

**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): March 1, 2024

Precision BioSciences, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-38841
(Commission
File Number)

20-4206017
(IRS Employer
Identification No.)

302 East Pettigrew St., Suite A-100, Durham, North Carolina 27701
(Address of principal executive offices) (Zip Code)

(919) 314-5512
(Registrant's telephone number, including area code)

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

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation 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 Symbol(s)	Name of each exchange on which registered
Common stock, par value \$0.000005 per share	DTIL	The Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 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 8.01. Other Events.

On March 1, 2024, Precision BioSciences, Inc. (the “Company”) entered into an underwriting agreement (the “Underwriting Agreement”) with Guggenheim Securities, LLC (the “Underwriter”), in connection with the offering (the “Offering”), issuance and sale by the Company of 2,500,000 shares of the Company’s common stock, \$0.000005 par value per share (the “Common Stock”), and warrants accompanying the Common Stock to purchase up to an aggregate of 2,500,000 shares of Common Stock, less underwriting discounts and commissions. The price to the public in the Offering is \$16.00 per share of Common Stock and accompanying warrant. The warrants have a five-year term and an exercise price of \$20.00 per share. The Company estimates the net proceeds from the offering will be approximately \$37.1 million, after deducting underwriting discounts and commissions and estimated offering expenses payable by the Company and excluding any proceeds the Company may receive upon exercise of the warrants being sold in the offering. The Company intends to use the net proceeds of the offering to fund ongoing and planned research and development, and for working capital and other general corporate purposes.

In addition, the Company has granted to the Underwriter an option to purchase up to 375,000 additional shares of common stock and accompanying warrants to purchase an additional 375,000 shares of common stock, in each case at their respective public offering prices, less underwriting discounts and commissions.

The shares of Common Stock and warrants are being sold pursuant to an effective shelf registration statement on Form S-3 (Registration No. 333-272540). A prospectus supplement relating to the offer and sale of the Common Stock and warrants has been filed with the Securities and Exchange Commission. The closing of the offering is expected to occur on March 5, 2024, subject to customary closing conditions.

The warrants have an exercise price of \$20.00 per share, are immediately exercisable, expire five years from the date of issuance, and are subject to adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting the Common Stock and also are entitled to participate on an as-exercised basis with respect to the Company’s stockholders. In the event of a fundamental transaction, the holders of the warrants are entitled to receive from the Company, or any successor entity, cash equal to the Black Scholes Value of the unexercised portion of the warrants, or, if the fundamental transaction is not within the Company’s control, including not approved by the Company’s board of directors, the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of the warrants, that is being offered and paid to the holders of Common Stock in connection with the fundamental transaction. The warrants do not entitle the holders thereof to any voting rights or any of the other rights or privileges to which holders of Common Stock are entitled.

A holder of a warrant will not be entitled to exercise any portion of such warrant that, upon giving effect to such exercise, (i) to the extent the holder immediately prior to the date of issuance of the warrants beneficially owns an amount less than 10.00% of the number of shares of the Common Stock outstanding at such time, would cause the aggregate number of shares of the Common Stock beneficially owned by such holder (together with its affiliates and any other persons whose beneficial ownership of common stock would be aggregated with the holder for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”)) to exceed 4.99% (or 9.99% at the election of the holder) of the total number of then issued and outstanding shares of the Common Stock or (ii) to the extent the holder immediately prior to the date of issuance of the warrants beneficially owns an amount equal to or greater than 10.00% of the number of shares of the Common Stock outstanding at such time, would cause the aggregate number of shares of the Common Stock beneficially owned by such holder (together with its affiliates and any other persons whose beneficial ownership of Common Stock would be aggregated with the holder for purposes of Section 13(d) of the Exchange Act) to exceed 19.99% of the total number of then issued and outstanding shares of the Common Stock, as such percentage ownership, in each case of (i) and (ii), is determined in accordance with the terms of the warrant and subject to such holder’s rights under the warrant to increase or decrease the applicable percentage to any other percentage upon at least 61 days’ prior notice from such holder to the Company.

In connection with the Offering, the Company intends to enter into a warrant agency agreement with Equiniti Trust Company, LLC, pursuant to which Equiniti Trust Company, LLC will serve as the warrant agent for the warrants.

The Underwriting Agreement contains customary representations, warranties and agreements by the Company, customary conditions to closing, indemnification obligations of the Company and the Underwriter, including for liabilities under the Securities Act of 1933, as amended, other obligations of the parties and termination provisions.

The foregoing description of the Underwriting Agreement and the form of warrant is not complete and is qualified in its entirety by reference to the full text of the Underwriting Agreement and the form of warrant, copies of which are filed, respectively, as Exhibit 1.1 and Exhibit 4.1 to this Current Report on Form 8-K and are incorporated by reference herein.

Latham & Watkins LLP, counsel to the Company, has issued an opinion regarding the validity of the shares of common stock, warrants and pre-funded warrants to be offered and sold in the offering. A copy of the opinion is filed as Exhibit 5.1 to this Current Report on Form 8-K.

The Company issued a press release on March 1, 2024 announcing the pricing of the offering, which press release is attached as Exhibit 99.1 to this Current Report on Form 8-K.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

The following exhibits relating to Item 8.01 shall be deemed to be furnished, and not filed:

Exhibit No.	Description
1.1	Underwriting Agreement, dated March 1, 2024, between the Company and Guggenheim Securities, LLC
4.1	Form of Warrant
5.1	Opinion of Latham & Watkins LLP
23.1	Consent of Latham & Watkins LLP (included in Exhibit 5.1)
99.1	Press Release of the Company, dated March 1, 2024
104	Cover Page Interactive Data File (embedded within the inline XBRL document)

SIGNATURES

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

PRECISION BIOSCIENCES, INC.

Date: March 1, 2024

By: /s/ John Alexander Kelly
John Alexander Kelly
Chief Financial Officer

Precision BioSciences, Inc.
2,500,000 Shares of Common Stock, par value \$0.000005 per share

and

Warrants to Purchase 2,500,000 Shares of Common Stock
Underwriting Agreement

March 1, 2024

Guggenheim Securities LLC
330 Madison Avenue
New York, NY 10017

Ladies and Gentlemen:

Precision BioSciences, Inc., a Delaware corporation (the “Company”), proposes to issue and sell to Guggenheim Securities LLC (the “Underwriter”) an aggregate of (i) 2,500,000 shares of common stock, par value \$0.000005 per share (“Common Stock”), of the Company (the “Underwritten Shares”) and (ii) warrants to purchase up to 2,500,000 shares of Common Stock in the form set forth in Exhibit A hereto (the “Underwritten Warrants” and, together with the Underwritten Shares, the “Underwritten Securities”). In addition, at the option of the Underwriter, up to (i) 375,000 additional shares of Common Stock (the “Option Shares” and, collectively with the Underwritten Shares, the “Shares”) and (ii) additional Warrants to purchase an aggregate of 375,000 of Common Stock (the “Option Warrants” and, collectively with the Underwritten Warrants, the “Warrants”). The Underwritten Securities, and if and to the extent such option is exercised, the Option Shares, including the Warrant Shares (as defined below) are collectively called the “Offered Shares.” Each Underwritten Share is being sold together with one Underwritten Warrant to purchase one (1) share of Common Stock at an exercise price of \$20.00 per whole share of Common Stock. The Shares and Warrants are collectively referred to herein as the “Securities.” The shares of Common Stock of the Company to be outstanding after giving effect to the sale of the Shares are referred to herein as the “Stock.” The shares of Common Stock underlying the Warrants are herein referred to as the “Warrant Shares.”

The Company hereby confirms its agreement with the Underwriter concerning the purchase and sale of the Securities, as follows:

1. Registration Statement. The Company has prepared and filed with the Securities and Exchange Commission (the “Commission”) under the Securities Act of 1933, as amended, and the rules and regulations of the Commission thereunder (collectively, the “Securities Act”), a registration statement on Form S-3 (File No. 333-272540), including a prospectus (the “Base Prospectus”), relating to the Securities, which shelf registration statement has been declared effective by the Commission. Such registration statement, as amended at the time it became effective, including the exhibits and any schedules thereto at such time, the documents incorporated or deemed to be incorporated by reference therein at such time pursuant to Item 12 of Form S-3 under the Securities Act and the documents otherwise deemed to be a part thereof as of such time pursuant to Rule 430B under the Securities Act (“Rule 430B”), is referred to herein as the “Registration Statement;” provided, however, that the “Registration Statement” without reference to a time means such registration statement as amended by any post-effective amendments thereto as of the time of the first contract of sale for the Securities, which time shall be considered the “new effective date” of such registration statement with respect to the Securities within the meaning of paragraph (f)(2) of Rule 430B, including the exhibits and schedules thereto as of such time, the documents incorporated or deemed to be incorporated by reference therein at such time pursuant to Item 12 of Form S-3 under the Securities Act and the documents otherwise deemed to be a part thereof as of such time pursuant to Rule 430B.

Any registration statement filed pursuant to Rule 462(b) of the Securities Act is herein called the “Rule 462(b) Registration Statement” and, after such filing, the term “Registration Statement” shall include the Rule 462(b) Registration Statement. Each preliminary prospectus supplement used in connection with the offering of the Securities, if any, including the Base Prospectus and the documents incorporated or deemed to be incorporated by reference therein pursuant to Item 12 of Form S-3 under the Securities Act, are collectively referred to herein as a “preliminary prospectus.” Promptly after execution and delivery of this Agreement, the Company will prepare and file a final prospectus supplement relating to the Securities in accordance with the provisions of Rule 424(b) of the Securities Act (“Rule 424(b)”). The final prospectus supplement, in the form first furnished or made available to the Underwriter for use in connection with the offering of the Securities, including the Base Prospectus and the documents incorporated or deemed to be incorporated by reference therein pursuant to Item 12 of Form S-3 under the Securities Act, are collectively referred to herein as the “Prospectus.” For purposes of this Agreement, all references to the Registration Statement, any preliminary prospectus, the Prospectus or any amendment or supplement to any of the foregoing shall be deemed to include the copy filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval system (or any successor system) (“EDGAR”). Capitalized terms used but not defined herein shall have the meanings given to such terms in the Registration Statement and the Prospectus.

“Applicable Time” means 6:10 a.m., New York City time, on March 1, 2024.

“Pricing Disclosure Package” means each Issuer Free Writing Prospectus (as defined below) issued at or prior to the Applicable Time, each “free-writing prospectus” (as defined pursuant to Rule 405 under the Securities Act) issued at or prior to the Applicable Time and listed on Annex A hereto and the Base Prospectus, all considered together.

All references in this Agreement to financial statements and schedules and other information which is “contained,” “included” or “stated” (or other references of like import) in the Registration Statement, any preliminary prospectus or the Prospectus shall be deemed to include all such financial statements and schedules and other information incorporated or deemed incorporated by reference in the Registration Statement, any preliminary prospectus or the Prospectus, as the case may be, prior to the execution and delivery of this Agreement; and all references in this Agreement to amendments or supplements to the Registration Statement, any preliminary prospectus or the Prospectus shall be deemed to include the filing of any document under the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder (collectively, the “Exchange Act”), incorporated or deemed to be incorporated by reference in the Registration Statement, such preliminary prospectus or the Prospectus, as the case may be, at or after the execution and delivery of this Agreement.

2. Purchase of the Securities by the Underwriter.

(a) The Company agrees to issue and sell the Underwritten Shares and Underwritten Warrants to the Underwriter as provided in this underwriting agreement (this “Agreement”), and the Underwriter, on the basis of the representations, warranties and agreements set forth herein and subject to the conditions set forth herein, agrees to purchase at a combined purchase price for each Underwritten Share and Underwritten Warrant of \$15.04 per unit, which shall be allocated as \$15.03 per share of Common Stock (the “Per Share Purchase Price”) and \$0.01 per Warrant (the “Per Warrant Purchase Price”) from the Company the respective number of Securities set forth opposite the Underwriter’s name in Schedule 1 hereto.

In addition, the Company agrees to issue and sell the Option Shares and Option Warrants to the Underwriter as provided in this Agreement, and the Underwriter, on the basis of the representations, warranties and agreements set forth herein and subject to the conditions set forth herein, shall have the option to purchase from the Company the Option Shares and Option Warrants at the Per Share Purchase Price and the Per Warrant Purchase Price, respectively, less an amount per share equal to any dividends or distributions declared by the Company and payable on the Underwritten Shares and Underwritten Warrants but not payable on the Option Shares and Option Warrants, respectively.

The Underwriter may exercise the option to purchase Option Shares and Option Warrants at any time in whole, or from time to time in part, on or before the 30th day following the date of the Prospectus, by written notice from the Underwriter to the Company. Such notice shall set forth the aggregate number of Option Shares and Option Warrants as to which the option is being exercised and the date and time when the Option Shares and Option Warrants are to be delivered and paid for, which may be the same date and time as the Closing Date (as hereinafter defined) but shall not be earlier than the Closing Date nor later than the 10th full business day (as hereinafter defined) after the date of such notice (unless such time and date are postponed in accordance with the provisions of Section 10 hereof). Any such notice shall be given at least two business days prior to the date and time of delivery specified therein.

(b) The Company understands that the Underwriter intends to make an offering of the Securities, and initially to offer the Securities on the terms set forth in the Pricing Disclosure Package. The Company acknowledges and agrees that the Underwriter may offer and sell Securities to or through any affiliate of an Underwriter.

Payment for the Securities shall be made by wire transfer in immediately available funds to the account specified by the Company to the Underwriter and, in the case of the Underwritten Shares and Underwritten Warrants, at the offices of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel for the Underwriter at 10:00 A.M., New York City time, on March 5, 2024, or at such other time or place on the same or such other date, not later than the fifth business day thereafter, as the Underwriter and the Company may agree upon in writing or, in the case of the Option Shares and Option Warrants, on the date and at the time and place specified by the Underwriter in the written notice of its election to purchase such Option Shares and Option Warrants. The time and date of such payment for the Securities is referred to herein as the "Closing Date," and the time and date for such payment for the Option Shares and Option Warrants, if other than the Closing Date, is herein referred to as the "Additional Closing Date."

(c) Payment for the Securities to be purchased on the Closing Date or the Additional Closing Date, as the case may be, shall be made against delivery to the Underwriter for the account of the Underwriter of the Securities to be purchased on such date with any transfer taxes payable in connection with the sale of such Securities duly paid by the Company. Delivery of the Securities shall be made through the facilities of The Depository Trust Company unless the Underwriter shall otherwise instruct.

(d) The Company acknowledges and agrees that the Underwriter is acting solely in the capacity of an arm's length contractual counterparty to the Company with respect to the offering of Securities contemplated hereby (including in connection with determining the terms of the offering) and not as a financial advisor or a fiduciary to, or an agent of, the Company or any other person. The Company further acknowledges and agrees that (a) the purchase and sale of the Securities pursuant to this Agreement, including the determination of the public offering price of the Securities, and any related discounts and commissions, does not constitute a recommendation, investment advice, or solicitation of any actions by the Underwriter, (b) Underwriter has not assumed and will not assume an advisory or fiduciary responsibility in favor of the Company with respect to the offering of the Securities or the process leading thereto (irrespective of whether the Underwriter has advised or is currently advising the Company on other matters) and the Underwriter has no obligation to the Company with respect to the offering of the Securities except the obligations expressly set forth in this Agreement, (c) the Underwriter and its affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Company, (d) the Underwriter has not provided any legal, accounting, regulatory, investment or tax advice with respect to the offering of the Securities and the Company has consulted its own respective legal, accounting, financial, regulatory and tax advisors to the extent it deemed appropriate and (e) none of the activities of the Underwriter in connection with the transactions contemplated herein constitutes a recommendation, investment advice or solicitation of any action by the Underwriter with respect to any entity or natural person. Any review by the Underwriter of the Company, the transactions contemplated hereby or other matters relating to such transactions will be performed solely for the benefit of the Underwriter and shall not be on behalf of the Company.

3. Representations and Warranties of the Company. The Company represents and warrants to the Underwriter that:

(a) *Preliminary Prospectus.* No order preventing or suspending the use of any preliminary prospectus has been issued by the Commission, and each preliminary prospectus included in the Pricing Disclosure Package, if any, at the time of filing thereof, complied in all material respects with the Securities Act, and no preliminary prospectus, if any, at the time of filing thereof, contained any untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company makes no representation or warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to the Underwriter furnished to the Company in writing by the Underwriter through the Underwriter expressly for use in any preliminary prospectus, it being understood and agreed that the only such information furnished by the Underwriter consists of the information described as such in Section 7(b) hereof.

(b) *Pricing Disclosure Package.* The Pricing Disclosure Package as of the Applicable Time did not, and as of the Closing Date and any Additional Closing Date will not, contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company makes no representation or warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to the Underwriter furnished to the Company in writing by the Underwriter expressly for use in such Pricing Disclosure Package, it being understood and agreed that the only such information furnished by the Underwriter consists of the information described as such in Section 7(b) hereof. No statement of material fact included in the Prospectus has been omitted from the Pricing Disclosure Package and no statement of material fact included in the Pricing Disclosure Package that is required to be included in the Prospectus has been omitted therefrom.

(c) *Issuer Free Writing Prospectus.* Other than the Registration Statement, the preliminary prospectus, if any, and the Prospectus, the Company (including its agents and representatives, other than the Underwriter in its capacity as such) has not prepared, made, used, authorized, approved or referred to and will not prepare, make, use, authorize, approve or refer to any “written communication” (as defined in Rule 405 under the Securities Act) that constitutes an offer to sell or solicitation of an offer to buy the Securities (each such communication by the Company or its agents and representatives (other than a communication referred to in clause (i) below) an “Issuer Free Writing Prospectus”) other than (i) any document not constituting a prospectus pursuant to Section 2(a)(10)(a) of the Securities Act or Rule 134 under the Securities Act or (ii) the documents listed on Annex A hereto, each electronic road show and any other written communications approved in writing in advance by the Underwriter. Each such Issuer Free Writing Prospectus complies in all material respects with the Securities Act, has been or will be (within the time period specified in Rule 433) filed in accordance with the Securities Act (to the extent required thereby) and does not conflict with the information contained in the Registration Statement or the Prospectus, including any document incorporated by reference therein and when taken together with any preliminary prospectus accompanying, or delivered prior to delivery of, such Issuer Free Writing Prospectus, did not, and as of the Closing Date and any Additional Closing Date will not, contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company makes no representation or warranty with respect to any statements or omissions made in each such Issuer Free Writing Prospectus or any preliminary prospectus in reliance upon and in conformity with information relating to the Underwriter furnished to the Company in writing by the Underwriter expressly for use in such Issuer Free Writing Prospectus or any preliminary prospectus, it being understood and agreed that the only such information furnished by the Underwriter consists of the information described as such in Section 7(b) hereof.

(d) *Emerging Growth Company*. From the time of the filing of the Registration Statement with the Commission through the date hereof, the Company has been and is an “emerging growth company,” as defined in Section 2(a) of the Securities Act (an “Emerging Growth Company”).

(e) *Registration Statement and Prospectus*. The Company meets the requirements for use of Form S-3 under the Securities Act. The Registration Statement and any post-effective amendment thereto has been declared effective by the Commission. No order suspending the effectiveness of the Registration Statement has been issued by the Commission, and no proceeding for that purpose or pursuant to Section 8A of the Securities Act against the Company or related to the offering of the Securities has been initiated or, to the knowledge of the Company, threatened by the Commission; as of the applicable effective date of the Registration Statement and any post-effective amendment thereto, each deemed effective date with respect to the Underwriter pursuant to Rule 430B(f)(2) under the Securities Act, at the Applicable Time, complied and will comply in all material respects with the requirements of the Securities Act. Each preliminary prospectus, if any, the Prospectus and any amendment or supplement thereto, at the time each was filed with the Commission, and, in each case, at the Applicable Time, and the Closing Date and any Additional Closing Date complied and will comply in all material respects with the requirements of the Securities Act.

The Registration Statement and any post-effective amendment did not and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein not misleading; and as of the date of each preliminary prospectus, if any, and any amendment or supplement thereto and as of the Closing Date and any Additional Closing Date each preliminary prospectus, if any, will not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company makes no representation and warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to the Underwriter furnished to the Company in writing by the Underwriter expressly for use in the Registration Statement and the Prospectus and any amendment or supplement thereto, it being understood and agreed that the only such information furnished by the Underwriter consists of the information described as such in Section 7(b) hereof.

The documents incorporated or deemed to be incorporated by reference in the Registration Statement and the Prospectus, when they became effective or at the time they were filed or hereafter are filed with the Commission, complied and will comply in all material respects with the requirements of the Exchange Act. The documents incorporated or deemed to be incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus, at the time the Registration Statement became effective or when such documents incorporated by reference were filed with the Commission, as the case may be, when read together with the other information in the Registration Statement, the Pricing Disclosure Package or the Prospectus, as the case may be, did not and will not include 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 with respect to the Pricing Disclosure Package or Prospectus, not misleading.

(f) *Financial Statements.* The financial statements (including the related notes thereto) of the Company included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus comply in all material respects with the applicable requirements of the Securities Act and the Exchange Act, as applicable, and present fairly in all material respects the financial position of the Company as of the dates indicated and the results of their operations and the changes in their cash flows for the periods specified; such financial statements have been prepared in conformity with generally accepted accounting principles in the United States (“GAAP”) applied on a consistent basis throughout the periods covered thereby, except in the case of unaudited financial statements, which are subject to normal year-end adjustments and do not contain certain footnotes as permitted by the applicable rules of the Commission; and any supporting schedules included or incorporated by reference in the Registration Statement present fairly in all material respects the information required to be stated therein; and the other financial information included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus has been derived from the accounting records of the Company and presents fairly in all material respects the information shown thereby. The interactive data in eXtensible Business Reporting Language incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus 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.

(g) *No Material Adverse Change.* Since the date of the most recent financial statements of the Company included in the Registration Statement, the Pricing Disclosure Package and the Prospectus, (i) there has not been any material change in the capital stock (other than the issuance of shares of Common Stock upon exercise of stock options and warrants described as outstanding in, and the grant of options and awards under existing equity incentive plans described in, the Registration Statement, the Pricing Disclosure Package and the Prospectus), short-term debt or long-term debt of the Company, or any dividend or distribution of any kind declared, set aside for payment, paid or made by the Company on any class of capital stock, or any material adverse change, or any development involving a prospective material adverse change, in or affecting the business, properties, management, financial position, stockholders’ equity, results of operations or prospects of the Company taken as a whole; (ii) the Company has not entered into any transaction or agreement (whether or not in the ordinary course of business) that is material to the Company taken as a whole or incurred any liability or obligation, direct or contingent, that is material to the Company taken as a whole; and (iii) the Company has not sustained any loss or interference with its business that is material to the Company taken as a whole and that is either from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor disturbance or dispute or any action, order or decree of any court or arbitrator or governmental or regulatory authority, except in each case as otherwise disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

(h) *Organization and Good Standing.* The Company has been duly organized and are validly existing and in good standing under the laws of their respective jurisdictions of organization, are duly qualified to do business and are in good standing in each jurisdiction in which their respective ownership or lease of property or the conduct of their respective businesses requires such qualification, and have all power and authority necessary to own or hold their respective properties and to conduct the businesses in which they are engaged, except where the failure to be so qualified or in good standing or have such power or authority would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the business, properties, management, financial position, stockholders' equity, results of operations or prospects of the Company taken as a whole or on the performance by the Company of its obligations under this Agreement (a "Material Adverse Effect"). The Company does not own or control, directly or indirectly, any corporation, association or other entity other than the subsidiaries listed in Exhibit 21 to the Company's most recent Annual Report on Form 10-K filed with the Commission.

(i) *Capitalization.* The Company has an authorized capitalization as set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus under the heading "Description of Capital Stock"; all the outstanding shares of capital stock of the Company have been duly and validly authorized and issued and are fully paid and non-assessable and are not subject to any pre-emptive or similar rights that have not been duly waived or satisfied; except as described in or expressly contemplated by the Registration Statement, the Pricing Disclosure Package and the Prospectus, there are no outstanding rights (including, without limitation, pre-emptive rights), rights of first refusal, warrants or options to acquire, or instruments convertible into or exchangeable for, any shares of capital stock or other equity interest in the Company, or any contract, commitment, agreement, understanding or arrangement of any kind relating to the issuance of any capital stock of the Company, any such convertible or exchangeable securities or any such rights, warrants or options; the capital stock of the Company conforms in all material respects to the description thereof contained in the Registration Statement, the Pricing Disclosure Package and the Prospectus; and the Company does not own any subsidiaries.

(j) *Stock Options.* With respect to the stock options (the "Stock Options") granted pursuant to the stock-based compensation plans of the Company (the "Company Stock Plans"), (i) each Stock Option intended to qualify as an "incentive stock option" under Section 422 of the Internal Revenue Code of 1986, as amended (the "Code") so qualifies, (ii) each grant of a Stock Option was duly authorized no later than the date on which the grant of such Stock Option was by its terms to be effective by all necessary corporate action, including, as applicable, approval by the board of directors of the Company (or a duly constituted and authorized committee thereof) and any required stockholder approval by the necessary number of votes or written consents, and the award agreement governing such grant (if any) was duly executed and delivered by each party thereto, (iii) each such grant was made in accordance with the terms of the Company Stock Plans and all other applicable laws and regulatory rules or requirements and (iv) each such grant was properly accounted for in accordance with GAAP in the financial statements (including the related notes) of the Company. Each Company Stock Plan is accurately described in all material respects in the Registration Statement, the Pricing Disclosure Package and the Prospectus. The Company has not knowingly granted, and there is no and has been no policy or practice of the Company granting, Stock Options, prior to, or otherwise coordinating the grant of Stock Options with, the release or other public announcement of material information regarding the Company or their results of operations or prospects.

(k) *Due Authorization.* The Company has full right, power and authority to execute and deliver this Agreement and to perform its obligations hereunder; and all action required to be taken for the due and proper authorization, execution and delivery by it of this Agreement and the consummation by it of the transactions contemplated hereby has been duly and validly taken.

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

(m) *The Securities.* The Shares to be issued and sold by the Company hereunder have been duly authorized by the Company and, when issued and delivered and paid for as provided herein, will be duly and validly issued, will be fully paid and nonassessable and will conform in all material respects to the descriptions thereof in the Registration Statement, 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 duly waived or satisfied. The Warrant Shares have been duly authorized and reserved for issuance upon exercise of the Warrants pursuant to the terms of the Warrants in a number sufficient to meet the current exercise requirements, and when issued and delivered upon valid exercise in accordance with the terms of the Warrants will be validly issued, fully paid and non-assessable, will conform in all material respects to the description thereof contained in the Registration Statement, the Pricing Disclosure Package and the Prospectus, will be issued in compliance with all applicable state, federal and foreign securities laws and will not be issued in violation of or subject to any preemptive or similar right that entitles any person to acquire any security from the Company.

(n) *Listing.* The Common Stock is registered pursuant to Section 12(b) or 12(g) of the Exchange Act and the Common Stock is listed on the Nasdaq Capital Market, and the Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from the Nasdaq Capital Market. Except as disclosed in the Registration Statement or Prospectus, the Company has not received any notification that the Commission or the Nasdaq Stock Market LLC is contemplating terminating such registration or listing. To the Company's knowledge, and except as otherwise described in the Registration Statement or Prospectus, the Company is in compliance with all applicable listing requirements of the Nasdaq Stock Market LLC.

(o) *No Violation or Default.* The Company is not (i) in violation of its charter or by-laws or similar organizational documents; (ii) in default, and no event has occurred that, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company is a party or by which the Company is bound or to which any of the property or assets of the Company is subject; or (iii) in violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority, except, in the case of clauses (ii) and (iii) above, for any such default or violation that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(p) *No Conflicts.* The execution, delivery and performance by the Company of this Agreement, the issuance and sale of the Securities and the consummation of the transactions contemplated by this Agreement or the Pricing Disclosure Package and the Prospectus will not (i) conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, result in the termination, modification or acceleration of, or result in the creation or imposition of any lien, charge or encumbrance upon any property, right or assets of the Company pursuant to, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company is a party or by which the Company is bound or to which any of the property, right or assets of the Company is subject, (ii) result in any violation of the provisions of the charter or by-laws or similar organizational documents of the Company or (iii) result in the violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority, except, in the case of clauses (i) and (iii) above, for any such conflict, breach, violation, default, lien, charge or encumbrance that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(q) *No Consents Required.* No consent, filing, approval, authorization, order, license, registration or qualification of or with any court or arbitrator or governmental or regulatory authority is required for the execution, delivery and performance by the Company of this Agreement, the issuance and sale of the Securities and the consummation of the transactions contemplated by this Agreement, except for the registration of the Securities under the Securities Act and such consents, approvals, authorizations, orders and registrations or qualifications as may be required by the Financial Industry Regulatory Authority, Inc. ("FINRA"), the Nasdaq Capital Market and under applicable state securities laws in connection with the purchase and distribution of the Securities by the Underwriter.

(r) *Legal Proceedings.* There are no legal, governmental or regulatory investigations, actions, demands, claims, suits, arbitrations, inquiries or proceedings ("Actions") pending to which the Company is or may reasonably be expected to become a party or to which any property of the Company is or may reasonably be expected to become the subject that, individually or in the aggregate, if determined adversely to the Company, would reasonably be expected to have a Material Adverse Effect; to the knowledge of the Company, no such Actions are threatened or contemplated by any governmental or regulatory authority or threatened by others; and (i) there are no current or pending Actions that are required under the Securities Act to be described in the Registration Statement, the Pricing Disclosure Package or the Prospectus that are not so described in the Registration Statement, the Pricing Disclosure Package and the Prospectus and (ii) there are no statutes, regulations or contracts or other documents that are required under the Securities Act to be filed as exhibits to the Registration Statement or described in the Registration Statement, the Pricing Disclosure Package or the Prospectus that are not so filed as exhibits to the Registration Statement or described in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

(s) *Independent Accountants.* Deloitte & Touche LLP, who has certified certain financial statements of the Company is an independent registered public accounting firm with respect to the Company within the applicable rules and regulations adopted by the Commission and the Public Company Accounting Oversight Board (United States) and as required by the Securities Act and the Exchange Act.

(t) *Title to Real and Personal Property.* The Company has good and marketable title in fee simple (in the case of real property) to, or have valid rights to lease or otherwise use, all items of real and personal property and assets that are material to the respective businesses of the Company, in each case free and clear of all liens, encumbrances, claims and defects and imperfections of title except those that (i) do not materially interfere with the use made and proposed to be made of such property by the Company or (ii) would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect.

(u) *Title to Intellectual Property.* The Company owns, or possesses valid and enforceable licensed rights to use, or can acquire on reasonable terms, all material patents, patent applications, trademarks, service marks, trade names, trademark registrations, service mark registrations, trade dress, designs, data, database rights, internet domain names, copyrights, works of authorship, licenses, proprietary information and know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures) necessary for the conduct of their respective businesses as currently conducted and as proposed to be conducted (collectively, “Intellectual Property”), and the conduct of their respective businesses does not and will not infringe, misappropriate or otherwise conflict in any material respect with any such rights of others. The Intellectual Property of the Company has not been adjudged by a court of competent jurisdiction to be invalid or unenforceable, in whole or in part, and the Company is unaware of any facts which would form a reasonable basis for any such adjudication. The Company has not received any notice of any claim of infringement, misappropriation or conflict with any intellectual property rights of another which would, singly or in the aggregate, result in a Material Adverse Effect, and the Company is unaware of any facts which would form a reasonable basis for any such notice or claim. To the Company’s knowledge and except for customary reversionary rights of third-party licensors with respect to Intellectual Property that is disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus (“Disclosure Documents”) as owned by or licensed to the Company: (i) there are no third parties who have rights to any Intellectual Property and (ii) there is no infringement by third parties of any Intellectual Property. Except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, there is no pending or, to the Company’s knowledge, threatened action, suit, proceeding or claim by others: (A) challenging the Company’s rights in or to any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim; (B) challenging the validity, enforceability or scope of any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim; or (C) asserting that the Company infringe, misappropriate, or otherwise violate, or would, upon the commercialization of any product or service described in the Disclosure Documents as under development, infringe, misappropriate or otherwise violate, any intellectual property rights of others, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim. The Company has materially complied with the terms of each agreement pursuant to which Intellectual Property has been licensed to the Company, and all such agreements are in full force and effect. To the Company’s knowledge, there are no material defects in any of the patents or patent applications included in the Intellectual Property. The Company has taken all reasonable steps to protect, maintain and safeguard their Intellectual Property, including the execution of appropriate nondisclosure, confidentiality agreements and invention assignment agreements and invention assignments with their employees. The duty of candor and good faith as required by the United States Patent and Trademark Office during the prosecution of the United States patents and patent applications included in the Intellectual Property have been complied with; and in all foreign offices having similar requirements, all such requirements have been complied with. To the Company’s knowledge, none of the Company owned Intellectual Property or technology (including information technology and outsourced arrangements) employed by the Company has been obtained or is being used by the Company in violation of any contractual obligation binding on the Company or any of its officers, directors or employees or otherwise in violation of the rights of any persons. The product candidates described in the Disclosure Documents as under development by the Company fall within the scope of the claims of one or more patents or patent applications owned by, or exclusively licensed to, the Company.

(v) *Trade Secrets.* The Company has taken reasonable and customary actions to protect their rights in and prevent the unauthorized use and disclosure of material trade secrets and confidential business information (including confidential source code, ideas, research and development information, know-how, formulas, compositions, technical data, designs, drawings, specifications, research records, records of inventions, test information, financial, marketing and business data, customer and supplier lists and information, pricing and cost information, business and marketing plans and proposals) owned by the Company, and, to the knowledge of the Company, there has been no unauthorized use or disclosure.

(w) *IT Assets.* Except as could not reasonably be expected to have a Material Adverse Effect (i) the computers, software, servers, networks, data communications lines, and other information technology systems owned, licensed, leased or otherwise used by the Company (excluding any public networks) (collectively, the “IT Assets”) operate and perform as is necessary for the operation of the business of the Company as currently conducted and as proposed to be conducted as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, and (ii) such IT Assets are not infected by viruses, disabling code or other harmful code. The Company have implemented and maintained all reasonably necessary controls, policies, procedures, and safeguards to maintain and protect their confidential information and the integrity, continuous operation, redundancy and security of all IT Assets and data (including all Personal Data (defined below) that is sensitive, confidential or regulated data (“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.

(x) *FDA and USDA Compliance.* The Company: (A) is and at all times has been in compliance with all statutes, rules or regulations of the FDA, USDA and other comparable governmental entities applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product under development, manufactured or distributed by the Company (“Applicable Laws”), except where such noncompliance would not singly or in the aggregate reasonably be expected to result in a Material Adverse Effect; (B) possesses all material licenses, certificates, approvals, clearances, exemptions, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws (“Authorizations”) and such Authorizations are valid and in full force and effect and the Company is not in material violation of any term of any such Authorizations; and (C) has not received written notice that the FDA or any governmental entity has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations and has no knowledge that the FDA or any governmental entity is considering such action.

(y) *Tests and Preclinical and Clinical Trials.* The studies, tests and preclinical and clinical trials conducted by or, to the Company’s knowledge, on behalf of the Company were and, if still ongoing, are being conducted in all material respects in accordance with Applicable Laws, including, without limitation, the Federal Food, Drug and Cosmetic Act; except to the extent disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the Company is not aware of any studies, tests or trials, the results of which reasonably call into question the study, test, or trial results described or referred to in the Registration Statement, the Pricing Disclosure Package and the Prospectus when viewed in the context in which such results are described and the state of development; and, except to the extent disclosed in the Registration Statement, the Pricing Disclosure Package or the Prospectus, the Company has not received any written notices or correspondence from the FDA or any governmental entity requiring the termination or suspension of any studies, tests or preclinical or clinical trials conducted by or on behalf of the Company, other than ordinary course communications with respect to modifications in connection with the design and implementation of such trials.

(z) *Compliance with Health Care Laws.* The Company is, and at all times since January 1, 2015 has been, in compliance with all Health Care Laws, except where such noncompliance would not singly or in the aggregate reasonably be expected to result in a Material Adverse Effect. For purposes of this Agreement, “Health Care Laws” means: (i) the Federal Food, Drug, and Cosmetic Act and the regulations promulgated thereunder; (ii) all applicable federal, state, local and foreign health care fraud and abuse laws, including, without limitation, the U.S. Anti-Kickback Statute (42 U.S.C. Section 1320a-7b(b)), the U.S. Civil False Claims Act (31 U.S.C. Section 3729 et seq.), the criminal False Statements Law (42 U.S.C. Section 1320a-7b(a)), 18 U.S.C. Sections 286, and 287, and the health care fraud criminal provisions under the U.S. Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) (42 U.S.C. Section 1320d et seq.), the civil monetary penalties law (42 U.S.C. Section 1320a-7a), the exclusions law (42 U.S.C. Section 1320a-7), the Physician Payments Sunshine Act (42 U.S.C. Section 1320-7h), (iii) HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. Section 17921 et seq., (iv) Medicare (Title XVIII of the Social Security Act), Medicaid (Title XIX of the Social Security Act), (v) the Public Health Service Act (42 U.S.C. § 201 et seq.), (vi) the regulations promulgated pursuant to such statutes and any state or foreign counterpart thereof, (vii) any similar applicable local, state, federal, national, supranational and foreign laws, relating to the regulation of the Company, and (viii) any and all other applicable health care laws and regulations. The Company has not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any court or arbitrator or governmental or regulatory authority or third party alleging that any product operation or activity is in violation of any Health Care Laws nor, to the Company’s knowledge, is any such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action threatened. The Company has filed, maintained or submitted all reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Health Care Laws, and all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and accurate on the date filed in all respects (or were corrected or supplemented by a subsequent submission), except where such failure would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect. The Company is not a party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any governmental or regulatory authority. Additionally, neither the Company nor any of its respective employees, officers, directors, or to the Company’s knowledge, agents has been excluded, suspended or debarred from participation in any U.S. federal health care program or human clinical research or, to the knowledge of the Company, is subject to a governmental inquiry, investigation, proceeding, or other similar action that could reasonably be expected to result in debarment, suspension, or exclusion.

(aa) *No Undisclosed Relationships.* No relationship, direct or indirect, exists between or among the Company, on the one hand, and the directors, officers, stockholders, customers, suppliers or other affiliates of the Company, on the other, that is required by the Securities Act to be described in each of the Registration Statement and the Prospectus and that is not so described in such documents and in the Pricing Disclosure Package.

(bb) *Investment Company Act.* The Company is not and, after giving effect to the offering and sale of the Securities and the application of the proceeds thereof as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, will not be required to register as an “investment company” or an entity “controlled” by an “investment company” within the meaning of the Investment Company Act of 1940, as amended, and the rules and regulations of the Commission thereunder (collectively, the “Investment Company Act”).

(cc) *Taxes.* The Company has paid all federal, state, local and foreign taxes and filed all tax returns required to be paid or filed through the date hereof, except for those taxes and tax returns whose failure to pay or file would not reasonably be expected to have a Material Adverse Effect; and, except as otherwise disclosed in the Registration Statement, the Pricing Disclosure Package or the Prospectus, there is no tax deficiency that has been, or could reasonably be expected to be, asserted against the Company or any of their respective properties or assets that has had or would reasonably be expected to have a Material Adverse Effect, except for any tax deficiency being contested in good faith and for which appropriate reserves have been provided in accordance with GAAP.

(dd) *Licenses and Permits.* The Company possesses all licenses, certificates, permits and other authorizations issued by, and have made all declarations and filings with, the appropriate federal, state, local or foreign governmental or regulatory authorities that are necessary for the ownership or lease of their respective properties or the conduct of their respective businesses as described in each of 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 the Pricing Disclosure Package and the Prospectus, the Company has not received written notice of any revocation or modification of any such license, certificate, permit or authorization or has any reason to believe that any such license, certificate, permit or authorization will not be renewed in the ordinary course, except where such revocation or modification would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. No party granting any such licenses, certificates, permits and other authorizations has taken any action to limit, suspend or revoke the same in any respect, except where such action would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect. The Company has filed, obtained, maintained or submitted all reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and correct on the date filed (or were corrected or supplemented by a subsequent submission) as required for maintenance of their licenses, certificates, permits and other authorizations that are necessary for the conduct of their respective businesses, except where such non-compliance would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(ee) *No Labor Disputes.* No labor disturbance by or dispute with employees of the Company exists or, to the knowledge of the Company, is threatened, and the Company is not aware of any existing or imminent labor disturbance by, or dispute with, the employees of any of its principal suppliers, contractors or customers, except in any event as would not reasonably be expected to have a Material Adverse Effect. The Company has not received any notice of cancellation or termination with respect to any collective bargaining agreement that is material to the Company.

(ff) *Certain Environmental Matters.* (i) The Company (x) are in compliance with all, and have not violated any, applicable federal, state, local and foreign laws, rules, regulations, requirements, decisions, judgments, decrees, orders and other legally enforceable requirements relating to pollution or the protection of human health or safety, the environment, natural resources, hazardous or toxic substances or wastes, pollutants or contaminants (collectively, "Environmental Laws"); (y) have received and are in compliance with all, and have not violated any, permits, licenses, certificates or other authorizations or approvals required of them under any Environmental Laws to conduct their respective businesses; and (z) have not received written notice of any actual or potential liability or obligation under or relating to, or any actual or potential violation of, any Environmental Laws, including for the investigation or remediation of any disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants, and have no knowledge of any event or condition that would reasonably be expected to result in any such notice, and (ii) there are no costs or liabilities associated with Environmental Laws of or relating to the Company, except in the case of each of (i) and (ii) above, for any such matter as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; and (iii) (x) there is no proceeding that is pending, or that is known by the Company to be contemplated, against the Company under any Environmental Laws in which a governmental entity is also a party, other than such proceeding regarding which the Company reasonably believes no monetary sanctions of \$100,000 or more will be imposed, (y) the Company is not aware of any facts or issues regarding compliance with Environmental Laws, or liabilities or other obligations under Environmental Laws or concerning hazardous or toxic substances or wastes, pollutants or contaminants, that would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, and (z) the Company does not anticipate material capital expenditures relating to any Environmental Laws.

(gg) *Hazardous Materials.* There has been no storage, generation, transportation, use, handling, treatment, Release or threat of Release of Hazardous Materials by, relating to or caused by the Company (or, to the knowledge of the Company, any other entity (including any predecessor) for whose acts or omissions the Company is or could reasonably be expected to be liable) at, on, under or from any property or facility now or previously owned, operated or leased by the Company, or at, on, under or from any other property or facility, in violation of any Environmental Laws or in a manner or amount or to a location that could reasonably be expected to result in any liability under any Environmental Law, except for any violation or liability which would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. "Hazardous Materials" means any material, chemical, substance, waste, pollutant, contaminant, compound, mixture, or constituent thereof, in any form or amount, including petroleum (including crude oil or any fraction thereof) and petroleum products, natural gas liquids, asbestos and asbestos containing materials, naturally occurring radioactive materials, brine, and drilling mud, regulated or which can give rise to liability under any Environmental Law. "Release" means any spilling, leaking, seepage, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, disposing, depositing, dispersing, or migrating in, into or through the environment, or in, into from or through any building or structure.

(hh) *Compliance with ERISA.* (i) Each employee benefit plan, within the meaning of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended (“ERISA”), for which the Company or any member of its “Controlled Group” (defined as any entity, whether or not incorporated, that is under common control with the Company within the meaning of Section 4001(a)(14) of ERISA or any entity that would be regarded as a single employer with the Company under Section 414(b),(c),(m) or (o) of the Internal Revenue Code of 1986, as amended (the “Code”)) would have any liability (each, a “Plan”) has been maintained in compliance with its terms and the requirements of any applicable statutes, orders, rules and regulations, including but not limited to ERISA and the Code; (ii) no prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred with respect to any Plan, excluding transactions effected pursuant to a statutory or administrative exemption; (iii) for each Plan that is subject to the funding rules of Section 412 of the Code or Section 302 of ERISA, no Plan has failed (whether or not waived), or is reasonably expected to fail, to satisfy the minimum funding standards (within the meaning of Section 302 of ERISA or Section 412 of the Code) applicable to such Plan; (iv) no Plan is, or is reasonably expected to be, in “at risk status” (within the meaning of Section 303(i) of ERISA) and no Plan that is a “multiemployer plan” within the meaning of Section 4001(a)(3) of ERISA is in “endangered status” or “critical status” (within the meaning of Sections 304 and 305 of ERISA); (v) the fair market value of the assets of each Plan exceeds the present value of all benefits accrued under such Plan (determined based on those assumptions used to fund such Plan); (vi) no “reportable event” (within the meaning of Section 4043(c) of ERISA and the regulations promulgated thereunder) has occurred or is reasonably expected to occur; (vii) each Plan that is intended to be qualified under Section 401(a) of the Code is so qualified, and, to the knowledge of the Company, nothing has occurred, whether by action or by failure to act, which would reasonably be expected to cause the loss of such qualification; (viii) neither the Company nor any member of the Controlled Group has incurred, nor reasonably expects to incur, any liability under Title IV of ERISA (other than contributions to the Plan or premiums to the Pension Benefit Guarantee Corporation, in the ordinary course and without default) in respect of a Plan (including a “multiemployer plan” within the meaning of Section 4001(a)(3) of ERISA); and (ix) none of the following events has occurred or is reasonably likely to occur: (A) a material increase in the aggregate amount of contributions required to be made to all Plans by the Company or its Controlled Group affiliates in the current fiscal year of the Company and its Controlled Group affiliates compared to the amount of such contributions made in the Company’s and its Controlled Group affiliates’ most recently completed fiscal year; or (B) a material increase in the Company’s “accumulated post-retirement benefit obligations” (within the meaning of Accounting Standards Codification Topic 715-60) compared to the amount of such obligations in the Company’s most recently completed fiscal year, except in each case with respect to the events or conditions set forth in (i) through (ix) hereof, as would not, individually or in the aggregate, have a Material Adverse Effect.

(ii) *Disclosure Controls.* The Company maintains an effective system of “disclosure controls and procedures” (as defined in Rule 13a-15(e) of the Exchange Act) that complies with the requirements of the Exchange Act and that has been designed to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission’s rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to the Company’s management as appropriate to allow timely decisions regarding required disclosure. The Company has carried out evaluations of the effectiveness of its disclosure controls and procedures as required by Rule 13a-15 of the Exchange Act through December 31, 2023.

(jj) *Accounting Controls.* The Company maintains systems of “internal control over financial reporting” (as defined in Rule 13a-15(f) of the Exchange Act) that are designed to comply with the requirements of the Exchange Act and have been designed by, or under the supervision of, their respective principal executive and principal financial officers, or persons performing similar functions, 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, including, but not limited to, internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management’s general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management’s general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences; and (v) the interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus fairly presents the information called for in all material respects and is prepared in accordance with the Commission’s rules and guidelines applicable thereto. There are no material weaknesses in the Company’s internal controls. The Company’s auditors and the Audit Committee of the Board of Directors of the Company have been advised of: (i) all significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which have adversely affected or are reasonably likely to adversely affect the Company’s ability to record, process, summarize and report financial information; and (ii) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company’s internal controls over financial reporting.

(kk) *Insurance.* The Company has insurance covering their respective properties, operations, personnel and businesses, including business interruption insurance, which insurance is in amounts and insures against such losses and risks as are generally maintained by similarly situated companies and which the Company believes are reasonably adequate to protect the Company and its business; and the Company has not (i) received notice from any insurer or agent of such insurer that capital improvements or other expenditures are required or necessary to be made in order to continue such insurance or (ii) 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.

(ll) *No Unlawful Payments.* Neither the Company nor any director, officer, or employee of the Company nor, to the knowledge of the Company, any agent, affiliate or other person associated with or acting on behalf of the Company has (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (ii) made or taken an act in furtherance of an offer, promise or authorization of any direct or indirect unlawful payment or benefit to any foreign or domestic government or regulatory official or employee, including of any government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office; (iii) violated or is in violation of any provision of the Foreign Corrupt Practices Act of 1977, as amended, or any applicable law or regulation implementing the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, or committed an offence under the Bribery Act 2010 of the United Kingdom, or any other applicable anti-bribery or anti-corruption laws; or (iv) made, offered, agreed, requested or taken an act in furtherance of any unlawful bribe or other unlawful benefit, including, without limitation, any rebate, payoff, influence payment, kickback or other unlawful or improper payment or benefit. The Company has instituted, maintain and enforce, and will continue to maintain and enforce policies and procedures designed to promote and ensure compliance with all applicable anti-bribery and anti-corruption laws.

(mm) *Compliance with Anti-Money Laundering Laws.* The operations of the Company are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements, including those of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the applicable money laundering statutes of all jurisdictions where the Company conducts business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines issued, administered or enforced by any governmental or regulatory agency (collectively, the “Anti-Money Laundering Laws”) and no action, suit or proceeding by or before any court or governmental or regulatory agency, authority or body or any arbitrator involving the Company with respect to the Anti-Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

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

(oo) *No Broker’s Fees.* 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 the Underwriter for a brokerage commission, finder’s fee or like payment in connection with the offering and sale of the Securities.

(pp) *No Registration Rights.* No person has the right to require the Company to register any securities for sale under the Securities Act by reason of the filing of the Registration Statement with the Commission or the issuance and sale of the Securities, except for such rights as have duly been waived.

(qq) *No Stabilization.* Neither the Company nor, to the Company's knowledge, affiliates have taken, directly or indirectly, any action designed to or that could reasonably be expected to cause or result in any stabilization or manipulation of the price of the Securities.

(rr) *Margin Rules.* Neither the issuance, sale and delivery of the Securities nor the application of the proceeds thereof by the Company as described in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus will violate Regulation T, U or X of the Board of Governors of the Federal Reserve System or any other regulation of such Board of Governors.

(ss) *Forward-Looking Statements.* No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) contained in the Registration Statement, the Pricing Disclosure Package or the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(tt) *Statistical and Market Data.* Nothing has come to the attention of the Company that has caused the Company to believe that the statistical and market-related data included in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus is not based on or derived from sources that are reliable and accurate in all material respects.

(uu) *Sarbanes-Oxley Act.* There is and has been no failure on the part of the Company or any of the Company's directors or officers, in their capacities as such, to comply with any provision of the Sarbanes-Oxley Act of 2002, as amended, and the rules and regulations promulgated in connection therewith (the "Sarbanes-Oxley Act"), including Section 402 related to loans.

(vv) *Status under the Securities Act.* 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 Securities Act) of the Securities and at the date hereof, the Company was not and is not an "ineligible issuer," as defined in Rule 405 under the Securities Act. The Company has paid the registration fee for this offering pursuant to Rule 456(b)(1) under the Securities Act or will pay such fee within the time period required by such rule (without giving effect to the proviso therein) and in any event prior to the Closing Date and any and any Additional Closing Date.

(ww) *No Ratings.* There are (and prior to the Closing Date and any Additional Closing Date, will be) no debt securities, convertible securities or preferred stock issued or guaranteed by the Company that are rated by a "nationally recognized statistical rating organization," as such term is defined in Section 3(a)(62) of the Exchange Act.

(xx) *Cybersecurity.* The Company's 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 as currently conducted, free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants. The Company has 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, personally identifiable, sensitive, confidential or regulated data ("Personal Data"), used in connection with their businesses. 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 is presently in material compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Personal Data and to the protection of such IT Systems and Personal Data from unauthorized use, access, misappropriation or modification.

4. Further Agreements of the Company. The Company covenants and agrees with the Underwriter that:

(a) *Required Filings.* The Company will file the final Prospectus with the Commission within the time periods specified by Rule 424(b) and Rule 430B under the Securities Act, will file any Issuer Free Writing Prospectus to the extent required by Rule 433 under the Securities Act; and will furnish copies of the Prospectus and each Issuer Free Writing Prospectus (to the extent not previously delivered) to the Underwriter in New York City prior to 10:00 A.M., New York City time, on the business day next succeeding the date of this Agreement in such quantities as the Underwriter may reasonably request.

(b) *Delivery of Copies.* The Company will deliver, without charge, (i) to the Underwriter, four signed copies of the Registration Statement as originally filed and each amendment thereto, in each case including all exhibits and consents filed therewith or incorporated by reference therein and documents incorporated or deemed to be incorporated by reference therein; and (ii) to the Underwriter (A) a conformed copy of the Registration Statement as originally filed and each amendment thereto (without exhibits) and (B) during the Prospectus Delivery Period (as defined below), as many copies of the Prospectus (including all amendments and supplements thereto and each Issuer Free Writing Prospectus) as the Underwriter may reasonably request. As used herein, the term "Prospectus Delivery Period" means such period of time after the first date of the offering of the Securities as in the opinion of counsel for the Underwriter a prospectus relating to the Securities is required by law to be delivered (or required to be delivered but for Rule 172 under the Securities Act) in connection with sales of the Securities by the Underwriter or dealer.

(c) *Amendments or Supplements, Issuer Free Writing Prospectuses.* Before preparing, using, authorizing, approving, referring to or filing any Issuer Free Writing Prospectus, and before filing any amendment or supplement to the Registration Statement, the Pricing Disclosure Package or the Prospectus, the Company will furnish to the Underwriter and counsel for the Underwriter a copy of the proposed Issuer Free Writing Prospectus, amendment or supplement for review and will not prepare, use, authorize, approve, refer to or file any such Issuer Free Writing Prospectus or file any such proposed amendment or supplement to which the Underwriter reasonably object.

(d) *Notice to the Underwriter.* The Company will advise the Underwriter promptly, and confirm such advice in writing, (i) when any amendment to the Registration Statement has been filed or becomes effective; (ii) when any supplement to the Pricing Disclosure Package, the Prospectus, any Issuer Free Writing Prospectus, any amendment to the Prospectus has been filed or distributed; (iii) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus, including any document incorporated by reference therein, or the receipt of any comments from the Commission relating to the Registration Statement or any other request by the Commission for any additional information; (iv) of the issuance by the Commission or any other governmental or regulatory authority of any order suspending the effectiveness of the Registration Statement or preventing or suspending the use of any preliminary prospectus, any of the Pricing Disclosure Package, the Prospectus or the initiation or, to the knowledge of the Company, threatening of any proceeding for that purpose or pursuant to Section 8A of the Securities Act; (v) of the occurrence of any event or development within the Prospectus Delivery Period as a result of which the Prospectus, the Pricing Disclosure Package or any Issuer Free Writing Prospectus as then amended or supplemented would include any untrue statement of a material fact or omit to state a material fact or necessary in order to make the statements therein, in the light of the circumstances existing when the Prospectus, the Pricing Disclosure Package, or any such Issuer Free Writing Prospectus delivered to a purchaser, not misleading; and (vi) of the receipt by the Company of any notice with respect to any suspension of the qualification of the Securities for offer and sale in any jurisdiction or the initiation or, to the knowledge of the Company, threatening of any proceeding for such purpose; and the Company will use its best efforts to prevent the issuance of any such order suspending the effectiveness of the Registration Statement, preventing or suspending the use of any preliminary prospectus, any of the Pricing Disclosure Package or the Prospectus or suspending any such qualification of the Securities and, if any such order is issued, will obtain as soon as possible the withdrawal thereof.

(e) *Ongoing Compliance.* (1) If during the Prospectus Delivery Period (i) any event or development shall occur or condition shall exist as a result of which the Prospectus as then amended or supplemented would include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances existing when the Prospectus is delivered to a purchaser, not misleading or (ii) it is necessary to amend or supplement the Prospectus to comply with law, the Company will promptly notify the Underwriter thereof and forthwith prepare and, subject to paragraph (c) above, file with the Commission and furnish to the Underwriter and to such dealers as the Underwriter may designate such amendments or supplements to the Prospectus as may be necessary so that the statements in the Prospectus as so amended or supplemented will not, in the light of the circumstances existing when the Prospectus is delivered to a purchaser, be misleading or so that the Prospectus will comply with law and (2) if at any time prior to the Closing Date and any Additional Closing Date (i) any event or development shall occur or condition shall exist as a result of which the Pricing Disclosure Package as then amended or supplemented would 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 existing when the Pricing Disclosure Package is delivered to a purchaser, not misleading or (ii) it is necessary to amend or supplement the Pricing Disclosure Package to comply with law, the Company will promptly notify the Underwriter thereof and forthwith prepare and, subject to paragraph (c) above, file with the Commission (to the extent required) and furnish to the Underwriter and to such dealers as the Underwriter may designate such amendments or supplements to the Pricing Disclosure Package as may be necessary so that the statements in the Pricing Disclosure Package as so amended or supplemented will not, in the light of the circumstances existing when the Pricing Disclosure Package is delivered to a purchaser, be misleading or so that the Pricing Disclosure Package will comply with law.

(f) *Blue Sky Compliance.* The Company will qualify the Securities for offer and sale under the securities or Blue Sky laws of such jurisdictions as the Underwriter shall reasonably request and will continue such qualifications in effect so long as required for distribution of the Securities; provided that the Company shall not be required to (i) qualify as a foreign corporation or other entity or as a dealer in securities in any such jurisdiction where it would not otherwise be required to so qualify, (ii) file any general consent to service of process in any such jurisdiction or (iii) subject itself to taxation in any such jurisdiction if it is not otherwise so subject.

(g) *Earnings Statement.* The Company will make generally available to its securityholders and the Underwriter as soon as practicable an earnings statement that satisfies the provisions of Section 11(a) of the Securities Act and Rule 158 of the Commission promulgated thereunder covering a period of at least twelve months beginning with the first fiscal quarter of the Company occurring after the “effective date” (as defined in Rule 158) of the Registration Statement, provided that the Company will be deemed to have furnished such statements to its securityholders and the Underwriter to the extent they are filed on the Commission’s Electronic Data Gathering, Analysis and Retrieval system.

(h) *Clear Market.* For a period of 90 days after the date of the Prospectus, the Company will not (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, or file with, or submit to, the Commission a registration statement under the Securities Act relating to, any shares of Stock or any securities convertible into or exercisable or exchangeable for Stock, (ii) enter into any swap, hedging or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Stock or any such other securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Stock or such other securities, in cash or otherwise, without the prior written consent of the Underwriter, (iii) effect a reverse stock split, recapitalization, share consolidation, reclassification or similar transaction affecting the outstanding shares of Stock or (iv) publicly disclose the intention to do any of the foregoing other than (A) the Shares to be sold hereunder, (B) any shares of Stock of the Company issued upon the exercise of options granted under Company Stock Plans as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, (C) any shares of Stock issued upon the exercise of warrants outstanding on the date of this Agreement and as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, (D) any options and other awards granted under a Company Stock Plan described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, (E) the filing by the Company of any registration statement on Form S-8 or a successor form thereto relating to a Company Stock Plan described in the Registration Statement, the Pricing Disclosure Package and the Prospectus and (F) shares of Stock or other securities issued in connection with a transaction with an unaffiliated third party that includes a *bona fide* commercial relationship (including joint ventures, marketing or distribution arrangements, collaboration agreements or licensing agreements) or any acquisition of assets of not less than a majority or controlling portion of the equity of another entity, provided that (x) the aggregate number of the shares issued pursuant to clause (F) shall not exceed more than five percent (5%) of the total number of outstanding shares of Stock immediately following the issuance and sale of the Securities pursuant to this Agreement and (y) the recipient of any such shares of Stock or securities issued pursuant to clauses (B), (C), (D) and (F) during the Restricted Period shall enter into an agreement substantially in the form of Exhibit B hereto.

(i) *Use of Proceeds.* The Company will apply the net proceeds from the sale of the Securities as described in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus under the heading “Use of Proceeds.”

(j) *No Stabilization.* Neither the Company nor its affiliates will take, directly or indirectly, without giving effect to the activities by the Underwriter, any action designed to or that could reasonably be expected to cause or result in any stabilization or manipulation of the price of the Stock.

(k) *Exchange Listing.* The Company will use its reasonable best efforts to list, subject to notice of issuance, the Shares and Warrant Shares on the Nasdaq Capital Market.

(l) *Reports.* During a period of three years from the date of this Agreement, the Company will furnish to the Underwriter, as soon as commercially reasonable after the date they are available, copies of all reports or other communications (financial or other) furnished to holders of the Securities, and copies of any reports and financial statements furnished to or filed with the Commission or any national securities exchange or automatic quotation system; provided the Company will be deemed to have furnished such reports and financial statements to the Underwriter to the extent they are filed on the Commission's Electronic Data Gathering, Analysis, and Retrieval system.

(m) *Record Retention.* The Company will, pursuant to reasonable procedures developed in good faith, retain copies of each Issuer Free Writing Prospectus that is not filed with the Commission in accordance with Rule 433 under the Securities Act.

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

(o) *Registration Statement of Warrant Shares.* The Company shall, at all times while any Warrants are outstanding, use its commercially reasonable best efforts to maintain a registration statement covering the issue and sale of the Warrant Shares issuable upon exercise of the Warrants such that the Warrant Shares, when issued, will not be subject to resale restrictions under the Securities Act except to the extent that the Warrant Shares are owned by affiliates. The Company shall, at all times while any 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 Warrants the number of Warrant Shares that are initially issuable and deliverable upon the exercise of the then-outstanding Warrants.

5. Certain Agreements of the Underwriter. The Underwriter hereby represents and agrees that:

(a) It has not used, authorized use of, referred to or participated in the planning for use of, and will not use, authorize use of, refer to or participate in the planning for use of, any "free writing prospectus," as defined in Rule 405 under the Securities Act (which term includes use of any written information furnished to the Commission by the Company and not incorporated by reference into the Registration Statement and any press release issued by the Company) other than (i) a free writing prospectus that contains no "issuer information" (as defined in Rule 433(h)(2) under the Securities Act) that was not included (including through incorporation by reference) in the preliminary prospectus, if any, or a previously filed Issuer Free Writing Prospectus, (ii) any Issuer Free Writing Prospectus listed on Annex A or prepared pursuant to Section 3(c) or Section 4(c) above (including any electronic road show), or (iii) any free writing prospectus prepared by the Underwriter and approved by the Company in advance in writing.

(b) It has not and will not, without the prior written consent of the Company, use any free writing prospectus that contains the final terms of the Securities unless such terms have previously been included in a free writing prospectus filed with the Commission; *provided* that Underwriter may use a term sheet substantially in the form of Annex B hereto without the consent of the Company; *provided further* that if the Underwriter uses such term sheet, it shall notify the Company and provide a copy of such term sheet to the Company, prior to, or substantially concurrently with, the first use of such term sheet.

(c) It is not subject to any pending proceeding under Section 8A of the Securities Act with respect to the offering (and will promptly notify the Company if any such proceeding against it is initiated during the Prospectus Delivery Period).

6. Conditions of the Underwriter's Obligations. The obligation of the Underwriter to purchase the Shares and Warrants on the Closing Date or the Option Shares and Option Warrants on any Additional Closing Date, as the case may be, as provided herein is subject to the performance by the Company of its covenants and other obligations hereunder and to the following additional conditions:

(a) *Registration Compliance; No Stop Order.* No order suspending the effectiveness of the Registration Statement shall be in effect, and no proceeding for such purpose or pursuant to Section 8A under the Securities Act shall be pending before or threatened by the Commission; the Prospectus and each Issuer Free Writing Prospectus shall have been timely filed with the Commission under the Securities Act (in the case of an Issuer Free Writing Prospectus, to the extent required by Rule 433 under the Securities Act) and in accordance with Section 4(a) hereof; and all requests by the Commission for additional information shall have been complied with to the reasonable satisfaction of the Underwriter.

(b) *Representations and Warranties.* The representations and warranties of the Company contained herein shall be true and correct on the date hereof and on and as of the Closing Date and any Additional Closing Date; and the statements of the Company and its officers made in any certificates delivered pursuant to this Agreement shall be true and correct on and as of the Closing Date and any Additional Closing Date.

(c) *No Material Adverse Change.* No event or condition of a type described in Section 3(g) hereof shall have occurred or shall exist, which event or condition is not described in the Pricing Disclosure Package (excluding any amendment or supplement thereto) and the Prospectus (excluding any amendment or supplement thereto) and the effect of which in the judgment of the Underwriter makes it impracticable or inadvisable to proceed with the offering, sale or delivery of the Securities on the Closing Date and any Additional Closing Date on the terms and in the manner contemplated by this Agreement, the Pricing Disclosure Package and the Prospectus.

(d) *Officer's Certificate.* The Underwriter shall have received on and as of the Closing Date and any Additional Closing Date, a certificate of the chief financial officer or chief accounting officer of the Company and one additional senior executive officer of the Company who is satisfactory to the Underwriter, on behalf of the Company and not in their individual capacities (i) confirming that such officers have carefully reviewed the Registration Statement, the Pricing Disclosure Package and the Prospectus and, to the knowledge of such officers, the representations set forth in Sections 3(b) and 3(d) hereof are true and correct, (ii) confirming that the other representations and warranties of the Company in this Agreement are true and correct and that the Company has complied in all material respects with all agreements and satisfied all conditions on its part to be performed or satisfied hereunder at or prior to the Closing Date or Additional Closing Date, as the case may be, and (iii) to the effect set forth in paragraphs (a), (b) and (c) above.

(e) *Comfort Letters.* On the date of this Agreement and on the Closing Date and any Additional Closing Date, Deloitte & Touche LLP shall have furnished to the Underwriter, at the request of the Company, letters, dated the respective dates of delivery thereof and addressed to the Underwriter, in form and substance reasonably satisfactory to the Underwriter, containing statements and information of the type customarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained or incorporated by reference in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus; provided, that the letter delivered on the Closing Date and any Additional Closing Date, shall use a "cut-off" date reasonably acceptable to the Underwriter.

(f) *Opinion and Negative Assurance Letter of Counsel for the Company.* Latham & Watkins LLP, counsel for the Company, shall have furnished to the Underwriter, at the request of the Company, their written opinion and negative assurance letter, dated the Closing Date or the Additional Closing Date, as applicable, and addressed to the Underwriter, in form and substance reasonably satisfactory to the Underwriter.

(g) *[Reserved].*

(h) *Opinion of Intellectual Property Counsel for the Company.* Wolf, Greenfield & Sacks, P.C., intellectual property counsel for the Company, shall have furnished to the Underwriter, at the request of the Company, their written opinion, dated the Closing Date or the Additional Closing Date, as the case may be, and addressed to the Underwriter, in form and substance reasonably satisfactory to the Underwriter.

(i) *[Reserved].*

(j) *Opinion and Negative Assurance Letter of Counsel for the Underwriter.* The Underwriter shall have received on and as of the Closing Date and any Additional Closing Date, an opinion and negative assurance letter of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel for the Underwriter, with respect to such matters as the Underwriter may reasonably request, and such counsel shall have received such documents and information as they may reasonably request to enable them to pass upon such matters.

(k) *No Legal Impediment to Issuance and Sale.* No action shall have been taken and no statute, rule, regulation or order shall have been enacted, adopted or issued by any federal, state or foreign governmental or regulatory authority that would, as of the Closing Date or any Additional Closing Date, prevent the issuance or sale of the Securities; and no injunction or order of any federal, state or foreign court shall have been issued that would, as of the Closing Date or any Additional Closing Date, prevent the issuance or sale of the Securities.

(l) *Good Standing.* The Underwriter shall have received on and as of the Closing Date and any Additional Closing Date satisfactory evidence of the good standing of the Company in its jurisdiction of organization and its good standing as foreign entities in such other jurisdictions as the Underwriter may reasonably request, in each case in writing or any standard form of telecommunication from the appropriate governmental authorities of such jurisdiction.

(m) *Exchange Listing.* The Securities to be delivered on the Closing Date and the Additional Closing Date, as applicable, shall have been approved for listing on the Nasdaq Capital Market, subject to official notice of issuance.

(n) *Lock-up Agreements.* The “lock-up” agreements, each substantially in the form of Exhibit B hereto, between you and all of the officers and directors of the Company relating to sales and certain other dispositions of shares of Stock or certain other securities, delivered to you on or before the date hereof, shall be full force and effect on the Closing Date and any Additional Closing Date.

(o) *Certificate of Chief Financial Officer.* The Underwriter shall have received on the date of this Agreement and as of the Closing Date and any Additional Closing Date, a certificate of the chief financial officer in form and substance satisfactory to the Underwriter and Underwriter’s counsel, with respect to certain financial information contained in the Registration Statement, the Pricing Disclosure Package, and the Prospectus.

(p) *Form of Warrants.* On or prior to the Closing Date and any Additional Closing Date, the Warrants shall be delivered to those persons and entities as directed by the Underwriter in form and substance as set form on Exhibit A hereto dated as of such date.

(q) *Additional Documents.* On or prior to the Closing Date and any Additional Closing Date, the Company shall have furnished to the Underwriter such further certificates and documents as the Underwriter may reasonably request.

All opinions, letters, certificates and evidence mentioned above or elsewhere in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in form and substance reasonably satisfactory to counsel for the Underwriter.

7. Indemnification and Contribution.

(a) *Indemnification of the Underwriter.* The Company agrees to indemnify and hold harmless the Underwriter, its affiliates, directors and officers and each person, if any, who controls the Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any and all losses, claims, damages and liabilities (including, without limitation, legal fees and other expenses incurred in connection with any suit, action or proceeding or any claim asserted, as such fees and expenses are incurred) that arise out of, or are based upon, (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or caused by any omission or alleged omission to state therein a material fact required to be stated therein or necessary in order to make the statements therein, not misleading, or (ii) any untrue statement or alleged untrue statement of a material fact contained in the Prospectus (or any amendment or supplement thereto), any preliminary prospectus, any Issuer Free Writing Prospectus, any “issuer information” filed or required to be filed pursuant to Rule 433(d) under the Securities Act, any road show as defined in Rule 433(h) under the Securities Act (a “road show”) or any Pricing Disclosure Package (including any Pricing Disclosure Package that has subsequently been amended), or caused by any omission or alleged omission to state therein a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading, in each case except insofar as such losses, claims, damages or liabilities arise out of, or are based upon, any untrue statement or omission or alleged untrue statement or omission made in the Registration Statement (or any amendment thereto), including any information deemed to be a part thereof pursuant to Rule 430B, the Pricing Disclosure Package or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with any information relating to the Underwriter furnished to the Company in writing by the Underwriter through the Underwriter expressly for use therein, it being understood and agreed that the only such information furnished by the Underwriter consists of the information described as such in subsection (b) below.

(b) *Indemnification of the Company.* The Underwriter agrees to indemnify and hold harmless the Company, its directors, its officers who signed the Registration Statement and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act to the same extent as the indemnity set forth in paragraph (a) above, but only with respect to any losses, claims, damages or liabilities that arise out of, or are based upon, any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with any information relating to the Underwriter furnished to the Company in writing by the Underwriter through the Underwriter expressly for use in the Registration Statement, the Prospectus (or any amendment or supplement thereto), any preliminary prospectus, any Issuer Free Writing Prospectus, any road show or any Pricing Disclosure Package (including any Pricing Disclosure Package that has subsequently been amended), it being understood and agreed upon that the only such information furnished by the Underwriter consists of the following information in the Prospectus furnished on behalf of the Underwriter: the information contained in the first and second sentences in the fifth paragraph under the caption "Underwriting."

(c) *Notice and Procedures.* If any suit, action, proceeding (including any governmental or regulatory investigation), claim or demand shall be brought or asserted against any person in respect of which indemnification may be sought pursuant to the preceding paragraphs of this Section 7, such person (the "Indemnified Person") shall promptly notify the person against whom such indemnification may be sought (the "Indemnifying Person") in writing; provided that the failure to notify the Indemnifying Person shall not relieve it from any liability that it may have under the preceding paragraphs of this Section 7 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 Person shall not relieve it from any liability that it may have to an Indemnified Person otherwise than under the preceding paragraphs of this Section 7. If any such proceeding shall be brought or asserted against an Indemnified Person and it shall have notified the Indemnifying Person thereof, the Indemnifying Person shall retain counsel reasonably satisfactory to the Indemnified Person (who shall not, without the consent of the Indemnified Person, be counsel to the Indemnifying Person) to represent the Indemnified Person and any others entitled to indemnification pursuant to this Section that the Indemnifying Person may designate in such proceeding and shall pay the reasonable and documented fees and expenses in such proceeding and shall pay the reasonable and documented fees and expenses of such counsel related to such proceeding, as incurred. In any such proceeding, any Indemnified Person shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such Indemnified Person unless (i) the Indemnifying Person and the Indemnified Person shall have mutually agreed to the contrary; (ii) the Indemnifying Person has failed within a reasonable time to retain counsel reasonably satisfactory to the Indemnified Person; (iii) the Indemnified Person shall have reasonably concluded that there may be legal defenses available to it that are different from or in addition to those available to the Indemnifying Person; or (iv) the named parties in any such proceeding (including any impleaded parties) include both the Indemnifying Person and the Indemnified Person and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interest between them. It is understood and agreed that the Indemnifying Person shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the fees and expenses of more than one separate firm (in addition to any local counsel) for all Indemnified Persons, and that all such fees and expenses shall be paid or reimbursed as they are incurred. Any such separate firm for the Underwriter, its affiliates, directors and officers and any control persons of the Underwriter shall be designated in writing by the Underwriter, and any such separate firm for the Company, its directors, its officers who signed the Registration Statement and any control persons of the Company shall be designated in writing by the Company. The Indemnifying Person shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent, the Indemnifying Person agrees to indemnify each Indemnified Person from and against any loss or liability by reason of such settlement. Notwithstanding the foregoing sentence, if at any time an Indemnified Person shall have requested that an Indemnifying Person reimburse the Indemnified Person for fees and expenses of counsel as contemplated by this paragraph, the Indemnifying Person shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than 30 days after receipt by the Indemnifying Person of such request and (ii) the Indemnifying Person shall not have reimbursed the Indemnified Person in accordance with such request prior to the date of such settlement. No Indemnifying Person shall, without the written consent of the Indemnified Person, effect any settlement of any pending or threatened proceeding in respect of which any Indemnified Person is or could have been a party and indemnification could have been sought hereunder by such Indemnified Person, unless such settlement (x) includes an unconditional release of such Indemnified Person, in form and substance reasonably satisfactory to such Indemnified Person, from all liability on claims that are the subject matter of such proceeding and (y) does not include any statement as to or any admission of fault, culpability or a failure to act by or on behalf of any Indemnified Person.

(d) *Contribution.* If the indemnification provided for in paragraphs (a) and (b) above is unavailable to an Indemnified Person or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each Indemnifying Person under such paragraph, in lieu of indemnifying such Indemnified Person thereunder, shall contribute to the amount paid or payable by such Indemnified Person as a result of such losses, claims, damages or liabilities (i) in such proportion as is appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriter on the other, from the offering of the Securities or (ii) if the allocation provided by clause (i) is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) but also the relative fault of the Company, on the one hand, and the Underwriter on the other, in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company, on the one hand, and the Underwriter on the other, shall be deemed to be in the same respective proportions as the net proceeds (before deducting expenses) received by the Company from the sale of the Securities and the total underwriting discounts and commissions received by the Underwriter in connection therewith, in each case as set forth in the table on the cover of the Prospectus, bear to the aggregate offering price of the Securities. The relative fault of the Company, on the one hand, and the Underwriter on the other, 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 or by the Underwriter and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

(e) *Limitation on Liability.* The Company and the Underwriter agree that it would not be just and equitable if contribution pursuant to paragraph (d) above were determined by pro rata allocation (even if the Underwriter were treated as one entity for such purpose) or by any other method of allocation that does not take account of the equitable considerations referred to in paragraph (d) above. The amount paid or payable by an Indemnified Person as a result of the losses, claims, damages and liabilities referred to in paragraph (d) above shall be deemed to include, subject to the limitations set forth above, any legal or other expenses incurred by such Indemnified Person in connection with any such action or claim. Notwithstanding the provisions of paragraphs (d) and (e), in no event shall the Underwriter be required to contribute any amount in excess of the amount by which the total underwriting discounts and commissions received by the Underwriter with respect to the offering of the Securities exceeds the amount of any damages that the 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 Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

(f) *Non-Exclusive Remedies.* The remedies provided for in this Section 7 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any Indemnified Person at law or in equity.

8. Effectiveness of Agreement. This Agreement shall become effective as of the date first written above.

9. Termination. This Agreement may be terminated in the absolute discretion of the Underwriter, by notice to the Company, if after the execution and delivery of this Agreement and on or prior to the Closing Date or, in the case of the Option Shares and Option Warrants, on or prior to the Additional Closing Date: (i) any domestic or international event or act or occurrence has materially disrupted, or in the opinion of the Underwriter will in the immediate future materially disrupt, the market for the Company's securities or securities in general; (ii) trading generally shall have been suspended or materially limited on or by any of the New York Stock Exchange or The Nasdaq Stock Market; (iii) trading of any securities issued or guaranteed by the Company shall have been suspended on any exchange or in any over-the-counter market; (iv) a general moratorium on commercial banking activities shall have been declared by federal or New York State authorities; (v) (A) there shall have occurred any outbreak or escalation of hostilities or acts of terrorism involving the United States or there is a declaration of a national emergency or war by the United States or (B) there shall have been any other calamity or crisis or any change in political, financial or economic conditions if the effect of any such event in (A) or (B), in the judgment of the Underwriter, makes it impracticable or inadvisable to proceed with the offering, sale or delivery of the Securities on the Closing Date, on the terms and in the manner contemplated by this Agreement, the Pricing Disclosure Package and the Prospectus; or (vi) any of the events described in Sections 3(g) shall have occurred or the Underwriter shall decline to purchase the Securities for any reason permitted under this Agreement.

10. Payment of Expenses.

(a) Whether or not the transactions contemplated by this Agreement are consummated or this Agreement is terminated, the Company will pay or cause to be paid all costs and expenses incident to the performance of its obligations hereunder, including without limitation, (i) the costs incident to the authorization, issuance, sale, preparation and delivery of the Securities and any stamp or transfer taxes payable in that connection; (ii) the costs incident to the preparation, printing and filing under the Securities Act of the Registration Statement, any preliminary prospectus, any Issuer Free Writing Prospectus, any Pricing Disclosure Package and the Prospectus (including all exhibits, amendments and supplements thereto) and the distribution thereof; (iii) the fees and expenses of the Company's counsel and independent accountants; (iv) the fees and expenses incurred in connection with the registration or qualification and determination of eligibility for investment of the Securities under the state or foreign securities or blue sky laws of such jurisdictions as the Underwriter may designate and the preparation, printing and distribution of a Blue Sky Memorandum and any "Canadian wrapper" (including the related documented fees and expenses of counsel for the Underwriter in an amount not to exceed \$5,000 (excluding filing fees)); (v) the cost of preparing stock certificates; (vi) the costs and charges of any transfer agent, warrant agent, and any registrar; (vii) all expenses and application fees incurred in connection with any filing with, and clearance of the offering by, FINRA, provided that the aggregate amount payable by the Company pursuant to clauses (iv) and (vii) shall not exceed \$20,000 (excluding filing fees); and (viii) all expenses incurred by the Company in connection with any "road show" presentation to potential investors (provided, however, that the Underwriter and the Company shall each pay 50% of the cost of chartering any aircraft to be used in connection with the road show by both the Company and the Underwriter, and all lodging, commercial airfare and individual expenses of the Underwriter shall be the responsibility of the Underwriter); (ix) all expenses and application fees related to the listing of the Securities on the Nasdaq Global Select Market and (x) all reasonable fees and expenses incurred by the Underwriter in connection with the issuance of the Securities such as fees and disbursements of counsel and out-of-pocket expenses related to the issuance of the Securities; *provided* that the expense reimbursement payable to the Underwriter under this paragraph shall not exceed \$150,000 in aggregate without the Company's consent and shall be invoiced in reasonable detail.

(b) If (i) this Agreement is terminated pursuant to Section 9, (ii) the Company for any reason fails to tender the Securities for delivery to the Underwriter or (iii) the Underwriter declines to purchase the Securities for any reason permitted under this Agreement, the Company agrees to reimburse the Underwriter for all out-of-pocket costs and expenses (including the fees and expenses of their counsel) reasonably incurred by the Underwriter in connection with this Agreement and the offering contemplated hereby; provided, however, that no additional amounts beyond what has been reimbursed pursuant to the foregoing will be owed to the Underwriter other than under Section 7 hereof. For the avoidance of doubt, it is understood that the Company shall not pay or reimburse any costs, fees or expenses incurred by the Underwriter if it defaults on its obligations to purchase the Securities.

11. Persons Entitled to Benefit of Agreement. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and the officers and directors and any controlling persons referred to herein, and the affiliates of each Underwriter referred to in Section 7 hereof. Nothing in this Agreement is intended or shall be construed to give any other person any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision contained herein. No purchaser of Securities from the Underwriter shall be deemed to be a successor merely by reason of such purchase.

12. Survival. The respective indemnities, rights of contribution, representations, warranties and agreements of the Company and the Underwriter contained in this Agreement or made by or on behalf of the Company or the Underwriter pursuant to this Agreement or any certificate delivered pursuant hereto shall survive the delivery of and payment for the Securities and shall remain in full force and effect, regardless of any termination of this Agreement or any investigation made by or on behalf of the Company or the Underwriter or the directors, officers, controlling persons or affiliates referred to in Section 7 hereof.

13. Certain Defined Terms. For purposes of this Agreement, (a) except where otherwise expressly provided, the term “affiliate” has the meaning set forth in Rule 405 under the Securities Act; (b) the term “business day” means any day other than a day on which banks are permitted or required to be closed in New York City; (c) the term “subsidiary” has the meaning set forth in Rule 405 under the Securities Act; and (d) the term “significant subsidiary” has the meaning set forth in Rule 1-02 of Regulation S-X under the Exchange Act. In the event that the Company has only one subsidiary, then all references herein to “subsidiaries” of the Company shall be deemed to refer to such single subsidiary, mutatis mutandis.

14. Compliance with USA Patriot Act. In accordance with the requirements of the USA Patriot Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)), the Underwriter is 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 Underwriter to properly identify their respective clients.

15. Miscellaneous.

(a) *Notices.* All notices and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed or transmitted and confirmed by any standard form of telecommunication. Notices to the Underwriter shall be sent to Guggenheim Securities, LLC, 330 Madison Avenue, New York, NY 10017, with a copy to Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., One Financial Center, Boston, MA 02111, Attention: John T. Rudy; notices to the Company shall be given to it at Precision BioSciences, Inc., 302 East Pettigrew St., Suite A-100, Durham, North Carolina 27701, (fax: 480-393-5553); Attention: Matthew Kane.

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

(c) *Waiver of Jury Trial.* Each of the parties hereto hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any suit or legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

(d) *Counterparts.* This Agreement may be signed in counterparts (which may include counterparts delivered by any standard form of telecommunication), each of which shall be an original and all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including any electronic signature covered by the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., 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.

(e) *Amendments or Waivers.* No amendment or waiver of any provision of this Agreement, nor any consent or approval to any departure therefrom, shall in any event be effective unless the same shall be in writing and signed by the parties hereto.

(f) *Headings.* The headings herein are included for convenience of reference only and are not intended to be part of, or to affect the meaning or interpretation of, this Agreement.

(g) *Integration.* This Agreement supersedes all prior agreements and understandings (whether written or oral) between the Company and the Underwriter with respect to the subject matter hereof.

(h) *Recognition of the U.S. Special Resolution Regimes.*

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

(ii) In the event that the Underwriter is a Covered Entity or a BHC Act Affiliate of the Underwriter and becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against the 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.

As used in this Section 16(h):

“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 indicate your acceptance of this Agreement by signing in the space provided below.

Very truly yours,

PRECISION BIOSCIENCES, INC.

By: /s/ Michael Amoroso

Name: Michael Amoroso

Title: Chief Executive Officer

[Signature Page to Underwriting Agreement]

Accepted: As of the date first written above

GUGGENHEIM SECURITIES, LLC

By: /s/ Geoffrey Goodman

Name: Geoffrey Goodman

Title: Senior Managing Director

[Signature Page to Underwriting Agreement]

Underwriter	Number of Underwritten Shares	Number of Underwritten Warrants
Guggenheim Securities, LLC	2,500,000	2,500,000
Total	2,500,000	2,500,000

a. Pricing Disclosure Package

Issuer Free Writing Prospectus filed on March 1, 2024

b. Pricing Information Provided Orally by Underwriter

Combined Price per share of Common Stock and Warrant: \$16.00

Per Share Purchase Price: \$15.99

Per Warrant Purchase Price: \$0.01

Number of Underwritten Shares: 2,500,000

Number of Underwritten Warrants: 2,500,000

Number of Option Shares: 375,000

Number of Option Warrants: 375,000

Precision BioSciences, Inc.

Pricing Term Sheet

None

Form of Warrant

[See Exhibit 4.1 to this Current Report on Form 8-K]

Form of Lock-up

Guggenheim Securities LLC
330 Madison Avenue
New York, NY 10017

Re: Precision BioSciences, Inc.

Ladies and Gentlemen:

The undersigned, a stockholder of Precision BioSciences, Inc., a Delaware corporation (the "Company"), understands that you, as underwriter (the "Underwriter"), propose to enter into an Underwriting Agreement (the "Underwriting Agreement") with the Company, providing for an offering (the "Offering") by the you, of common stock, par value \$0.000005 per share ("Common Stock") of the Company and warrants to purchase Common Stock of the Company (the "Warrants" and, together with the Common Stock, the "Securities"). Capitalized terms used herein and not otherwise defined shall have the meanings set forth in the Underwriting Agreement.

Annex A sets forth definitions for capitalized terms used in this Letter Agreement (as defined below) that are not defined in the body of this Letter Agreement. Those definitions are part of this Letter Agreement.

In consideration of the Underwriter's agreement to purchase and make the Offering of the Securities, and for other good and valuable consideration receipt of which is hereby acknowledged, the undersigned hereby agrees that, without the prior written consent of Guggenheim Securities LLC, the undersigned will not, during the period beginning on the date of this letter agreement (this "Letter Agreement") and ending 90 days after the date of the final prospectus supplement relating to the Offering (the "Prospectus") (such period, the "Restricted Period"), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock, the Warrants or any securities convertible into or exercisable or exchangeable for Common Stock or the Warrants (including without limitation, Common Stock, Warrants or such other securities which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the Securities and Exchange Commission and securities which may be issued upon exercise of a stock option or warrant), (2) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Common Stock, the Warrants or such other securities, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock, Warrants or such other securities, in cash or otherwise, (3) make any demand for or exercise any right with respect to the registration of any shares of Common Stock, the Warrants or any security convertible into or exercisable or exchangeable for Common Stock or Warrants (and, for the avoidance of doubt, the undersigned hereby waives any and all notice requirements and rights with respect to the registration of any securities pursuant to any agreement, instrument, understanding or otherwise, including any stockholders or registration rights agreement or similar agreement, to which the undersigned is a party or under which the undersigned is entitled to any right or benefit), or (4) publicly disclose the intention to do any of the foregoing described in clauses (1), (2) and (3) above, in each case other than:

- (A) transfers of shares of Common Stock, Warrants or any security convertible into or exercisable or exchangeable for Common Stock or Warrants as a bona fide gift or gifts or for bona fide estate planning purposes including, without limitation, transfers to charitable organizations,
 - (B) transfers or distributions of shares of Common Stock, Warrants or any security convertible into or exercisable or exchangeable for Common Stock or Warrants to (i) limited partners, members, stockholders or holders of similar equity interests in the undersigned or (ii) 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 the undersigned, including without limitation any general partner, limited partner, managing member, manager, member, employee, officer or director of such entity or any trust for the benefit of any of the foregoing or any affiliate of the foregoing, or to any investment fund or other entity controlled or managed by the undersigned or affiliates of the undersigned,
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- (C) transactions relating to Common Stock, Warrants or other securities acquired in the Offering or open market transactions after the completion of the Offering; provided, that no public disclosure or filing under Section 16(a) of the Exchange Act will be required or will be voluntarily made during the Restricted Period in connection with subsequent sales of Common Stock, Warrants or other securities acquired in the Offering or such open market transactions during the Restricted Period,
- (D) (i) transfers or dispositions of Common Stock, Warrants or any security convertible into or exercisable or exchangeable for Common Stock or Warrants by will or intestacy or (ii) to any Family Member or to a trust whose beneficiaries consist exclusively of one or more of the undersigned and/or a Family Member,
- (E) transfers of Common Stock, Warrants or any security convertible into or exercisable or exchangeable for Common Stock or Warrants pursuant to a domestic order or negotiated divorce settlement; provided, 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 clause and no other public announcement shall be made voluntarily in connection with such transfer or disposition during the Restricted Period; provided further, that in the case of a negotiated divorce settlement, such transferee agrees to be bound by the restrictions on transfer set forth herein,
- (F) the exercise of a warrant or the exercise of a stock option granted under a stock incentive plan described in the Prospectus for shares of Common Stock or Warrants; provided, that the underlying Common Stock or Warrants received by the undersigned shall continue to be subject to the restrictions on transfer set forth in this Letter Agreement; provided further, that no filing under Section 16(a) of the Exchange Act or other public filing, report or announcement shall be voluntarily made during the Restricted Period, and any public report or filing under Section 16 of the Exchange Act shall clearly indicate in the footnotes thereto that (i) the filing relates to such conversion or exercise, (ii) no Common Stock or Warrants was sold by the reporting person and (iii) Common Stock or Warrants so received is subject to this Letter Agreement with the Underwriter of the Offering,
- (G) transfers or dispositions of restricted stock units to the Company pursuant to any contractual arrangement in effect on the date of this Letter Agreement and described in the Prospectus that provides for the repurchase of the undersigned's Common Stock or Warrants in connection with the termination of services to the Company; provided, that (i) no filing under Section 16(a) of the Exchange Act or other public filing, report or announcement reporting a reduction in beneficial ownership of shares of Common Stock or Warrants shall be required or shall be voluntarily made during the Restricted Period, and (ii) if the undersigned is required to file a report under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of shares of Common Stock or Warrants during the Restricted 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,
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- (H) the disposition of Common Stock or Warrants to, or the withholding of Common Stock or Warrants by, the Company, or sales or disposition of Common Stock or Warrants in the open market, in each case solely in connection with the payment of taxes due with respect to the vesting of restricted stock units as disclosed in writing to the Representative prior to the date hereof and, in each case, granted under a stock incentive plan or pursuant to a contractual employment arrangement, described in the Prospectus, insofar as such restricted stock units is outstanding as of the date of the Prospectus; provided, that (i) no filing under Section 16(a) of the Exchange Act or other public filing, report or announcement shall be voluntarily made during the Restricted Period and (ii) if required, any public report or filing under Section 16 of the Exchange Act shall clearly indicate in the footnotes thereto that the filing relates to such disposition relates to the payment of taxes due with respect to such vesting of restricted stock units,
- (I) the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of Common Stock or Warrants; provided, that (i) such plan does not provide for the transfer of Common Stock or Warrants during the Restricted Period and (ii) the entry into such plan is not publicly disclosed, including in any filings under the Exchange Act, during the Restricted Period, and
- (J) pursuant to a bona fide third party tender offer for all outstanding Common Stock or Warrants of the Company, merger, consolidation or other similar transaction approved by the Company's Board of Directors and made to all holders of the Company's securities involving a Change of Control of the Company (including, without limitation, the entering into of any lock-up, voting or similar agreement pursuant to which the undersigned may agree to transfer, sell, tender or otherwise dispose of Common Stock, Warrants or other such securities in connection with such transaction, or vote any Common Stock, Warrants or other such securities in favor of any such transaction); provided, that in the event that such tender offer, merger, consolidation or other such transaction is not completed, such securities held by the undersigned shall remain subject to the provisions of this Letter Agreement;
- (K) pursuant to a 10b5-1 Plan; provided that such 10b5-1 Plan was established prior to the execution of this Letter Agreement by the undersigned, the existence and details of such 10b5-1 Plan were communicated to the Representative and such 10b5-1 Plan will not be amended or otherwise modified during the Restricted Period; provided, further, that any filing under Section 16(a) of the Exchange Act in connection with such transfer shall indicate, to the extent permitted by such section and the related rules and regulations, that such transfer was pursuant to a 10b5-1 Plan;

provided, that in the case of any transfer or distribution pursuant to clause (A), (B) or (D), each donee or distributee shall execute and deliver to the Representative a lock-up letter in the form of this Letter Agreement; provided further, that in the case of any transfer or distribution pursuant to clause (A), (B) or (D)(ii), no filing by any party (donor, donee, transferor or transferee) under the Exchange Act or other public announcement shall be required or shall be made voluntarily in connection with such transfer or distribution (other than a filing on a Form 5 made after the expiration of the Restricted Period referred to above) or in the case of a transfer or disposition pursuant to clause (A) above, any Form 4 or Form 5 required to be filed under the Exchange Act if the undersigned is subject to Section 16 reporting with respect to the Company under the Exchange Act and indicating by footnote disclosure or otherwise the nature of the transfer or the disposition); provided further, in the case of clauses (B) and (D)(ii), any such transfer shall not involve a disposition for value.

In furtherance of the foregoing, the Company, and any duly appointed transfer agent for the registration or transfer of the securities described herein, are hereby authorized to decline to make any transfer of securities if such transfer would constitute a violation or breach of this Letter Agreement.

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

The undersigned acknowledges and agrees that the Underwriter has not provided any recommendation or investment advice nor has the Underwriter solicited any action from the undersigned with respect to the Offering of the shares of Common Stock or Warrants 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, although the Underwriter may be required or choose to provide certain Regulation Best Interest and Form CRS disclosures in connection with the Offering, the Underwriter is not making a recommendation to enter into this agreement, and nothing set forth in such disclosures is intended to suggest that the Underwriter is making such a recommendation.

The undersigned understands that, if (i) either the Company or the Underwriter notifies the other in writing prior to the execution of the Underwriting Agreement that it does not intend to proceed with the Offering, (ii) the Underwriting Agreement does not become effective by the end of the Restricted Period, or (iii) if the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Common Stock or Warrants to be sold thereunder, the undersigned shall be released from, all obligations under this Letter Agreement. The undersigned understands that the Underwriter is entering into the Underwriting Agreement and proceeding with the Offering in reliance upon this Letter Agreement.

This Letter Agreement and any claim, controversy or dispute arising under or related to this Letter Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflict of laws principles thereof.

[Signature Page Follows]

Very truly yours,

Name of Security Holder (Print exact name)

By: _____
Signature

If not signing in an individual capacity:

Name of Authorized Signatory (Print)

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

Annex A

Certain Defined Terms Used in this Lock-up Agreement

For purposes of this Letter Agreement to which this Annex A is attached and of which it is made a part:

“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 50% of the total voting power of the voting share capital of the Company.

“Exchange Act” shall mean the Securities Exchange Act of 1934, as amended.

“Family Member” shall mean the spouse of the undersigned, an immediate family member of the undersigned or an immediate family member of the undersigned’s spouse, in each case living in the undersigned’s household or whose principal residence is the undersigned’s household (regardless of whether such spouse or family member may at the time be living elsewhere due to educational activities, health care treatment, military service, temporary internship or employment or otherwise).

“Immediate family member” as used above shall have the meaning set forth in Rule 16a-1(e) under the Exchange Act.

“Securities Act” shall mean the Securities Act of 1933, as amended.

Capitalized terms not defined in this Annex A shall have the meanings given to them in the body of this Letter Agreement.

COMMON STOCK PURCHASE WARRANT
Precision BioSciences, Inc.

Warrant number: _____

CUSIP No.: 74019P 116

Warrant Shares: _____

Issue Date: _____

THIS COMMON STOCK PURCHASE WARRANT (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 "Issue Date") and on or prior to 5:00 p.m. (New York City time) on [], 2029, (the "Termination Date") but not thereafter, to subscribe for and purchase from Precision BioSciences, Inc., a Delaware corporation (the "Company"), up to _____ shares (as subject to adjustment hereunder, the "Warrant Shares") of common stock, \$0.000005 par value per share, of the Company ("Common Stock"). The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b). This Warrant shall initially be issued and maintained in the form of a security held in book-entry form and the Depository Trust Company or its nominee ("DTC") shall initially be the sole registered holder of this Warrant, subject to a Holder's right to elect to receive a Warrant in certificated form pursuant to the terms of the warrant agency agreement, by and between the Company and Equiniti Trust Company, LLC (the "Warrant Agent"), dated on or about the Issue Date (the "Warrant Agency Agreement"), in which case this sentence shall not apply.

Section 1. Definitions. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Underwriting Agreement (the "Underwriting Agreement"), dated March 1, 2024, between the Company and Guggenheim Securities LLC.

- a. "Trading Day" means any weekday on which the Trading Market is open for trading.
 - b. "Transfer Agent" means Equiniti Trust Company, LLC, the Company's transfer agent and registrar for the Common Stock, and any successor appointed in such capacity.
-

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 Issue Date and on or before the Termination Date by delivery to the Warrant Agent of a duly executed facsimile copy or PDF copy submitted by e-mail (or e-mail attachment) of the Notice of Exercise in the form annexed hereto (the "Notice of Exercise"). Within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined in Section 2(d)(i) herein) following the date of exercise as aforesaid, the Holder shall deliver the aggregate Exercise Price for the Warrant Shares specified in the applicable Notice of Exercise by wire transfer or cashier's check drawn on a United States bank unless the cashless exercise procedure specified in Section 2(c) below is specified in the applicable Notice of Exercise. No ink-original Notice of Exercise shall, nor shall any medallion guarantee (or other type of guarantee or notarization), be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant, if certificated, to the Warrant Agent 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 Warrant Agent for cancellation as soon as reasonably practical but in any event within three (3) Trading Days of the date on which the final Notice of Exercise is delivered to the Warrant Agent. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one (1) Trading Day of its receipt of such notice. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.** Notwithstanding the foregoing in this Section 2(a), a holder whose interest in this Warrant is a beneficial interest in certificate(s) representing this Warrant held in book-entry form through DTC (or another established clearing corporation performing similar functions), shall effect exercises made pursuant to this Section 2(a) by delivering to DTC (or such other clearing corporation, as applicable) the appropriate instruction form for exercise, complying with the procedures to effect exercise that are required by DTC (or such other clearing corporation, as applicable), subject to a Holder's right to elect to receive a Definitive Warrant pursuant to the terms of the Warrant Agency Agreement, in which case this sentence shall not apply.

b. Exercise Price. The exercise price per share of Common Stock under this Warrant shall be \$20.00, subject to adjustment hereunder (the "Exercise Price").

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

(A) = 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, as adjusted hereunder; and

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

If Warrant Shares are issued in such a cashless exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the 1933 Act, the Warrant Shares shall take on the registered characteristics of the Warrants being exercised. The Company agrees not to take any position contrary to this Section 2(c).

“Bid Price” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the bid price of the Common Stock for the time in question (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg (based on a Trading Day from 9:30 a.m. (New York City time) to 4:00 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.

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

“VWAP” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock are then reported in The Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported thereon, 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 Company’s board of directors.

d. Mechanics of Exercise.

i. Delivery of Warrant Shares Upon Exercise. The Company shall cause the Warrant Shares purchased hereunder to be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder’s or its designee’s balance account with The Depository Trust Company through its Deposit or Withdrawal at Custodian system (“DWAC”) if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) this Warrant is being exercised via cashless exercise, and otherwise by physical delivery of a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the address specified by the Holder in the Notice of Exercise by the date that is the earliest of (i) two (2) Trading Days after the delivery to the Warrant Agent of the Notice of Exercise, (ii) one (1) Trading Day after delivery of the aggregate Exercise Price to the Company and (iii) the number of Trading Days comprising the Standard Settlement Period after the delivery to the Warrant Agent of the Notice of 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. 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 to the Warrant Agent.

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

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

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

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

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

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

e. Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's Affiliates (such Persons, "Attribution Parties")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock held by the Holder, its Affiliates and Attribution Parties plus 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 1934 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 1934 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 Holder's 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. To ensure compliance with this restriction, each Holder will be deemed to represent to the Company each time it delivers a Notice of Exercise that such Notice of Exercise has not violated the restrictions set forth in this paragraph, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the 1934 Act and the rules and regulations promulgated thereunder. For purposes of this Section 2(e), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Securities and Exchange Commission (the "Commission"), as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Company shall within two (2) Trading Days confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. As used herein, "Affiliate" shall mean any Person directly or indirectly controlled by, controlling or under common control with, a Holder, as such terms are used in and construed under Rule 405 under the 1933 Act, but only for so long as such control shall continue. The "Beneficial Ownership Limitation" shall be 4.99% (or, upon election by a Holder prior to the issuance of any Warrants, 9.99%) of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. Notwithstanding the foregoing, in the case of a Holder who immediately prior to the Issue Date beneficially owns an amount equal to or greater than 10.00% of the number of shares of the Common Stock outstanding at such time, as calculated in accordance with Section 13(d) of the 1934 Act, the Beneficial Ownership Limitation shall be 19.99% of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 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 Warrant Shares 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 after such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately before such event, and the Exercise Price shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

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

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

d. Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company (and all of its Subsidiaries, taken as a whole), directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock or 50% or more of the outstanding voting power of the common equity of the Company, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off, merger or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding Common Stock or more than 50% of the outstanding voting power of the common equity of the Company, or (vi) the Company authorizes or the Company's shareholders approve any plan or proposal for the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company (each a "Fundamental Transaction"), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder, the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation on exercise contained herein). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. Notwithstanding the foregoing, in the event of a Fundamental Transaction, the Company or any Successor Entity (as defined below) shall, at the option of the Holder, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction (or, if later, the date of the public announcement of the applicable Fundamental Transaction), purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value (as defined below) of the remaining unexercised portion of this Warrant on the date of the consummation of such Fundamental Transaction; provided, however, that, if the Fundamental Transaction is not within the Company's control, including not approved by the Company's Board of Directors, the Holder shall only be entitled to receive from the Company or any successor or acquiring corporation the same type or form of consideration (and in the same proportion), at the Black Scholes Value (as defined below) of the unexercised portion of this Warrant, that is being offered and paid to the holders of Common Stock of the Company in connection with the Fundamental Transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of Common Stock are given the choice to receive from among alternative forms of consideration in connection with the Fundamental Transaction; provided, further, that if holders of Common Stock of the Company are not offered or paid any consideration in such Fundamental Transaction, such holders of Common Stock will be deemed to have received common stock of the Successor Entity (which Successor Entity may be the Company following such Fundamental Transaction) in such Fundamental Transaction. "Black Scholes Value" means the value of this Warrant based on the Black Scholes Option Pricing Model obtained from the "OV" function on Bloomberg determined as of the day of consummation of the applicable Fundamental Transaction for pricing purposes and reflecting (A) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the time between the date of the public announcement of the applicable contemplated Fundamental Transaction and the Termination Date, (B) an expected volatility equal to the 100 day volatility obtained from the HVT function on Bloomberg (determined utilizing a 365-day annualization factor) as of the Trading Day immediately following the public announcement of the applicable contemplated Fundamental Transaction, (C) the underlying price per share used in such calculation shall be the greater of (i) the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in such Fundamental Transaction and (ii) the highest VWAP during the five (5) trading days immediately prior to the consummation of such Fundamental Transaction, (D) a remaining option time equal to the time between the date of the public announcement of the applicable contemplated Fundamental Transaction and the Termination Date and (E) a zero cost of borrow. The payment of the Black Scholes Value will be made by wire transfer of immediately available funds within five Business Days of the Holder's election (or, if later, on the effective date of the Fundamental Transaction). The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 3(d) pursuant to written agreements in form and substance reasonably satisfactory to the Holder prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant and the other Transaction Documents referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein.

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

f. Voluntary Adjustment By Company. Subject to the rules and regulations of the Trading Market, the Company may at any time during the term of this Warrant, subject to the prior written consent of the Holder, reduce the then current Exercise Price to any amount not less than the par value per share of the Common Stock and for any period of time deemed appropriate by the board of directors of the Company.

g. Notice to Holder.

- (i) Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3, the Company shall promptly deliver to the Holder by facsimile or email a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.
- (ii) If, while the Warrant is outstanding, (A) the Company declares a dividend (or any other distribution in whatever form) on the shares of Common Stock, (B) the Company declares a cash dividend on or a redemption of the shares of Common Stock, (C) the Company authorizes the granting to all holders of the shares of Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company is required in connection with a Fundamental Transaction, or (E) the Company authorizes or the Company's shareholders approve any plan or proposal for 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 shares of Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the shares of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 4. Transfer of Warrant.

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

b. New Warrants. If this Warrant is not held in global form through DTC (or any successor depository), this Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the original Issue Date and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c. Warrant Register. The Company shall cause the Warrant Agent to 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 shall deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

Section 5. Miscellaneous.

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

b. Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it, and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

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

d. Authorized Shares.

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

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

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

The Company represents, warrants and covenants that, as of the date hereof, (i) the issued and outstanding Common Stock of the Company is registered pursuant to Section 12(b) of the 1934 Act, and listed for trading on a Trading Market, (ii) there is no suit, action, proceeding or investigation pending, or to the knowledge of the Company, threatened against the Company by any Trading Market or the Commission with respect to any intention by such entity to deregister the Common Stock or prohibit or terminate the listing of the Common Stock on any Trading Market, except as disclosed in the Company's reports under the 1934 Act, and (iii) the Company has taken no action that is designed to terminate the registration of Common Stock under the 1934 Act.

The Company represents, warrants and covenants that, as of the date hereof, the other Common Stock purchase warrants issued by the Company pursuant to the Underwriting Agreement and the Registration Statement (a) reflect the same Exercise Price as provided herein, and (b) do not contain, and will not be amended to contain, any terms that are materially more favorable to any such other subscriber thereunder than the terms of this Warrant.

e. Jurisdiction. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be determined in accordance with the provisions of the Underwriting Agreement.

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

g. Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies. Without limiting any other provision of this Warrant, if the Company willfully and knowingly fails to comply with any provision of this Warrant, which results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable external attorneys' fees of one counsel, 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 notices, consents, waivers or other document or communications required or permitted to be given or delivered under the terms of this Warrant must be in writing and will be deemed to have been delivered: (i) upon receipt, if delivered personally; (ii) when sent, if sent by facsimile (*provided* confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); (iii) when sent, if sent by e-mail (*provided* that such sent e-mail is kept on file (whether electronically or otherwise) by the sending party and the sending party does not receive an automatically generated message from the recipient's e-mail server that such e-mail could not be delivered to such recipient) and (iv) if sent by overnight courier service, one (1) Trading Day after deposit with an overnight courier service with next day delivery specified, in each case, properly addressed to the party to receive the same. If notice is given by facsimile or email, a copy of such notice shall be dispatched no later than the next business day by first class mail, postage prepaid. The addresses, facsimile numbers and e-mail addresses for such communications shall be:

If to the Company:

Precision BioSciences, Inc.,
302 East Pettigrew St., Suite A-100
Durham, North Carolina 27701
Facsimile: 480-393-5553
Attention: Alex Kelly

With a copy (for informational purposes only) to:

Latham & Watkins LLP
1271 Avenue of the Americas
New York, New York 10020
Attention: Nathan Ajjashvili and Peter Handrinis
E-mail: Nathan.Ajjashvili@lw.com; Peter.Handrinis@lw.com

If to a Holder, to its address, facsimile number or e-mail address set forth herein or on the books and records of the Company.

Or, in each of the above instances, to such other address, facsimile number or e-mail address and/or to the attention of such other Person as the recipient party has specified by written notice given to each other party at least five (5) days prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) mechanically or electronically generated by the sender's facsimile machine containing the time, date and recipient facsimile number or (C) provided by an overnight courier service shall be rebuttable evidence of personal service, receipt by facsimile or receipt from an overnight courier service in accordance with clause (i), (ii) or (iv) above, respectively. A copy of the e-mail transmission containing the time, date and recipient e-mail address shall be rebuttable evidence of receipt by e-mail in accordance with clause (iii) above. Notwithstanding anything in this Warrant to the contrary, the Company shall not publicly disclose the name of Holder or any of its Affiliates, or include the name of Holder or any of its Affiliates in any press release or in any filing with the Commission or any regulatory agency or Trading Market, without the prior written consent of Holder, except (i) as required by the federal or state securities laws and (ii) to the extent such disclosure is required by law, rules or regulation of any applicable governmental authority or self-regulatory organization (including Nasdaq or other stock exchange).

Notwithstanding any other provision of this Warrant, where this Warrant provides for notice of any event by the Holder, if this Warrant is held in global form by DTC (or any successor depository), such notice shall be sufficiently given if given to DTC (or any successor depository) pursuant to the procedures of the DTC (or any successor depository), subject to a Holder's right to elect to receive a Warrant in certificated form pursuant to the terms of the Warrant Agent Agreement, in which case this sentence shall not apply.

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

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

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

l. Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder; *provided* that, if any such amendment or modification shall affect the rights, immunities, liabilities, duties or obligations of the Warrant Agent, the Warrant Agent's written consent to modify or amend the provisions hereof will be required.

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

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

o. Warrant Agency Agreement. If this Warrant is held in global form through DTC (or any successor depository), this Warrant is issued subject to the Warrant Agency Agreement. To the extent any provision of this Warrant conflicts with the express provisions of the Warrant Agency Agreement (other than Section 14 or Section 27 of the Warrant Agency Agreement), the provisions of this Warrant shall govern and be controlling. Notwithstanding the foregoing, if any provision contained in this Warrant conflicts with the provisions set forth in Section 14 or Section 27 of the Warrant Agency Agreement, the provisions of Section 14 and Section 27 of the Warrant Agency Agreement control and supersede any provision of the Warrant. Notwithstanding anything to the contrary herein and for the avoidance of doubt, solely with respect to the rights, duties, obligations, protections, immunities and liability of the Warrant Agent, the Warrant Agency Agreement shall govern and control.

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.

PRECISION BIOSCIENCES, INC.

By: _____
Name:
Title:

[Signature Page to Common Stock Purchase Warrant]

NOTICE OF EXERCISE

TO: Precision BioSciences, Inc. (the "Company")

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

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

- wire transfer or cashier's check drawn on a United States bank; or
- if permitted the cancellation of such number of Warrant Shares as is necessary, in accordance with the formula set forth in subsection 2(c), to exercise this Warrant with respect to the maximum number of Warrant Shares purchasable pursuant to the cashless exercise procedure set forth in subsection 2(c).

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

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

By its delivery of this Notice of Exercise, the undersigned represents and warrants to the Company that in giving effect to the exercise evidenced hereby the Holders will not beneficially own in excess of the number of shares of Common Stock permitted to be owned under Section 2(e) of the Warrant to which this notice relates.

[SIGNATURE OF HOLDER]

Name of Investing Entity:

Signature of Authorized Signatory of Investing Entity:

Name of Authorized Signatory:

Title of Authorized Signatory:

Date:

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

Notice of Exercise

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: _____

DWAC Account Number: _____

Dated: _____, _____

Holder's Signature: _____

Holder's Address: _____

Assignment Form

1271 Avenue of the Americas
 New York, New York 10020-1401
 Tel: +1.212.906.1200 Fax: +1.212.751.4864
 www.lw.com

LATHAM & WATKINS LLP

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Hong Kong	Singapore
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London	Tokyo
Los Angeles	Washington, D.C.
Madrid	

March 1, 2024

Precision BioSciences, Inc.
 302 East Pettigrew Street, Suite A-100
 Durham, North Carolina 27701

Re: Registration statement on Form S-3 (Registration No. 333-272540); 2,875,000 shares of common stock, par value \$0.000005 per share and 2,875,000 common warrants to purchase 2,875,000 shares of common stock, par value \$0.000005 per share

To the addressee set forth above:

We have acted as special counsel to Precision BioSciences, Inc., a Delaware corporation (the “*Company*”), in connection with the proposed issuance of (i) 2,875,000 shares of common stock, par value \$0.000005 per share (the “*Common Stock*”), of the Company (the “*Shares*”) and (ii) 2,875,000 common warrants to purchase 2,875,000 shares of Common Stock (each, a “*Warrant*” or collectively, the “*Warrants*”). The Shares and Warrants are included in a registration statement on Form S-3 under the Securities Act of 1933, as amended (the “*Act*”), filed with the Securities and Exchange Commission (the “*Commission*”) on June 9, 2023 (Registration No. 333-272540) (as so filed, the “*Registration Statement*”) and are being offered pursuant to a base prospectus dated June 15, 2023 included in the Registration Statement (the “*Base Prospectus*”) and a preliminary prospectus supplement dated February 29, 2024 filed with the Commission pursuant to Rule 424(b) under the Act and a prospectus supplement dated March 1, 2024 (the “*Final Prospectus Supplement*”) and together with the Base Prospectus, the “*Prospectus*”) and an underwriting agreement dated March 1, 2024, between Guggenheim Securities, LLC, and the Company (the “*Underwriting Agreement*”). This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement, Preliminary Prospectus or related Prospectus, other than as expressly stated herein with respect to the issue of the Shares, Warrants and Warrant Shares (as defined below).

As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. We are opining herein as to the General Corporation Law of the State of Delaware (the “*DGCL*”), and we express no opinion with respect to any other laws.

1. Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof, when the Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the purchasers and have been issued by the Company against payment therefor (not less than par value) in the circumstances contemplated by the Underwriting Agreement, the issue and sale of the Shares will have been duly authorized by all necessary corporate action of the Company, and the Shares will be validly issued, fully paid and nonassessable. In rendering the foregoing opinion, we have assumed that the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the DGCL.

LATHAM & WATKINS^{LLP}

2. When the Warrants have been duly issued by the Company against payment therefor in the circumstances contemplated by the Underwriting Agreement, the issue and sale of the Warrants will have been duly authorized by all necessary corporate action of the Company, and the Warrants will be legally valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.
3. When the shares of Common Stock initially issuable upon exercise of the Warrants (the “*Warrant Shares*”) shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the Warrant holders, and have been issued by the Company against payment therefor (not less than par value) in the circumstances contemplated by the Warrants, as applicable, the issue of the Warrant Shares will have been duly authorized by all necessary corporate action of the Company, and the Warrant Shares will be validly issued, fully paid and nonassessable. In rendering the foregoing opinion, we have assumed that (i) the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the DGCL and (ii) upon the issue of any of the Warrant Shares, the total number of shares of Common Stock issued and outstanding will not exceed the total number of shares of Common Stock that the Company is then authorized to issue under its Amended and Restated Certificate of Incorporation and by the board of directors of the Company in connection with the offering contemplated by the Registration Statement and the Prospectus.

With your consent, we have assumed that the status of the Warrants as legally valid and binding obligations of the Company is not affected by any (i) breaches of, or defaults under, agreements or instruments, (ii) violations of statutes, rules, regulations or court or governmental orders, or (iii) failures to obtain required consents, approvals or authorizations from, or make required registrations, declarations or filings with, governmental authorities.

Our opinions are subject to: (i) the effect of bankruptcy, insolvency, reorganization, preference, fraudulent transfer, moratorium or other similar laws relating to or affecting the rights and remedies of creditors; (ii) (a) the effect of general principles of equity, whether considered in a proceeding in equity or at law (including the possible unavailability of specific performance or injunctive relief), (b) concepts of materiality, reasonableness, good faith and fair dealing, and (c) the discretion of the court before which a proceeding is brought; and (iii) the invalidity under certain circumstances under law or court decisions of provisions providing for the indemnification of or contribution to a party with respect to a liability where such indemnification or contribution is contrary to public policy. We express no opinion as to (a) any provision for liquidated damages, default interest, late charges, monetary penalties, make-whole premiums or other economic remedies to the extent such provisions are deemed to constitute a penalty; (b) consents to, or restrictions upon, governing law, jurisdiction, venue, arbitration, remedies, or judicial relief; (c) any provision requiring the payment of attorneys’ fees, where such payment is contrary to law or public policy; and (d) the severability, if invalid, of provisions to the foregoing effect.

March 1, 2024

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LATHAM & WATKINS LLP

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to the Company's Current Report on Form 8-K dated March 1, 2024, and to the reference to our firm contained in the Prospectus under the heading "Legal Matters." In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Sincerely,

/s/ Latham & Watkins LLP

Precision BioSciences Announces \$40.0 Million Offering of Common Stock and Warrants

DURHAM, N.C.—March 1, 2024 – Precision BioSciences, Inc. (Nasdaq: DTIL) (“Precision”), an advanced gene editing company utilizing its novel proprietary ARCUS[®] platform to develop in vivo gene editing therapies for sophisticated gene edits, including gene insertion, excision, and elimination, today announced that it has agreed to sell to the public by way of an underwritten offering 2,500,000 shares of its common stock and accompanying warrants to purchase up to 2,500,000 shares of common stock at a combined offering price of \$16.00 price per share, for total gross proceeds of \$40.0 million, before deducting underwriting discounts and commissions. The warrants have an exercise price of \$20.00 per share and are exercisable immediately and will expire five years following the date of issuance. The financing consisted of participation from leading life sciences investors, including Perceptive Advisors, Janus Henderson Investors, Aquilo Capital Management, LLC and LYFE Capital.

In addition, Precision BioSciences has granted the underwriter a 30-day option to purchase up to an additional 375,000 shares of its common stock and/or warrants to purchase up to 375,000 shares of common stock, at the combined public offering price and less underwriting discounts and commissions. The offering is expected to close on or about March 5, 2024, subject to customary closing conditions. All shares of common stock and accompanying warrants to be sold in the offering will be sold by Precision. Precision intends to use the net proceeds of the offering to help fund ongoing and planned research and development, and for working capital and general corporate purposes.

Guggenheim Securities, LLC is acting as sole book-running manager for the offering.

The securities described above were offered by means of a prospectus supplement dated March 1, 2024, and accompanying prospectus dated June 15, 2023, forming part of Precision’s effective shelf registration statement (File No. 333-272540). The prospectus supplement and accompanying prospectus relating to this offering will be filed with the U.S. Securities and Exchange Commission (the “SEC”) and will be available on the SEC’s website located at www.sec.gov. Copies of the prospectus supplement and the accompanying prospectus may also be obtained, when available, by contacting: Guggenheim Securities, LLC, Attention: Equity Syndicate Department, 330 Madison Avenue, 8th Floor, New York, NY 10017, by telephone at (212) 518-9544, or by email at GSEquityProspectusDelivery@guggenheimpartners.com.

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

About Precision BioSciences, Inc.

Precision BioSciences, Inc. is an advanced gene editing company dedicated to improving life (DTIL) with its novel and proprietary ARCUS[®] genome editing platform that differs from other technologies in the way it cuts, its smaller size, and its simpler structure. Key capabilities and differentiating characteristics may enable ARCUS nucleases to drive more intended, defined therapeutic outcomes. Using ARCUS, Precision’s pipeline is comprised of in vivo gene editing candidates designed to deliver lasting cures for the broadest range of genetic and infectious diseases where no adequate treatments exist.

Forward-Looking Statements

Certain statements contained in this press release, including those relating to the timing and size of the offering, the grant of the option to purchase additional shares of common stock and/or warrants, the anticipated total gross proceeds from the offering and other statements relating to the proposed offering, are forward-looking statements that involve a number of risks and uncertainties that could cause actual results to differ materially from those in the forward-looking statements. These risks and uncertainties include, but are not limited to, risks and uncertainties associated with the consummation of the proposed offering, uncertainties related to market conditions, the satisfaction of customary closing conditions related to the proposed offering, the completion of the offering on the anticipated terms or at all, general economic conditions and other risks identified from time to time in the reports Precision files with the SEC, including its Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and the preliminary prospectus supplement and accompanying prospectus related to the proposed offering to be filed with the SEC, which are available at www.sec.gov. The forward-looking statements in this press release speak only as of the date of this document, and Precision undertakes no obligation to update or revise any of the statements. Precision's business is subject to substantial risks and uncertainties, including those referenced above. Investors, potential investors, and others should give careful consideration to these risks and uncertainties.

Investor and Media Contact:

Naresh Tanna

Vice President of Investor Relations

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