation or investment advice nor have the Underwriters solicited any action from the undersigned with respect to the Transaction and the undersigned has consulted their own legal, accounting, financial, regulatory and tax advisors to the extent deemed appropriate. The undersigned further acknowledges and agrees that, in the event of an Offering, Cowen, Evercore, and any other underwriters may provide certain Regulation Best Interest and Form CRS disclosures or other related documentation to you in connection with the Offering, they are not making a recommendation to the undersigned to participate in the Offering or sell any shares at the price determined in the Offering, and nothing set forth in such disclosures or documentation is intended to suggest that any of them is making such a recommendation.

The undersigned understands that the Company, Cowen and Evercore are relying upon this Lock-Up Agreement in proceeding toward consummation of the Transaction. The undersigned further understands that this Lock-Up Agreement is irrevocable and shall be binding upon the undersigned’s heirs, legal representatives, successors, and assigns.

The undersigned further acknowledges and agrees that Cowen may assign its rights and obligations under this Agreement to any other affiliated registered broker-dealer.

This Lock-Up Agreement and any claim, controversy or dispute arising under or related to this Lock-Up Agreement shall be governed by and construed in accordance with the laws of the State of New York.

*[signature page follows]*



Very truly yours,

**IF AN INDIVIDUAL:**

By: \_\_\_\_\_  
*(duly authorized signature)*

Name: \_\_\_\_\_  
*(please print full name)*

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

E-mail: \_\_\_\_\_

**IF AN ENTITY:**

\_\_\_\_\_  
*(please print complete name of entity)*

By: \_\_\_\_\_  
*(duly authorized signature)*

Name: \_\_\_\_\_  
*(please print full name)*

Title: \_\_\_\_\_  
*(please print full title)*

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

E-mail: \_\_\_\_\_

**WARRANT TO PURCHASE COMMON STOCK OR PRE-FUNDED WARRANTS  
GRITSTONE BIO, INC.**

Warrant Shares: \_\_\_

Initial Exercise Date: April [•], 2024

THIS WARRANT TO PURCHASE COMMON STOCK OR PRE-FUNDED WARRANTS (the “Warrant”) certifies that, for value received, or its assigns (the “Holder”) is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the date hereof (the “Initial Exercise Date”) and on or prior to 5:00 p.m. (New York City time) on April [•], 2025<sup>1</sup> (the “Termination Date”) but not thereafter, to subscribe for and purchase from Gritstone bio, Inc., a company incorporated under the laws of the State of Delaware (the “Company”), up to shares of Common Stock (as subject to adjustment hereunder, the “Warrant Shares”) or Pre-Funded Warrants (as defined below) to purchase the same number of Warrant Shares (as subject to adjustment as provided herein). The purchase price of one share of Common Stock or one Pre-Funded Warrant under this Warrant shall be equal to the applicable Exercise Price, as defined in Section 2(b).

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

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

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

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

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

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

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

<sup>1</sup> NTD: To be 12 months after the initial issuance date.

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

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

“Pre-Funded Warrant” means a pre-funded warrant to purchase a number of shares of Common Stock equal to the number of Warrant Shares as to which this Warrant is being exercised in the form of a Pre-Funded Warrant attached as Exhibit A hereto.

“Pre-Funded Warrant Exercise Price” means \$0.0001 per share of Common Stock.

“Registration Statement” means the Company’s registration statement on Form S-3, as amended (File No. 333-263455).

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

“Trading Day” means any weekday on which the Trading Market is open for trading. If the Common Stock is not listed or admitted for trading, “Trading Day” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in New York City are authorized or required by law or other governmental action to close.

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

“Transfer Agent” means Equiniti Trust Company, LLC, the current transfer agent of the Company, with a mailing address of 48 Wall Street, 22<sup>nd</sup> Floor, New York, NY 10005, Attention: Reorg Department, and any successor transfer agent of the Company.

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

“Warrant Agent” means initially the Company, but upon ten (10) days’ notice to the Holder, the Company may appoint a new warrant agent. Any corporation into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new warrant agent shall be a party or any corporation to which the Company or any new warrant agent transfers substantially all of its corporate trust or shareholders services business shall be a successor warrant agent under this Warrant without any further act. Any such successor warrant agent shall promptly cause notice of its succession as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder’s last address as shown on the Warrant Register.

“Warrants” means this Warrant and the other Common Stock purchase warrants issued by the Company pursuant to the prospectus supplement filed by the Company, dated April 1, 2024, exclusive of the Pre-Funded Warrants (as described in the Registration Statement).

## Section 2. Exercise.

a) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company of a duly executed e-mail attachment of the Notice of Exercise in the form annexed hereto (the “Notice of Exercise”). Within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined in Section 2(d)(i) herein) following the date of exercise as aforesaid, the Holder shall deliver the aggregate Exercise Price for the Warrant Shares (or, in the event that this Warrant is exercised for Pre-Funded Warrants, the Exercise Price minus the Pre-Funded Warrant Exercise Price) specified in the applicable Notice of Exercise by wire transfer unless the cashless exercise procedure specified in Section 2(c) below is specified in the applicable Notice of Exercise. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise be required.

Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares or Pre-Funded Warrants available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date on which the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares or Pre-Funded Warrants available hereunder shall have the effect of lowering the outstanding number of Warrant Shares or Pre-Funded Warrants purchasable hereunder in an amount equal to the applicable number of Warrant Shares or Pre-Funded Warrants purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares and Pre-Funded Warrants purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one (1) Business Day of receipt of such notice. The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares or Pre-Funded Warrants hereunder, the number of Warrant Shares or Pre-Funded Warrants available for purchase hereunder at any given time may be less than the amount stated on the face hereof.

b) Exercise Price. The exercise price per share of Common Stock under this Warrant shall be \$[•], subject to adjustment hereunder (the “Exercise Price”). In the event this Warrant is exercised for Pre-Funded Warrants, the exercise price per Pre-Funded Warrant under this Warrant shall be \$[•], which represents the Exercise Price minus the Pre-Funded Warrant Exercise Price, subject to adjustment hereunder.

c) Cashless Exercise. Notwithstanding anything to the contrary set forth herein, if at the time of exercise hereof there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of the Warrant Shares or Pre-Funded Warrants to the Holder, then this Warrant may also be exercised, in whole or in part, at such time by means of a “cashless exercise” in which the Holder shall be entitled to receive a number of Warrant Shares or Pre-Funded Warrants equal to the quotient obtained by dividing [(A-B) (X)] by (A), where:

(A) = as applicable: (i) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is (1) both executed and delivered pursuant to Section 2(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 2(a) hereof on a Trading Day prior to the opening of “regular trading hours” (as defined in Rule 600(b) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) at the option of the Holder, either (y) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise or (z) the Bid Price of the Common Stock on the principal Trading Market as reported by Bloomberg L.P. (“Bloomberg”) as of the time of the Holder’s execution of the applicable Notice of Exercise if such Notice of Exercise is executed during “regular trading hours” on a Trading Day and is delivered within two (2) hours thereafter (including until two (2) hours after the close of “regular trading hours” on a Trading Day) pursuant to Section 2(a) hereof or (iii) the VWAP on the date of the applicable Notice of Exercise if the date of such Notice of Exercise is a Trading Day and such Notice of Exercise is both executed and delivered pursuant to Section 2(a) hereof after the close of “regular trading hours” on such Trading Day;

(B) = the Exercise Price of this Warrant (or, in the case of a cashless exercise for Pre-Funded Warrants, the Exercise Price minus the Pre-Funded Warrant Exercise Price), as adjusted hereunder; and

(X) = the number of Warrant Shares (or Pre-Funded Warrants, as applicable) that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

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

d) Mechanics of Exercise.

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

ii. Delivery of Pre-Funded Warrants Upon Exercise. If this Warrant is being exercised for Pre-Funded Warrants, the Company shall issue Pre-Funded Warrants to purchase a number of shares of Common Stock with respect to which this Warrant is being exercised by the date that is the latest of (i) five (5) Business Days after delivery to the Company of the Notice of Exercise, (ii) five (5) Business Days after delivery of the aggregate Exercise Price minus the Pre-Funded Warrant Exercise Price to the Company and (iii) the number of Trading Days comprising the Standard Settlement Period after delivery to the Company of the Notice of Exercise (such date, the “Pre-Funded Warrant Delivery Date”).

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

iv. Rescission Rights. If the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares or the Company fails to provide evidence of the executed Pre-Funded Warrants pursuant to Section 2(d)(i) or Section 2(d)(ii), as applicable, by the Warrant Share Delivery Date or the Pre-Funded Warrant Delivery Date, as applicable, then the Holder will have the right to rescind such exercise, and the Company shall return all consideration paid by the Holder for such Warrant Shares or Pre-Funded Warrants, as applicable, upon such rescission. Notwithstanding anything herein to the contrary, the Company shall not be required to make any cash payments to the Holder in lieu of issuance of the Warrant Shares or Pre-Funded Warrants.

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

vi. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price, or the Exercise Price minus the Pre-Funded Warrant Exercise Price, as applicable, or round down to the nearest whole share.

vii. Charges, Taxes and Expenses. Issuance of Warrant Shares or Pre-Funded Warrants shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such Warrant Shares or Pre-Funded Warrants, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares or Pre-Funded Warrants shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event that Warrant Shares or Pre-Funded Warrants are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto. The Company shall pay all Transfer Agent fees required for same-day processing of any Notice of Exercise and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Warrant Shares.

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

e) Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise (except in the case of an exercise for Pre-Funded Warrants) to the extent that immediately prior to or after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's Affiliates (such Persons, "Attribution Parties")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case

subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination and shall have no liability for exercises of this Warrant that are not in compliance with the Beneficial Ownership Limitation (other than to the extent that information on the number of outstanding shares of Common Stock of the Company is provided by the Company and relied upon by the Holder). In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder and the Company shall have no obligation to verify or confirm the accuracy of such determination and shall have no liability for exercises of this Warrant that are not in compliance with the Beneficial Ownership Limitation. For purposes of this Section 2(e), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Company shall within one Trading Day confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% (or, upon election by a Holder prior to the issuance of any Warrants, 9.99%, 14.99% or 19.99%) of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 9.99%, 14.99% or 19.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61st day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2(e) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

### Section 3. Certain Adjustments.

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



b) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) other than dividends or distributions subject to Section 3(a) (a “Distribution”), other than a reclassification as to which Section 3(c) applies, then in each such case, at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, to the extent that the Holder’s right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

c) Fundamental Transactions. If, at any time while this Warrant is outstanding (i) the Company effects any merger or consolidation of the Company with or into another Person, in which the Company is not the surviving entity and in which the stockholders of the Company immediately prior to such merger or consolidation do not own, directly or indirectly, at least 50% of the voting power of the surviving entity immediately after such merger or consolidation, (ii) the Company effects any sale, transfer or disposition to another Person of all or substantially all of its assets in one transaction or a series of related transactions, (iii) pursuant to any tender offer or exchange offer (whether by the Company or another Person), holders of capital stock tender shares representing more than 50% of the voting power of the capital stock of the Company and the Company or such other Person, as applicable, accepts such tender for payment, (iv) the Company consummates a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than the 50% of the voting power of the capital stock of the Company (except for any such transaction in which the stockholders of the Company immediately prior to such transaction maintain, in substantially the same proportions, the voting power of such Person immediately after the transaction) or (v) the Company effects any reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 3(a) above) (in any such case, a “Fundamental Transaction”), then following such Fundamental Transaction the Holder shall have the right to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of Warrant Shares then issuable upon exercise in full of this Warrant without regard to any limitations on exercise contained herein (the “Alternate Consideration”). The Company shall not effect any Fundamental Transaction in which the Company is not the surviving entity or the Alternate Consideration includes securities of another Person unless (i) the Alternate Consideration is solely cash and the Company provides for the simultaneous “cashless exercise” of this Warrant pursuant to Section 2 above or (ii) prior to or simultaneously with the consummation thereof, any successor to the Company, surviving entity or other Person (including any purchaser of assets of the Company) shall assume the obligation to deliver to the Holder such Alternate Consideration as, in accordance with the foregoing provisions, the Holder may be entitled to receive, and the other obligations under this Warrant. The provisions of this paragraph (c) shall similarly apply to subsequent transactions analogous of a Fundamental Transaction type.

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

e) Notice to Holder.

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

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

Section 4. Transfer of Warrant.

a) Transferability. The Holder may not transfer or assign this Warrant and all rights hereunder, in whole or in part unless such transfer is to the Holder's successors and Affiliates. Upon transfer to a successor or Affiliate, the Holder shall surrender this Warrant at the principal office of the Company or its designated agent, and provide a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, the Holder shall surrender this Warrant to the Company within three (3) Trading Days of the date on which the Holder delivers an assignment form to the Company assigning this Warrant in full. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares or Pre-Funded Warrants without having a new Warrant issued.

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

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

#### Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i), except as expressly set forth in Section 3. Without limiting any rights of a Holder to receive Warrant Shares on a “cashless exercise” pursuant to Section 2(c) or to receive cash payments pursuant to Section 2(d)(i) and Section 2(d)(iv) herein, in no event shall the Company be required to net cash settle an exercise of this Warrant.

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

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

#### d) Authorized Shares.

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

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

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

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

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

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

h) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Exercise, shall be in writing and delivered personally, or via e-mail, or sent by a nationally recognized overnight courier service, addressed to the Company, at Gritstone bio, Inc. 5959 Horton Street, Suite 300, Emeryville, CA 94608, Attention: Chief Executive Officer; General Counsel; with a copy to (which shall not constitute notice) Fenwick & West LLP, 401 Union Street, 5th Fl., Seattle, WA 98101, Attention: Robert Freedman and Ryan Mitteness or such other address as the Company may specify for such purposes by notice to the Holders. Any and all notices or other communications or deliveries to be provided by the Company hereunder shall be in writing and delivered personally, by facsimile or e-mail, or sent by a nationally recognized overnight courier service addressed to each Holder at the e-mail address or address of such Holder appearing on the books of the Company. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via e-mail at the e-mail address set forth in this Section prior to 5:30 p.m. (New York City time) on any date, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via e-mail at the e-mail address set forth in this Section on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Company or any subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K.

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

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

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

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company, on the one hand, and the Holder or the beneficial owner of this Warrant, on the other hand.

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

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

*[signature page follows]*

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

**GRITSTONE BIO, INC.**

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

**NOTICE OF EXERCISE**

TO: GRITSTONE BIO, INC.

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

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

in lawful money of the United States; or

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

(3) Please issue said [Warrant Shares][Pre-Funded Warrants] in the name of the undersigned or in such other name as is specified below:

\_\_\_\_\_

If permitted by the terms of the Warrant, the Warrant Shares shall be delivered to the following DWAC Account Number:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

[SIGNATURE OF HOLDER]

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

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

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

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

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

**ASSIGNMENT FORM**

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

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

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

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

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

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

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

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

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



---

**EXHIBIT A**

**FORM OF PRE-FUNDED WARRANT**

*[see attached.]*

DATE OF ISSUANCE: [•], 2024

EXPIRATION DATE: The first date on which no shares of Common Stock are issuable upon a cash exercise of this Warrant

PRE-FUNDED WARRANT TO PURCHASE SHARES OF  
COMMON STOCK OF  
GRITSTONE BIO, INC.

This Warrant (the “Warrant”) is issued by Gritstone bio, Inc., a Delaware corporation (the “Company”), to [•], or its registered assigns (including any successors or assigns, the “Holder”), and is subject to the terms and conditions set forth below. The Warrants are offered and sold by the Company pursuant to the Prospectus Supplement, dated April 1, 2024 (as described in the Registration Statement). “Registration Statement” means the Company’s registration statement on Form S-3, as amended (File No. 333-263455). As of the Date of Issuance the Warrant Shares are issuable under the Registration Statement. Accordingly, the Warrant and, assuming issuance pursuant to the Registration Statement or an exchange meeting the requirements of Section 3(a)(9) of the Securities Act of 1933, as amended (the “Securities Act”) as in effect on the Date of Issuance, the Warrant Shares, are not “restricted securities” under Rule 144 promulgated under the Securities Act as of the Date of Issuance.

## 1. EXERCISE OF WARRANT.

(a) Number and Exercise Price of Warrant Shares; Expiration Date. Subject to the terms and conditions set forth herein, the Holder is entitled to purchase from the Company up to [•] shares of the Company’s Common Stock, \$0.0001 par value per share (the “Common Stock”) (as adjusted from time to time pursuant to the provisions of this Warrant) (the “Warrant Shares”) until this Warrant is exercised in full. The aggregate exercise price of this Warrant of \$[•], except for a nominal exercise price of \$0.0001 per Warrant Share, was paid to the Company on or prior to the date of issuance of this Warrant, and, consequently, no additional consideration (other than the nominal exercise price of \$0.0001 per Warrant Share) shall be required to be paid by the Holder to effect any exercise of this Warrant. The Holder shall not be entitled to return or refund of all, or any portion, of such pre-paid aggregate exercise price under any circumstance or for any reason whatsoever, including in the event this Warrant shall not have been exercised prior to the Expiration Date. The remaining unpaid exercise price per share of Common Stock under this Warrant shall be \$0.0001, subject to adjustment as provided herein (the “Exercise Price”).

(b) Method of Exercise. While this Warrant remains outstanding and exercisable in accordance with Section 1(a) above, the Holder may exercise this Warrant in whole or in part in accordance with Section 5 by either:

(1) wire transfer to the Company or cashier’s check drawn on a United States bank made payable to the order of the Company, or

(2) exercising of the right to credit the Exercise Price against the Fair Market Value (as defined below) of the Warrant Shares (as defined below) at the time of exercise (the “Net Exercise”) pursuant to Section 1(c).

(c) Net Exercise. At any time the Holder may elect to exercise this Warrant by Net Exercise pursuant to this Section 1(c). At any time that this Warrant may be exercised by Net Exercise pursuant to this Section 1(c), if the Company shall receive written notice from the Holder at the time of exercise of this Warrant that the Holder elects to Net Exercise the Warrant, the Company shall deliver to such Holder (without payment by the Holder of any exercise price in cash) that number of Warrant Shares computed using the following formula:

$$X = \frac{Y(A - B)}{A}$$

Where

X = The number of Warrant Shares to be issued to the Holder.

Y = The number of Warrant Shares purchasable under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being cancelled (at the date of such calculation).

A = The Fair Market Value of one share of Common Stock (at the date of such calculation).

B = The Exercise Price (as adjusted to the date of such calculations).

The “Fair Market Value” of one share of Common Stock shall mean (x) the last reported sale price and, if there are no sales, the last reported bid price, of the Common Stock on the last trading day prior to the date of exercise on the trading market on which the Common Stock is listed as reported by Bloomberg Financial Markets (or a comparable reporting service of national reputation selected by the Company and reasonably acceptable to the Holder if Bloomberg Financial Markets is not then reporting sales prices of the Common Stock) (collectively, “Bloomberg”), or (y) if the foregoing does not apply, the last sales price of such security in the over-the-counter market on the pink sheets by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.) (the “pink sheets”) or bulletin board for such security as reported by Bloomberg, or if no sales price is so reported, the last bid price of the Common Stock as reported by Bloomberg or (z) if the fair market value cannot be calculated on any of the foregoing bases, the fair market value determined by the Company’s Board of Directors in good faith.

For purposes of Rule 144 promulgated under the Securities Act, it is intended, understood and acknowledged that the Warrant Shares issued in such a “net exercise” transaction shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the Date of Issuance (provided that the United States Securities and Exchange Commission continues to take the position that such treatment is proper at the time of such exercise). If Warrant Shares are issued in such a net exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the Securities Act, the Warrant Shares shall take on the registered characteristics of the Warrants being exercised. The Company agrees not to take any position contrary to this Section 1(c). Except as otherwise set forth herein, in no event will the exercise of this Warrant be settled in cash.

(d) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed.

(e) Deemed Exercise. In the event that immediately prior to the close of business on the Expiration Date, the Fair Market Value of one share of Common Stock (as determined in accordance with Section 1(c) above) is greater than the then applicable Exercise Price, this Warrant shall be deemed to be automatically exercised on a net exercise issue basis pursuant to Section 1(c) above, and the Company shall deliver the applicable number of shares of Common Stock to the Holder pursuant to the provisions of Section 1(c) above and this Section 1(e). Notwithstanding anything to the contrary contained in this Section 1(e), to the extent that the Holder’s right to receive shares of Common Stock upon such a net exercise would result in the Holder and its affiliates exceeding the Beneficial Ownership Limitation (as defined below), if applicable pursuant to Section 5(c) herein, then the Holder shall not be entitled to such shares of Common Stock to the extent of the Beneficial Ownership Limitation (and shall not be entitled to beneficial ownership of such shares of Common Stock (and beneficial ownership) to the extent of any such excess) and the portion of such shares of Common Stock shall be held in abeyance for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and its affiliates exceeding the Beneficial Ownership Limitation, at which time or times the Holder shall be granted such shares of Common Stock to the same extent as if there had been no such limitation).

## 2. CERTAIN ADJUSTMENTS.

(a) Adjustment of Number of Warrant Shares and Exercise Price. The number and kind of Warrant Shares purchasable upon exercise of this Warrant and the Exercise Price shall be subject to adjustment from time to time as follows:

(1) Subdivisions, Combinations and Other Issuances. If the Company shall at any time after the Date of Issuance but prior to the Expiration Date subdivide its shares of capital stock of the same class as the Warrant Shares, by split-up or otherwise, or combine such shares of capital stock, or issue additional shares of capital stock as a dividend with respect to any shares of such capital stock, the number of Warrant Shares issuable on the exercise of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination. Appropriate adjustments shall also be made to the Exercise Price payable per share, but the aggregate Exercise Price payable for the total number of Warrant Shares purchasable under this Warrant (as adjusted) shall remain the same. Any adjustment under this Section 2(a)(1) shall become effective at the close of business on the date the subdivision or combination becomes effective, or as of the record date of such dividend, or in the event that no record date is fixed, upon the making of such dividend.

(2) Reorganizations or Mergers. In case of any reclassification, capital reorganization or change in the capital stock of the Company (other than as a result of a subdivision, combination or stock dividend provided for in Section 2(a)(1) above) that occurs after the Date of Issuance, then as a condition of such reclassification, reorganization or change, lawful provision shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder, so that the Holder shall thereafter have the right at any time prior to the expiration of this Warrant to purchase, at a total price equal to that payable upon the exercise of this Warrant, the kind and amount of shares of stock and/or other securities or property (including, if applicable, cash) receivable in connection with such reclassification, reorganization or change by a holder of the same number and type of securities as were purchasable as Warrant Shares by the Holder immediately prior to such reclassification, reorganization or change. In any such case, appropriate provisions shall be made with respect to the rights and interest of the Holder so that the provisions hereof shall thereafter be applicable with respect to any shares of stock or other securities or property deliverable upon exercise hereof, and appropriate adjustments shall be made to the Exercise Price payable hereunder, provided the aggregate Exercise Price shall remain the same (and, for the avoidance of doubt, this Warrant shall be exclusively exercisable for such shares of stock and/or other securities or property from and after the consummation of such reclassification or other change in the capital stock of the Company).

(3) Rights Upon Distribution of Assets. If the Company shall declare or make any dividend, other distribution of its assets (or rights to acquire its assets) or evidences of its indebtedness to holders of shares of Common Stock generally (which dividend or other distribution has not already been given to the Holder with respect to the Warrant Shares), by way of return of capital or otherwise not addressed by this Section 2 above (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, subdivision, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant and prior to the Expiration Date, then in each such case the Holder shall be entitled (subject to the following proviso) to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including, without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution. Notwithstanding anything to the contrary contained herein, to the extent that the Holder's right to participate in any such Distribution would result in the Holder and its affiliates exceeding the Beneficial Ownership Limitation, if applicable pursuant to Section 5(c) herein, then the Holder shall not be entitled to participate in such Distribution to the extent of the Beneficial Ownership Limitation (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Distribution (and beneficial ownership) to the extent of any such excess) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and its affiliates exceeding the Beneficial Ownership Limitation, at which time or times the Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation).

(4) Purchase Rights. If at any time the Company grants, issues or sells any options, convertible securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties (as defined in Section 5(c)) exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to

participate in such Purchase Right to such extent (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to such extent) and such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Beneficial Ownership Limitation, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance) to the same extent as if there had been no such limitation).

(b) Notice of Adjustment. When any adjustment is required to be made in the number or kind of shares purchasable upon exercise of the Warrant or in the Exercise Price, the Company shall promptly notify the Holder of such event and of the number of Warrant Shares or other securities or property thereafter purchasable upon exercise of this Warrant.

(c) Calculations. No adjustment in the Exercise Price shall be required unless such adjustment would require an increase or decrease of at least \$0.01 in such price; provided, however, that any adjustment which by reason of this Section 2(c) is not required to be made shall be carried forward and taken into account in any subsequent adjustments under this Section 2. All calculations under this Section 2 shall be made by the Company in good faith and shall be made to the nearest cent or to the nearest one hundredth of a share, as applicable. No adjustment need be made for a change in the par value or no par value of the Company's Common Stock.

(d) Treatment of Warrant upon a Change of Control.

(1) If, at any time while this Warrant is outstanding, there is a Change of Control (as defined below), then the Holder shall have the right thereafter to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Change of Control if it had been, immediately prior to such Change of Control, the holder of the number of Warrant Shares then issuable upon exercise in full of this Warrant (the "Alternate Consideration"). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Change of Control, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Change of Control, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Change of Control. Any successor to the Company or surviving entity in such Change of Control shall issue to the Holder a new warrant substantially in the form of this Warrant and consistent with the foregoing provisions and evidencing the Holder's right to purchase the Alternate Consideration for the aggregate Exercise Price upon exercise thereof.

(2) Notice of a Change of Control. The Company shall provide written notice to the Holder of a Change of Control reasonably promptly after public announcement thereof (and, in any event, not less than twenty (20) trading days prior to the consummation of such Change of Control) and such notice shall include (i) the projected date of consummation of the Change of Control to the extent known at the time such notice is delivered and (ii) the expected consideration to be received by the Company's stockholders in such Change of Control.

(3) As used in this Warrant, a "Change of Control" shall mean (i) a merger or consolidation of the Company with another entity, in which the Company is not the survivor or the stockholders of the Company immediately prior to such merger or consolidation do not own, directly or indirectly, at least 50% of the voting securities of the surviving entity, (ii) the consummation of a stock purchase agreement or other business combination of the Company with another person whereby such other person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other person or other persons making or party to, or associated or affiliated with the other persons making or party to, such stock purchase agreement or other business combination), (iii) the sale, assignment, transfer, conveyance or other disposal of all or substantially all of the properties or assets or all or a majority of the outstanding voting securities of the Company, (iv) a purchase, tender or exchange offer accepted by the holders of a majority of the outstanding voting shares of capital stock of the Company directly or indirectly, in one or more related transactions, (v) a "person" or "group" (as these terms are used for purposes of Section 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) is or shall become the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of at least a majority of the outstanding shares of Common Stock of the Company through a stock purchase agreement or other business combination (including, without limitation, a reorganization, reclassification, spin off or scheme of arrangement) with another person, or (vi) the Company has elected to reorganize, recapitalize or reclassify its Common Stock (other than to change domicile).

3. NO STOCKHOLDER RIGHTS. Until the exercise of this Warrant, the Holder shall not have, nor exercise, any rights as a stockholder of the Company (including without limitation the right to notification of stockholder meetings or the right to receive any notice or other communication concerning the business and affairs of the Company), except as expressly provided in this Warrant.

4. COVENANT TO PERFORM; NON-CIRCUMVENTION. The Company hereby covenants and agrees that the Company will at all times in good faith carry out all the provisions of this Warrant and will not by amendment of its certificate of incorporation, bylaws or other organizational documents or through a Change of Control, dissolution, sale of assets or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant. Without limiting the generality of the foregoing, the Company (i) shall not increase the par value of any shares of Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, (ii) shall take such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon the exercise of this Warrant, and (iii) shall, so long as this Warrant is outstanding, take action necessary to reserve and keep available out of its authorized and unissued shares of Common Stock solely for the purpose of effecting the exercise of this Warrant, 100% of the number of shares of Common Stock issuable upon exercise of this Warrant then outstanding.

#### 5. MECHANICS OF EXERCISE.

(a) Delivery of Warrant Shares Upon Exercise. This Warrant may be exercised by the Holder hereof upon the delivery of a Notice of Exercise (the “Exercise Notice”) attached hereto as Exhibit A properly completed and duly executed by the Holder hereof, at the office of the Company designated for such purpose together with this Warrant and payment in full of the Exercise Price (unless the Holder has elected to Net Exercise) then in effect with respect to the number of Warrant Shares as to which the Warrant is being exercised. This Warrant shall be deemed to have been exercised immediately prior to the close of business on the date of its surrender for exercise as provided above, and the person entitled to receive the Warrant Shares issuable upon such exercise shall be treated for all purposes as the holder of such shares of record as of the close of business on such date. Notwithstanding anything herein to the contrary (although the Holder may surrender the Warrant to, and receive a replacement Warrant from, the Company), the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) trading days of the date the final Exercise Notice is delivered to the Company. Execution and delivery of the Exercise Notice with respect to less than all of the Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. On or before the second (2nd) trading day following the date on which the Company has received each of the Exercise Notice and the aggregate Exercise Price (or confirmation from the Company of the number of shares of Warrant Shares issuable in connection with a duly executed and delivered notice of Net Exercise), the Company shall transmit by facsimile an acknowledgment of confirmation of receipt of the Exercise Notice to the Company’s transfer agent (“Transfer Agent”). The Company shall deliver any objection to the Exercise Notice on or before the second trading day following the date on which the Company has received the Exercise Notice. On or before the second (2nd) trading day following the date on which the Company has received the Exercise Notice and the aggregate Exercise Price (the “Share Delivery Date”), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company (“DTC”) Fast Automated Securities Transfer Program and either (i) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (ii) this Warrant is being exercised via cashless exercise and Rule 144 is available, upon the request of the Holder, credit such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder or its designee’s balance account with DTC through its Deposit Withdrawal Agent Commission system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, or (i) there is not an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder and (ii) this Warrant is being exercised via cashless exercise and Rule 144 is not available, upon the request of the Holder, issue and dispatch by first class mail, postage prepaid, to the address as specified in the Exercise Notice, a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder is entitled

pursuant to such exercise. Upon delivery of the Exercise Notice and the payment of the aggregate Exercise Price (or a duly executed and delivered notice of Net Exercise), the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder's DTC account or the date of delivery of the certificates or book-entry position evidencing such Warrant Shares, as the case may be. The Company shall pay any and all taxes (other than taxes based upon the income of the Holder) which may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant; provided, that the Company shall not be required to pay any tax that may be payable in respect of any transfer involved in the issue and delivery of shares of Common Stock in any name other than that of the Holder, in either case with respect to any income or transfer tax due by the Holder with respect to such shares of Common Stock issued upon exercise of this Warrant. The Company shall not have any duty or obligation to take any action under any section of this Agreement that requires the payment of taxes and/or charges unless and until it is satisfied that all such payments have been made.

(b) Company's Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to issue to the Holder by the Share Delivery Date in compliance with the terms of this Section 5, a certificate or book entry position for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company's share register or to credit the Holder's balance account with DTC for such number of shares of Common Stock to which the Holder is entitled upon the Holder's exercise of this Warrant, and if on or after such trading day the Holder purchases (in an open market transaction or otherwise, provided such purchases shall be made in a commercially reasonable manner at prevailing market prices) shares of Common Stock to deliver in satisfaction of a sale by the Holder of shares of Common Stock issuable upon such exercise that the Holder anticipated receiving from the Company, then the Company shall, within two (2) trading days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including commercially reasonable brokerage commissions, if any) for the shares of Common Stock so purchased (the "Buy-In Price"), at which point the Company's obligation to deliver such certificate or evidence of book entry position (and to issue such Warrant Shares) shall terminate, or (ii) pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the price at which the sell order giving rise to such purchase obligation was executed (assuming such sale was executed on commercially reasonable terms at prevailing market prices) and, at the option of the holder, either (x) promptly honor its obligation to deliver to the Holder a certificate or certificates or evidence of book entry position representing such Warrant Shares or (y) reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded).

(c) Holder's Exercise Limitation. Notwithstanding anything to the contrary contained in this Warrant, this Warrant shall not be exercisable by the Holder pursuant to Section 1 or otherwise, and any such exercise shall be void ab initio, to the extent (but only to the extent) that after giving effect to such issuance after exercise as set forth on the applicable Exercise Notice, the Holder (together with the Holder's affiliates, and any other persons acting as a group together with the Holder or any of the Holder's affiliates (such person "Attribution Parties")), would beneficially own in excess of 9.99% of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issued upon exercise of this Warrant (the "Beneficial Ownership Limitation"). Notwithstanding the foregoing, the Holder shall have the right to increase or decrease the Beneficial Ownership Limitation to an amount not to exceed 9.9% of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant, with any increase to be effective only upon the Holder providing the Company with prior written notice of such increase, which shall be effective 61 days after delivery of such notice to the Company. To the extent the above limitation applies, the determination of whether this Warrant shall be exercisable (vis-à-vis other convertible, exercisable or exchangeable securities owned by the Holder or any of its Attribution Parties) and of which such securities shall be exercisable (as among all such securities owned by the Holder or any of its Attribution Parties) shall, subject to such Beneficial Ownership Limitation, be determined by the Holder, and the Company shall have no responsibility for determining the accuracy of the Holder's determination. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability. For purposes of the calculation of the Beneficial Ownership Limitation, the aggregate number of shares of Common Stock beneficially owned by the Holder and its Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining nonexercised portion of this Warrant beneficially owned by the

Holder or any of its Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other convertible notes or convertible preferred stock or warrants) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Attribution Parties. Except as set forth in the preceding sentence, for purposes of this section, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 5(c), in determining the number of outstanding shares of Common Stock, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Securities and Exchange Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Company's transfer agent setting forth the number of shares of Common Stock outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 5(c) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant. Upon the written request of the Holder, the Company shall within three (3) trading days confirm orally or in writing to the Holder the number of shares of Common Stock then outstanding, including by virtue of any prior conversion or exercise of convertible or exercisable securities into Common Stock, including, without limitation, pursuant to this Warrant.

6. **CERTIFICATE OF ADJUSTMENT.** Whenever the Exercise Price or number or type of securities issuable upon exercise of this Warrant is adjusted, as herein provided, the Company shall, at its expense, promptly deliver to the Holder a certificate of an officer of the Company setting forth the nature of such adjustment and showing in detail the facts upon which such adjustment is based.

7. **NOTICES.** In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend (other than a cash dividend payable out of earned surplus of the Company) or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right; or

(b) any voluntary or involuntary dissolution, liquidation or winding-up of the Company, then and in each such event the Company will promptly mail or cause to be delivered to the Holder (or a permitted transferee) a notice specifying (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and stating the amount and character of such dividend, distribution or right, and (ii) the date on which any such dissolution, liquidation or winding-up is to take place, and the time, if any, as of which the holders of record of Common Stock (or other securities) shall be entitled to exchange their shares of Common Stock (or other securities) for securities or other property deliverable upon such dissolution, liquidation or winding-up. Such notice shall be delivered at least twenty (20) days prior to the date therein specified.

(c) Whenever any other notice is required to be given under this Warrant, unless otherwise provided herein, the Company shall provide prompt written notice of all actions taken pursuant to this Warrant, including in reasonable detail a description of such action and the reason therefore.

8. **REPLACEMENT OF WARRANTS.** On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction of this Warrant, on delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of any such mutilation, on surrender and cancellation of such Warrant, the Company at its expense will execute and deliver, in lieu thereof, a new Warrant of like tenor.



9. **ISSUANCE OF NEW WARRANTS.** Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Sections 8 or 9, the Warrant Shares designated by the Holder which, when added to the number of shares of Common Stock underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

10. **NO FRACTIONAL SHARES.** No fractional Warrant Shares or scrip representing fractional shares will be issued upon exercise of this Warrant. In lieu of any fractional shares which would otherwise be issued, the Company shall pay cash equal to the product of such fraction multiplied by the Fair Market Value of one Warrant Share.

11. **AMENDMENT AND WAIVER.** Except as otherwise provided herein, the provisions of this Warrant may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder.

12. **TRADING DAYS.** If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be other than a day on which the Common Stock is traded (which for the avoidance of doubt includes a Saturday, Sunday or a legal U.S. holiday) on the Nasdaq Global Select Market, or, if the Nasdaq Global Select Market is not the principal trading market for the Common Stock or other such securities, as applicable, then on the principal securities exchange or securities market on which the Common Stock is then traded then such action may be taken or such right may be exercised on the next succeeding day on which the Common Stock is so traded.

13. **TRANSFERS; EXCHANGES.**

(a) Subject to compliance with applicable federal and state securities laws and Section 7 hereof, this Warrant may be transferred by the Holder with respect to all of the Warrant Shares purchasable hereunder. For a transfer of this Warrant, as an entirety by Holder, upon surrender of this Warrant to the Company, together with the Notice of Assignment in the form attached hereto as Exhibit B properly completed and duly executed by the Holder, the Company shall issue a new Warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the Notice of Assignment in the form attached hereto as Exhibit B properly completed and duly executed by the Holder, for transfer of this Warrant with respect to a portion of the Warrant Shares purchasable hereunder, the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 9), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 9) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

(b) This Warrant is exchangeable, without expense, at the option of the Holder, upon presentation and surrender hereof to the Company for other warrants of different denominations entitling the holder thereof to purchase in the aggregate the same number of shares of Common Stock purchasable hereunder. This Warrant may be combined with other warrants that carry the same rights upon presentation hereof at the office of the Company designated for such purpose together with a written notice specifying the denominations in which new warrants are to be issued to the Holder and signed by the Holder hereof. The term "Warrants" as used herein includes any warrants into which this Warrant may be divided or exchanged.

(c) If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant, the transfer of this Warrant shall not be either (i) registered pursuant to an effective registration statement under the Securities Act and under applicable state securities or blue sky laws or (ii) eligible for resale pursuant to Rule 144, the Company may require, as a condition of allowing such transfer; that the Holder or transferee of this Warrant, as the case may be, provide to the Company an opinion of counsel selected by the Holder and reasonably acceptable to the Company, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration of such transferred Warrant under the Securities Act.

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

14. GOVERNING LAW; VENUE. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. With respect to any disputes arising out of or related to this Warrant, the parties consent to the exclusive jurisdiction of, and venue in, the state courts in the State of New York (or in the event of exclusive federal jurisdiction, the courts of the District of New York). Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Warrant and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law. EACH OF THE COMPANY AND THE HOLDER HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS WARRANT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

15. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price, the arithmetic calculation of the Warrant Shares or under Sections 2 or 6, the disputing party shall submit the disputed determinations or arithmetic calculations to the other party. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three (3) trading days of such disputed determination or arithmetic calculation being submitted to the non-disputing party, then the Company shall, within two (2) trading days submit the dispute to an independent, reputable accountant. The Company shall cause, at the expense of the prevailing party, the accountant to perform the determinations or calculations and notify the Company and the Holder of the results no later than ten (10) trading days from the time it receives the disputed determinations or calculations. Such accountant's determination or calculation shall be binding upon all parties absent demonstrable error.

16. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual damages for any failure by the Company to comply with the terms of this Warrant.

17. CONSTRUCTION; HEADINGS. This Warrant shall be deemed to be jointly drafted by the Company and the Holder and shall not be construed against any person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant.

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

19. RESTRICTIONS. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, must comply with the applicable restrictions upon resale imposed by state and federal securities laws.

20. MISCELLANEOUS. All notices, requests, consents and other communications hereunder shall be in writing, shall be sent by confirmed electronic mail, or mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, and shall be deemed given when so sent in the case of electronic mail transmission, or when so received in the case of mail or courier, and addressed as follows: (a) if to the Company, at Gritstone bio, Inc. 5959 Horton Street, Suite 300, Emeryville, CA 94608, Attention: Chief Executive Officer; General Counsel; with a copy to (which shall not constitute notice) Fenwick & West LLP, 401 Union Street, 5th Fl., Seattle, WA 98101, Attention: Robert Freedman and Ryan Mitteness, and (b) if to the Holder, at such address or addresses (including copies to counsel) as may have been furnished by the Holder to the Company in writing. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provisions.

[Signature Page Follows]

IN WITNESS WHEREOF, this Warrant is issued effective as of the date first set forth above.

GRITSTONE BIO, INC.

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

**EXHIBIT A**

**NOTICE OF INTENT TO EXERCISE**  
(To be signed only upon exercise of Warrant)

To: Gritstone bio, Inc.

The undersigned, the Holder of the attached Warrant, hereby irrevocably elects to exercise the purchase right represented by such Warrant for, and to purchase thereunder, [•] shares of Common Stock of Gritstone bio, Inc., a Delaware corporation (the "Company"), and (choose one)

[•] herewith makes payment of USD [•] thereof

or

[•] elects to Net Exercise the Warrant pursuant to Section 1(b)(2) thereof.

The undersigned requests that the certificates or book entry position evidencing the shares to be acquired pursuant to such exercise be issued in the name of, and delivered to [•], whose address is [•].

By its delivery of this Exercise Notice, the undersigned represents and warrants to the Company that in giving effect to the exercise evidenced hereby the Holder will not beneficially own in excess of the number of shares of Common Stock (as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended) permitted to be owned under Section 5(c) of the Warrant to which this notice relates.

By its signature below the undersigned hereby agrees to be bound by the terms and conditions of the attached Warrant as of the date hereof, including Section 5 thereof.

DATED: \_\_\_\_\_

(Signature must conform in all respects to name of the Holder as specified on the face of the Warrant)

\_\_\_\_\_  
[Holder Name]

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

**EXHIBIT B**

**NOTICE OF ASSIGNMENT FORM**

FOR VALUE RECEIVED, [Holder Name] (the "Assignor") hereby sells, assigns and transfers all of the rights of the undersigned Assignor under the attached Warrant with respect to the number of shares of common stock of Gritstone bio, Inc., a Delaware corporation (the "Company"), covered thereby set forth below, to the following "Assignee" and, in connection with such transfer, represents and warrants to the Company that the transfer is in compliance with Section 5 of the Warrant and applicable federal and state securities laws:

NAME OF ASSIGNEE  
Number of shares: \_\_\_\_\_  
Dated: \_\_\_\_\_

ADDRESS  
Signature: \_\_\_\_\_

**ASSIGNEE ACKNOWLEDGMENT**

The undersigned Assignee acknowledges that it has reviewed the attached Warrant and by its signature below it hereby represents and warrants that it agrees to be bound by the terms and conditions of the Warrant as of the date hereof, including Section 5 thereof.

Signature: \_\_\_\_\_

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

Its: \_\_\_\_\_

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

WARRANT NO. 2024-[●]

NUMBER OF SHARES: [●]  
(subject to adjustment hereunder)

DATE OF ISSUANCE: [●], 2024

EXPIRATION DATE: The first date on which no shares of Common Stock are issuable upon a cash exercise of this Warrant

PRE-FUNDED WARRANT TO PURCHASE SHARES OF  
COMMON STOCK OF  
GRITSTONE BIO, INC.

This Warrant (the “Warrant”) is issued by Gritstone bio, Inc., a Delaware corporation (the “Company”), to [●], or its registered assigns (including any successors or assigns, the “Holder”), and is subject to the terms and conditions set forth below. The Warrants are offered and sold by the Company pursuant to the Prospectus Supplement, dated April 1, 2024 (as described in the Registration Statement). “Registration Statement” means the Company’s registration statement on Form S-3, as amended (File No. 333-263455). As of the Date of Issuance the Warrant Shares are issuable under the Registration Statement. Accordingly, the Warrant and, assuming issuance pursuant to the Registration Statement or an exchange meeting the requirements of Section 3(a)(9) of the Securities Act of 1933, as amended (the “Securities Act”) as in effect on the Date of Issuance, the Warrant Shares, are not “restricted securities” under Rule 144 promulgated under the Securities Act as of the Date of Issuance.

## 1. EXERCISE OF WARRANT.

(a) Number and Exercise Price of Warrant Shares; Expiration Date. Subject to the terms and conditions set forth herein, the Holder is entitled to purchase from the Company up to [●] shares of the Company’s Common Stock, \$0.0001 par value per share (the “Common Stock”) (as adjusted from time to time pursuant to the provisions of this Warrant) (the “Warrant Shares”) until this Warrant is exercised in full. The aggregate exercise price of this Warrant of \$[●], except for a nominal exercise price of \$0.0001 per Warrant Share, was paid to the Company on or prior to the date of issuance of this Warrant, and, consequently, no additional consideration (other than the nominal exercise price of \$0.0001 per Warrant Share) shall be required to be paid by the Holder to effect any exercise of this Warrant. The Holder shall not be entitled to return or refund of all, or any portion, of such pre-paid aggregate exercise price under any circumstance or for any reason whatsoever, including in the event this Warrant shall not have been exercised prior to the Expiration Date. The remaining unpaid exercise price per share of Common Stock under this Warrant shall be \$0.0001, subject to adjustment as provided herein (the “Exercise Price”).

(b) Method of Exercise. While this Warrant remains outstanding and exercisable in accordance with Section 1(a) above, the Holder may exercise this Warrant in whole or in part in accordance with Section 5 by either:

(1) wire transfer to the Company or cashier’s check drawn on a United States bank made payable to the order of the Company, or

(2) exercising of the right to credit the Exercise Price against the Fair Market Value (as defined below) of the Warrant Shares (as defined below) at the time of exercise (the “Net Exercise”) pursuant to Section 1(c).

(c) Net Exercise. At any time the Holder may elect to exercise this Warrant by Net Exercise pursuant to this Section 1(c). At any time that this Warrant may be exercised by Net Exercise pursuant to this Section 1(c), if the Company shall receive written notice from the Holder at the time of exercise of this Warrant that the Holder elects to Net Exercise the Warrant, the Company shall deliver to such Holder (without payment by the Holder of any exercise price in cash) that number of Warrant Shares computed using the following formula:

$$X = \frac{Y(A - B)}{A}$$

Where

X = The number of Warrant Shares to be issued to the Holder.

Y = The number of Warrant Shares purchasable under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being cancelled (at the date of such calculation).

A = The Fair Market Value of one share of Common Stock (at the date of such calculation).

B = The Exercise Price (as adjusted to the date of such calculations).

The “Fair Market Value” of one share of Common Stock shall mean (x) the last reported sale price and, if there are no sales, the last reported bid price, of the Common Stock on the last trading day prior to the date of exercise on the trading market on which the Common Stock is listed as reported by Bloomberg Financial Markets (or a comparable reporting service of national reputation selected by the Company and reasonably acceptable to the Holder if Bloomberg Financial Markets is not then reporting sales prices of the Common Stock) (collectively, “Bloomberg”), or (y) if the foregoing does not apply, the last sales price of such security in the over-the-counter market on the pink sheets by Pink Sheets LLC (formerly the National Quotation Bureau, Inc.) (the “pink sheets”) or bulletin board for such security as reported by Bloomberg, or if no sales price is so reported, the last bid price of the Common Stock as reported by Bloomberg or (z) if the fair market value cannot be calculated on any of the foregoing bases, the fair market value determined by the Company’s Board of Directors in good faith.

For purposes of Rule 144 promulgated under the Securities Act, it is intended, understood and acknowledged that the Warrant Shares issued in such a “net exercise” transaction shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the Date of Issuance (provided that the United States Securities and Exchange Commission continues to take the position that such treatment is proper at the time of such exercise). If Warrant Shares are issued in such a net exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the Securities Act, the Warrant Shares shall take on the registered characteristics of the Warrants being exercised. The Company agrees not to take any position contrary to this Section 1(c). Except as otherwise set forth herein, in no event will the exercise of this Warrant be settled in cash.

(d) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed.

(e) Deemed Exercise. In the event that immediately prior to the close of business on the Expiration Date, the Fair Market Value of one share of Common Stock (as determined in accordance with Section 1(c) above) is greater than the then applicable Exercise Price, this Warrant shall be deemed to be automatically exercised on a net exercise issue basis pursuant to Section 1(c) above, and the Company shall deliver the applicable number of shares of Common Stock to the Holder pursuant to the provisions of Section 1(c) above and this Section 1(e). Notwithstanding anything to the contrary contained in this Section 1(e), to the extent that the Holder’s right to receive shares of Common Stock upon such a net exercise would result in the Holder and its affiliates exceeding the Beneficial Ownership Limitation (as defined below), if applicable pursuant to Section 5(c) herein, then the Holder shall not be entitled to such shares of Common Stock to the extent of the Beneficial Ownership Limitation (and shall not be entitled to beneficial ownership of such shares of Common Stock (and beneficial ownership) to the extent of any such excess) and the portion of such shares of Common Stock shall be held in abeyance for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and its affiliates exceeding the Beneficial Ownership Limitation, at which time or times the Holder shall be granted such shares of Common Stock to the same extent as if there had been no such limitation).

## 2. CERTAIN ADJUSTMENTS.

(a) Adjustment of Number of Warrant Shares and Exercise Price. The number and kind of Warrant Shares purchasable upon exercise of this Warrant and the Exercise Price shall be subject to adjustment from time to time as follows:

(1) Subdivisions, Combinations and Other Issuances. If the Company shall at any time after the Date of Issuance but prior to the Expiration Date subdivide its shares of capital stock of the same class as the Warrant Shares, by split-up or otherwise, or combine such shares of capital stock, or issue additional shares of capital stock as a dividend with respect to any shares of such capital stock, the number of Warrant Shares issuable on the exercise of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination. Appropriate adjustments shall also be made to the Exercise

Price payable per share, but the aggregate Exercise Price payable for the total number of Warrant Shares purchasable under this Warrant (as adjusted) shall remain the same. Any adjustment under this Section 2(a)(1) shall become effective at the close of business on the date the subdivision or combination becomes effective, or as of the record date of such dividend, or in the event that no record date is fixed, upon the making of such dividend.

(2) Reorganizations or Mergers. In case of any reclassification, capital reorganization or change in the capital stock of the Company (other than as a result of a subdivision, combination or stock dividend provided for in Section 2(a)(1) above) that occurs after the Date of Issuance, then as a condition of such reclassification, reorganization or change, lawful provision shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder, so that the Holder shall thereafter have the right at any time prior to the expiration of this Warrant to purchase, at a total price equal to that payable upon the exercise of this Warrant, the kind and amount of shares of stock and/or other securities or property (including, if applicable, cash) receivable in connection with such reclassification, reorganization or change by a holder of the same number and type of securities as were purchasable as Warrant Shares by the Holder immediately prior to such reclassification, reorganization or change. In any such case, appropriate provisions shall be made with respect to the rights and interest of the Holder so that the provisions hereof shall thereafter be applicable with respect to any shares of stock or other securities or property deliverable upon exercise hereof, and appropriate adjustments shall be made to the Exercise Price payable hereunder, provided the aggregate Exercise Price shall remain the same (and, for the avoidance of doubt, this Warrant shall be exclusively exercisable for such shares of stock and/or other securities or property from and after the consummation of such reclassification or other change in the capital stock of the Company).

(3) Rights Upon Distribution of Assets. If the Company shall declare or make any dividend, other distribution of its assets (or rights to acquire its assets) or evidences of its indebtedness to holders of shares of Common Stock generally (which dividend or other distribution has not already been given to the Holder with respect to the Warrant Shares), by way of return of capital or otherwise not addressed by this Section 2 above (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, subdivision, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant and prior to the Expiration Date, then in each such case the Holder shall be entitled (subject to the following proviso) to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including, without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution. Notwithstanding anything to the contrary contained herein, to the extent that the Holder's right to participate in any such Distribution would result in the Holder and its affiliates exceeding the Beneficial Ownership Limitation, if applicable pursuant to Section 5(c) herein, then the Holder shall not be entitled to participate in such Distribution to the extent of the Beneficial Ownership Limitation (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Distribution (and beneficial ownership) to the extent of any such excess) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time or times, if ever, as its right thereto would not result in the Holder and its affiliates exceeding the Beneficial Ownership Limitation, at which time or times the Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation).

(4) Purchase Rights. If at any time the Company grants, issues or sells any options, convertible securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties (as defined in Section 5(c)) exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to



participate in such Purchase Right to such extent (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to such extent) and such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Beneficial Ownership Limitation, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance) to the same extent as if there had been no such limitation).

(b) Notice of Adjustment. When any adjustment is required to be made in the number or kind of shares purchasable upon exercise of the Warrant or in the Exercise Price, the Company shall promptly notify the Holder of such event and of the number of Warrant Shares or other securities or property thereafter purchasable upon exercise of this Warrant.

(c) Calculations. No adjustment in the Exercise Price shall be required unless such adjustment would require an increase or decrease of at least \$0.01 in such price; provided, however, that any adjustment which by reason of this Section 2(c) is not required to be made shall be carried forward and taken into account in any subsequent adjustments under this Section 2. All calculations under this Section 2 shall be made by the Company in good faith and shall be made to the nearest cent or to the nearest one hundredth of a share, as applicable. No adjustment need be made for a change in the par value or no par value of the Company's Common Stock.

(d) Treatment of Warrant upon a Change of Control.

(1) If, at any time while this Warrant is outstanding, there is a Change of Control (as defined below), then the Holder shall have the right thereafter to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Change of Control if it had been, immediately prior to such Change of Control, the holder of the number of Warrant Shares then issuable upon exercise in full of this Warrant (the "Alternate Consideration"). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Change of Control, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Change of Control, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Change of Control. Any successor to the Company or surviving entity in such Change of Control shall issue to the Holder a new warrant substantially in the form of this Warrant and consistent with the foregoing provisions and evidencing the Holder's right to purchase the Alternate Consideration for the aggregate Exercise Price upon exercise thereof.

(2) Notice of a Change of Control. The Company shall provide written notice to the Holder of a Change of Control reasonably promptly after public announcement thereof (and, in any event, not less than twenty (20) trading days prior to the consummation of such Change of Control) and such notice shall include (i) the projected date of consummation of the Change of Control to the extent known at the time such notice is delivered and (ii) the expected consideration to be received by the Company's stockholders in such Change of Control.

(3) As used in this Warrant, a "Change of Control" shall mean (i) a merger or consolidation of the Company with another entity, in which the Company is not the survivor or the stockholders of the Company immediately prior to such merger or consolidation do not own, directly or indirectly, at least 50% of the voting securities of the surviving entity, (ii) the consummation of a stock purchase agreement or other business combination of the Company with another person whereby such other person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other person or other persons making or party to, or associated or affiliated with the other persons making or party to, such stock purchase agreement or other business combination), (iii) the sale, assignment, transfer, conveyance or other disposal of all or substantially all of the properties or assets or all or a majority of the outstanding voting securities of the Company, (iv) a purchase, tender or exchange offer accepted by the holders of a majority of the outstanding voting shares of capital stock of the Company directly or indirectly, in one or more related transactions, (v) a "person" or "group" (as these terms are used for purposes of Section 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) is or shall become the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of at least a majority of the outstanding shares of Common Stock of the Company through a stock purchase agreement or other business combination (including, without limitation, a reorganization, reclassification, spin off or scheme of arrangement) with another person, or (vi) the Company has elected to reorganize, recapitalize or reclassify its Common Stock (other than to change domicile).

3. NO STOCKHOLDER RIGHTS. Until the exercise of this Warrant, the Holder shall not have, nor exercise, any rights as a stockholder of the Company (including without limitation the right to notification of stockholder meetings or the right to receive any notice or other communication concerning the business and affairs of the Company), except as expressly provided in this Warrant.

4. COVENANT TO PERFORM; NON-CIRCUMVENTION. The Company hereby covenants and agrees that the Company will at all times in good faith carry out all the provisions of this Warrant and will not by amendment of its certificate of incorporation, bylaws or other organizational documents or through a Change of Control, dissolution, sale of assets or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant. Without limiting the generality of the foregoing, the Company (i) shall not increase the par value of any shares of Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, (ii) shall take such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon the exercise of this Warrant, and (iii) shall, so long as this Warrant is outstanding, take action necessary to reserve and keep available out of its authorized and unissued shares of Common Stock solely for the purpose of effecting the exercise of this Warrant, 100% of the number of shares of Common Stock issuable upon exercise of this Warrant then outstanding.

#### 5. MECHANICS OF EXERCISE.

(a) Delivery of Warrant Shares Upon Exercise. This Warrant may be exercised by the Holder hereof upon the delivery of a Notice of Exercise (the "Exercise Notice") attached hereto as Exhibit A properly completed and duly executed by the Holder hereof, at the office of the Company designated for such purpose together with this Warrant and payment in full of the Exercise Price (unless the Holder has elected to Net Exercise) then in effect with respect to the number of Warrant Shares as to which the Warrant is being exercised. This Warrant shall be deemed to have been exercised immediately prior to the close of business on the date of its surrender for exercise as provided above, and the person entitled to receive the Warrant Shares issuable upon such exercise shall be treated for all purposes as the holder of such shares of record as of the close of business on such date. Notwithstanding anything herein to the contrary (although the Holder may surrender the Warrant to, and receive a replacement Warrant from, the Company), the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) trading days of the date the final Exercise Notice is delivered to the Company. Execution and delivery of the Exercise Notice with respect to less than all of the Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. On or before the second (2nd) trading day following the date on which the Company has received each of the Exercise Notice and the aggregate Exercise Price (or confirmation from the Company of the number of shares of Warrant Shares issuable in connection with a duly executed and delivered notice of Net Exercise), the Company shall transmit by facsimile an acknowledgment of confirmation of receipt of the Exercise Notice to the Company's transfer agent ("Transfer Agent"). The Company shall deliver any objection to the Exercise Notice on or before the second trading day following the date on which the Company has received the Exercise Notice. On or before the second (2nd) trading day following the date on which the Company has received the Exercise Notice and the aggregate Exercise Price (the "Share Delivery Date"), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company ("DTC") Fast Automated Securities Transfer Program and either (i) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (ii) this Warrant is being exercised via cashless exercise and Rule 144 is available, upon the request of the Holder, credit such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder or its designee's balance account with DTC through its Deposit Withdrawal Agent Commission system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, or (i) there is not an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder and (ii) this Warrant is being exercised via cashless exercise and Rule 144 is not available, upon the request of the Holder, issue and dispatch by first class mail, postage prepaid, to the address as specified in the Exercise Notice, a certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder is entitled

pursuant to such exercise. Upon delivery of the Exercise Notice and the payment of the aggregate Exercise Price (or a duly executed and delivered notice of Net Exercise), the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder's DTC account or the date of delivery of the certificates or book-entry position evidencing such Warrant Shares, as the case may be. The Company shall pay any and all taxes (other than taxes based upon the income of the Holder) which may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant; provided, that the Company shall not be required to pay any tax that may be payable in respect of any transfer involved in the issue and delivery of shares of Common Stock in any name other than that of the Holder, in either case with respect to any income or transfer tax due by the Holder with respect to such shares of Common Stock issued upon exercise of this Warrant. The Company shall not have any duty or obligation to take any action under any section of this Agreement that requires the payment of taxes and/or charges unless and until it is satisfied that all such payments have been made.

(b) Company's Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to issue to the Holder by the Share Delivery Date in compliance with the terms of this Section 5, a certificate or book entry position for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company's share register or to credit the Holder's balance account with DTC for such number of shares of Common Stock to which the Holder is entitled upon the Holder's exercise of this Warrant, and if on or after such trading day the Holder purchases (in an open market transaction or otherwise, provided such purchases shall be made in a commercially reasonable manner at prevailing market prices) shares of Common Stock to deliver in satisfaction of a sale by the Holder of shares of Common Stock issuable upon such exercise that the Holder anticipated receiving from the Company, then the Company shall, within two (2) trading days after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to the Holder's total purchase price (including commercially reasonable brokerage commissions, if any) for the shares of Common Stock so purchased (the "Buy-In Price"), at which point the Company's obligation to deliver such certificate or evidence of book entry position (and to issue such Warrant Shares) shall terminate, or (ii) pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) the price at which the sell order giving rise to such purchase obligation was executed (assuming such sale was executed on commercially reasonable terms at prevailing market prices) and, at the option of the holder, either (x) promptly honor its obligation to deliver to the Holder a certificate or certificates or evidence of book entry position representing such Warrant Shares or (y) reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded).

(c) Holder's Exercise Limitation. Notwithstanding anything to the contrary contained in this Warrant, this Warrant shall not be exercisable by the Holder pursuant to Section 1 or otherwise, and any such exercise shall be void ab initio, to the extent (but only to the extent) that after giving effect to such issuance after exercise as set forth on the applicable Exercise Notice, the Holder (together with the Holder's affiliates, and any other persons acting as a group together with the Holder or any of the Holder's affiliates (such person "Attribution Parties")), would beneficially own in excess of 9.99% of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issued upon exercise of this Warrant (the "Beneficial Ownership Limitation"). Notwithstanding the foregoing, the Holder shall have the right to increase or decrease the Beneficial Ownership Limitation to an amount not to exceed 9.9% of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant, with any increase to be effective only upon the Holder providing the Company with prior written notice of such increase, which shall be effective 61 days after delivery of such notice to the Company. To the extent the above limitation applies, the determination of whether this Warrant shall be exercisable (vis-à-vis other convertible, exercisable or exchangeable securities owned by the Holder or any of its Attribution Parties) and of which such securities shall be exercisable (as among all such securities owned by the Holder or any of its Attribution Parties) shall, subject to such Beneficial Ownership Limitation, be determined by the Holder, and the Company shall have no responsibility for determining the accuracy of the Holder's determination. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability. For purposes of the calculation of the Beneficial Ownership Limitation, the aggregate number of shares of Common Stock beneficially owned by the Holder and its Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining nonexercised portion of this Warrant beneficially owned by the

Holder or any of its Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other convertible notes or convertible preferred stock or warrants) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Attribution Parties. Except as set forth in the preceding sentence, for purposes of this section, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 5(c), in determining the number of outstanding shares of Common Stock, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Securities and Exchange Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Company's transfer agent setting forth the number of shares of Common Stock outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 5(c) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant. Upon the written request of the Holder, the Company shall within three (3) trading days confirm orally or in writing to the Holder the number of shares of Common Stock then outstanding, including by virtue of any prior conversion or exercise of convertible or exercisable securities into Common Stock, including, without limitation, pursuant to this Warrant.

6. CERTIFICATE OF ADJUSTMENT. Whenever the Exercise Price or number or type of securities issuable upon exercise of this Warrant is adjusted, as herein provided, the Company shall, at its expense, promptly deliver to the Holder a certificate of an officer of the Company setting forth the nature of such adjustment and showing in detail the facts upon which such adjustment is based.

7. NOTICES. In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend (other than a cash dividend payable out of earned surplus of the Company) or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right; or

(b) any voluntary or involuntary dissolution, liquidation or winding-up of the Company, then and in each such event the Company will promptly mail or cause to be delivered to the Holder (or a permitted transferee) a notice specifying (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and stating the amount and character of such dividend, distribution or right, and (ii) the date on which any such dissolution, liquidation or winding-up is to take place, and the time, if any, as of which the holders of record of Common Stock (or other securities) shall be entitled to exchange their shares of Common Stock (or other securities) for securities or other property deliverable upon such dissolution, liquidation or winding-up. Such notice shall be delivered at least twenty (20) days prior to the date therein specified.

(c) Whenever any other notice is required to be given under this Warrant, unless otherwise provided herein, the Company shall provide prompt written notice of all actions taken pursuant to this Warrant, including in reasonable detail a description of such action and the reason therefore.

8. REPLACEMENT OF WARRANTS. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction of this Warrant, on delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of any such mutilation, on surrender and cancellation of such Warrant, the Company at its expense will execute and deliver, in lieu thereof, a new Warrant of like tenor.

9. **ISSUANCE OF NEW WARRANTS.** Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Sections 8 or 9, the Warrant Shares designated by the Holder which, when added to the number of shares of Common Stock underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

10. **NO FRACTIONAL SHARES.** No fractional Warrant Shares or scrip representing fractional shares will be issued upon exercise of this Warrant. In lieu of any fractional shares which would otherwise be issued, the Company shall pay cash equal to the product of such fraction multiplied by the Fair Market Value of one Warrant Share.

11. **AMENDMENT AND WAIVER.** Except as otherwise provided herein, the provisions of this Warrant may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder.

12. **TRADING DAYS.** If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be other than a day on which the Common Stock is traded (which for the avoidance of doubt includes a Saturday, Sunday or a legal U.S. holiday) on the Nasdaq Global Select Market, or, if the Nasdaq Global Select Market is not the principal trading market for the Common Stock or other such securities, as applicable, then on the principal securities exchange or securities market on which the Common Stock is then traded then such action may be taken or such right may be exercised on the next succeeding day on which the Common Stock is so traded.

13. **TRANSFERS; EXCHANGES.**

(a) Subject to compliance with applicable federal and state securities laws and Section 7 hereof, this Warrant may be transferred by the Holder with respect to all of the Warrant Shares purchasable hereunder. For a transfer of this Warrant, as an entirety by Holder, upon surrender of this Warrant to the Company, together with the Notice of Assignment in the form attached hereto as Exhibit B properly completed and duly executed by the Holder, the Company shall issue a new Warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the Notice of Assignment in the form attached hereto as Exhibit B properly completed and duly executed by the Holder, for transfer of this Warrant with respect to a portion of the Warrant Shares purchasable hereunder, the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 9), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 9) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

(b) This Warrant is exchangeable, without expense, at the option of the Holder, upon presentation and surrender hereof to the Company for other warrants of different denominations entitling the holder thereof to purchase in the aggregate the same number of shares of Common Stock purchasable hereunder. This Warrant may be combined with other warrants that carry the same rights upon presentation hereof at the office of the Company designated for such purpose together with a written notice specifying the denominations in which new warrants are to be issued to the Holder and signed by the Holder hereof. The term "Warrants" as used herein includes any warrants into which this Warrant may be divided or exchanged.

(c) If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant, the transfer of this Warrant shall not be either (i) registered pursuant to an effective registration statement under the Securities Act and under applicable state securities or blue sky laws or (ii) eligible for resale pursuant to Rule 144, the Company may require, as a condition of allowing such transfer; that the Holder or transferee of this Warrant, as the case may be, provide to the Company an opinion of counsel selected by the Holder and reasonably acceptable to the Company, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration of such transferred Warrant under the Securities Act.

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

14. GOVERNING LAW; VENUE. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. With respect to any disputes arising out of or related to this Warrant, the parties consent to the exclusive jurisdiction of, and venue in, the state courts in the State of New York (or in the event of exclusive federal jurisdiction, the courts of the District of New York). Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Warrant and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law. EACH OF THE COMPANY AND THE HOLDER HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS WARRANT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

15. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price, the arithmetic calculation of the Warrant Shares or under Sections 2 or 6, the disputing party shall submit the disputed determinations or arithmetic calculations to the other party. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three (3) trading days of such disputed determination or arithmetic calculation being submitted to the non-disputing party, then the Company shall, within two (2) trading days submit the dispute to an independent, reputable accountant. The Company shall cause, at the expense of the prevailing party, the accountant to perform the determinations or calculations and notify the Company and the Holder of the results no later than ten (10) trading days from the time it receives the disputed determinations or calculations. Such accountant's determination or calculation shall be binding upon all parties absent demonstrable error.

16. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual damages for any failure by the Company to comply with the terms of this Warrant.

17. CONSTRUCTION; HEADINGS. This Warrant shall be deemed to be jointly drafted by the Company and the Holder and shall not be construed against any person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant.

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

19. RESTRICTIONS. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, must comply with the applicable restrictions upon resale imposed by state and federal securities laws.

20. MISCELLANEOUS. All notices, requests, consents and other communications hereunder shall be in writing, shall be sent by confirmed electronic mail, or mailed by first-class registered or certified airmail, or nationally recognized overnight express courier, postage prepaid, and shall be deemed given when so sent in the case of electronic mail transmission, or when so received in the case of mail or courier, and addressed as follows: (a) if to the Company, at Gritstone bio, Inc. 5959 Horton Street, Suite 300, Emeryville, CA 94608, Attention: Chief Executive Officer; General Counsel; with a copy to (which shall not constitute notice) Fenwick & West LLP, 401 Union Street, 5th Fl., Seattle, WA 98101, Attention: Robert Freedman and Ryan Mitteness, and (b) if to the Holder, at such address or addresses (including copies to counsel) as may have been furnished by the Holder to the Company in writing. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provisions.

[Signature Page Follows]

IN WITNESS WHEREOF, this Warrant is issued effective as of the date first set forth above.

GRITSTONE BIO, INC.

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

**EXHIBIT A**

**NOTICE OF INTENT TO EXERCISE**  
(To be signed only upon exercise of Warrant)

To: Gritstone bio, Inc.

The undersigned, the Holder of the attached Warrant, hereby irrevocably elects to exercise the purchase right represented by such Warrant for, and to purchase thereunder, [●] shares of Common Stock of Gritstone bio, Inc., a Delaware corporation (the "Company"), and (choose one)

[●] herewith makes payment of USD [●] thereof

or

[●] elects to Net Exercise the Warrant pursuant to Section 1(b)(2) thereof.

The undersigned requests that the certificates or book entry position evidencing the shares to be acquired pursuant to such exercise be issued in the name of, and delivered to [●], whose address is [●].

By its delivery of this Exercise Notice, the undersigned represents and warrants to the Company that in giving effect to the exercise evidenced hereby the Holder will not beneficially own in excess of the number of shares of Common Stock (as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended) permitted to be owned under Section 5(c) of the Warrant to which this notice relates.

By its signature below the undersigned hereby agrees to be bound by the terms and conditions of the attached Warrant as of the date hereof, including Section 5 thereof.

DATED: \_\_\_\_\_

(Signature must conform in all respects to name of the Holder as specified on the face of the Warrant)

\_\_\_\_\_  
[Holder Name]

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



**EXHIBIT B**

**NOTICE OF ASSIGNMENT FORM**

FOR VALUE RECEIVED, [Holder Name] (the "Assignor") hereby sells, assigns and transfers all of the rights of the undersigned Assignor under the attached Warrant with respect to the number of shares of common stock of Gritstone bio, Inc., a Delaware corporation (the "Company"), covered thereby set forth below, to the following "Assignee" and, in connection with such transfer, represents and warrants to the Company that the transfer is in compliance with Section 5 of the Warrant and applicable federal and state securities laws:

NAME OF ASSIGNEE

ADDRESS

Number of shares: \_\_\_\_\_

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

Signature: \_\_\_\_\_

**ASSIGNEE ACKNOWLEDGMENT**

The undersigned Assignee acknowledges that it has reviewed the attached Warrant and by its signature below it hereby represents and warrants that it agrees to be bound by the terms and conditions of the Warrant as of the date hereof, including Section 5 thereof.

Signature: \_\_\_\_\_

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

Its: \_\_\_\_\_

Address:

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



401 Union Street  
5th Floor  
Seattle, WA 98101

206.389.4510  
Fenwick.com

April 1, 2024

Gritstone bio, Inc.  
5959 Horton Street, Suite 300  
Emeryville, CA 94608

Ladies and Gentlemen:

As counsel to Gritstone bio, Inc., a Delaware corporation (the "**Company**"), we deliver this opinion with respect to certain matters in connection with the offering by the Company of up to (a) 8,333,333 shares (the "**Shares**") of the Company's common stock, par value \$0.0001 per share ("**Common Stock**"), (b) pre-funded warrants (the "**Initial Pre-Funded Warrants**") to purchase up to 13,334,222 shares of Common Stock at an exercise price of \$0.0001 per share (such shares issuable upon exercise of the Initial Pre-Funded Warrants, the "**Initial Pre-Funded Warrant Shares**"), and (c) accompanying warrants (the "**Accompanying Warrants**") to purchase up to 21,667,555 shares of Common Stock (the "**Accompanying Warrant Shares**") or pre-funded warrants (the "**Accompanying Pre-Funded Warrants**" and together with the Initial Pre-Funded Warrants and the Accompanying Warrants, the "**Warrants**") to purchase up to 21,667,555 shares of Common Stock (the "**Accompanying Pre-Funded Warrant Shares**" and collectively with the Initial Pre-Funded Warrant Shares and the Accompanying Warrant Shares, the "**Warrant Shares**" and collectively with the Shares and Warrants, the "**Securities**") issued pursuant to that certain Underwriting Agreement (the "**Underwriting Agreement**"), dated as of April 1, 2024, by and between the Company and Cowen and Company, LLC and Evercore Group L.L.C. as representatives of the several underwriters named therein. The Shares, Warrants and Warrant Shares were registered pursuant to the Registration Statement on Form S-3 (File No. 333-263455) filed by the Company with the Securities and Exchange Commission (the "**Commission**") on March 10, 2022 and declared effective on May 6, 2022 (the registration statement at the time it was declared effective, including the documents or portions thereof incorporated by reference therein, as modified or superseded as described therein, and the information deemed to be a part thereof pursuant to Rule 430B under the Securities Act of 1933, as amended (the "**Securities Act**"), the "**Registration Statement**") under the Securities Act, including the prospectus dated March 10, 2022 included therein (the "**Base Prospectus**") as supplemented by the final prospectus supplement dated April 1, 2024, filed with the Commission pursuant to Rule 424(b) under the Securities Act (the "**Prospectus Supplement**" and, together with the Base Prospectus, the "**Prospectus**"). The offering of the Securities by the Company pursuant to the Registration Statement, the Prospectus and the Underwriting Agreement is referred to herein as the "**Offering**." This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or related Prospectus, other than as expressly herein with respect to the issue of the Securities.

As to matters of fact relevant to the opinions rendered herein, we have examined such documents, certificates and other instruments which we have deemed necessary or advisable, including a certificate addressed to us and dated the date hereof executed by the Company (the "**Opinion Certificate**"). We have not undertaken any independent investigation to verify the accuracy of any such information, representations or warranties or to determine the existence or absence of any fact, and no inference as to our knowledge of the existence or absence of any fact should be drawn from our representation of the Company or the rendering of the opinions set forth below. We have not considered parol evidence in connection with any of the agreements or instruments reviewed by us in connection with this letter.

In our examination of documents for purposes of this letter, we have assumed, and express no opinion as to, the genuineness and authenticity of all signatures on original documents, the authenticity and completeness of all documents submitted to us as originals, that each document is what it purports to be, the conformity to originals of all documents submitted to us as copies or facsimile copies, the absence of any termination, modification or waiver of or amendment to any document reviewed by us (other than as has been disclosed to us), the legal competence or capacity of all persons or entities (other than the Company) executing the same and (other than the Company) the due authorization, execution and delivery of all documents by each party thereto. We have also assumed the conformity of the documents filed with the Commission via the Electronic Data Gathering, Analysis and Retrieval System (“**EDGAR**”), except for required EDGAR formatting changes, to physical copies submitted for our examination.

The opinions in this letter are limited to the existing General Corporation Law of the State of Delaware now in effect (the “**Applicable Laws**”). We express no opinion with respect to any other laws.

In connection with our opinions expressed below, we have assumed that, (i) at or prior to the time of the issuance and delivery of the Shares, Warrants or Warrant Shares there will not have occurred any change in the law or the facts affecting the validity of the Shares, Warrants or Warrant Shares, (ii) at the time of the offer, issuance and sale of the Shares, Warrants or Warrant Shares no stop order suspending the Registration Statement’s effectiveness will have been issued and remain in effect, (iii) no future amendments will be made to the Company’s current certificate of incorporation (as amended from time to time, the “**Certificate of Incorporation**”), or the Company’s Amended and Restated Bylaws (the “**Bylaws**” and, together with the Certificate of Incorporation, the “**Charter Documents**”) that would be in conflict with or inconsistent with the Company’s right and ability to issue the Shares, Warrants or Warrant Shares, (iv) at the time of the issuance and sale of the Shares, Warrants and Warrant Shares the Company will be validly existing as a corporation and in good standing under the laws of the State of Delaware and (v) at the time of each exercise of the Warrants, the Company will have a sufficient number of authorized and unissued shares of the Common Stock available for issuance under the Certificate of Incorporation to permit full exercise of each of the Warrants in accordance with their terms without the breach or violation of any other agreement, commitment or obligation of the Company.

This opinion is qualified by, and is subject to, and we render no opinion with respect to, the following limitations and exceptions to the enforceability of the Warrants:

1. The effect of the laws of bankruptcy, insolvency, reorganization, arrangement, moratorium, fraudulent conveyance, assignment for the benefit of creditors, and other similar laws now or hereinafter in effect relating to or affecting the rights and remedies of creditors, including the effect of statutory or other laws regarding fraudulent transfers or preferential transfers.
2. The effect of general principles of equity and similar principles, including, without limitation, concepts of materiality, reasonableness, good faith and fair dealing, public policy and unconscionability, and the possible unavailability of specific performance, injunctive relief, or other equitable remedies, regardless of whether considered in a proceeding in equity or at law.

We express no opinion regarding the effectiveness of any waiver or stay, extension or of unknown future rights. Further, we express no opinion regarding the effect of provisions relating to indemnification, exculpation or contribution to the extent such provisions may be held unenforceable as contrary to federal or state securities laws or public policy.

Based upon the foregoing, and subject to the qualifications and exceptions contained herein, we are of the following opinion:

- i. the Shares, when issued, sold and delivered in the manner and for the consideration stated in the Registration Statement and the Prospectus and in accordance with the resolutions adopted by the Company's board of Directors and the pricing committee thereof (the "**Board**"), will be validly issued, fully paid and nonassessable;
- ii. the Warrants, when issued, sold and delivered in the manner and for the consideration stated in the Registration Statement and the Prospectus and in accordance with the resolutions adopted by the Board, will be valid and binding obligations of the Company, enforceable against the Company in accordance with their terms; and
- iii. the Warrant Shares, when issued and delivered by the Company upon exercise of the Warrants, in accordance with the terms thereof, will be validly issued, fully paid and non-assessable.

We consent to the use of this opinion as an exhibit to the Report on Form 8-K to be filed by the Company with the Commission in connection with the offering of the Securities and further consent to all references to us, if any, in the Registration Statement, the Prospectus and any amendments or supplements thereto. In giving this consent we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

*[Concluding Paragraph Follows on Next Page]*

This opinion is intended solely for use in connection with the issuance and sale of the Securities subject to the Registration Statement and is not to be relied upon for any other purpose. In providing this letter, we are opining only as to the specific legal issues expressly set forth above, and no opinion shall be inferred as to any other matter or matters. This opinion is rendered on, and speaks only as of, the date of this letter first written above, is based solely on our understanding of facts in existence as of such date after the aforementioned examination and does not address any potential changes in facts, circumstance or law that may occur after the date of this opinion letter. We assume no obligation to advise you of any fact, circumstance, event or change in the law or the facts that may hereafter be brought to our attention, whether or not such occurrence would affect or modify any of the opinions expressed herein.

Very truly yours,

/s/ Fenwick & West LLP

---

FENWICK & WEST LLP