

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

FORM 8-K

Current Report
Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of report (Date of earliest event reported): April 22, 2021

NeuBase Therapeutics, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation)	001-35963 (Commission File Number)	46-5622433 (I.R.S. Employer Identification No.)
350 Technology Drive, Pittsburgh, PA (Address of Principal Executive Offices)		15219 (Zip Code)
	(646) 450-1790 (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 \$0.0001 per share	NBSE	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR § 230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR § 240.12b-2).

Emerging growth company

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

Item 1.01 Entry into a Material Definitive Agreement.

On April 22, 2021, NeuBase Therapeutics, Inc. (the "Company") entered into an underwriting agreement (the "Underwriting Agreement") with RBC Capital Markets, LLC, Oppenheimer & Co. Inc. and Chardan Capital Markets LLC (the "Representatives"), as joint book-running managers and representatives of the underwriters named therein (the "Underwriters"), relating to an underwritten public offering (the "Offering") of 8,000,000 shares of the Company's common stock ("Common Stock"). The public offering price is \$5.00 per share of Common Stock, and the Underwriters have agreed to purchase the Common Stock pursuant to the Underwriting Agreement at a price of \$4.70 per share. Under the terms of the Underwriting Agreement, the Company also granted to the Underwriters an option, exercisable in whole or in part at any time for a period of 30 days from the date of the Underwriting Agreement, to purchase up to an additional 1,200,000 shares of Common Stock to cover over-allotments, if any.

The Offering is being made pursuant to the Company's registration statement on Form S-3 (File No. 333-254980), previously filed with the Securities and Exchange Commission (the "SEC") on April 1, 2021 and declared effective on April 14, 2021, a base prospectus dated April 14, 2021 and a prospectus supplement dated April 22, 2021.

The legal opinion, including the related consent, of Paul Hastings LLP relating to the issuance and sale of the shares of Common Stock to be issued in the Offering is filed as Exhibit 5.1 hereto.

Net proceeds from the Offering are expected to be approximately \$37.0 million (excluding any sale of shares of Common Stock pursuant to the over-allotment option granted to the Underwriters), after deducting underwriting discounts and commissions and estimated Offering expenses payable by the Company. The purchase and sale of the Common Stock, and the closing of the Offering, is expected to take place on or about April 26, 2021, subject to the satisfaction of customary closing conditions.

The Underwriting Agreement contains customary representations, warranties and covenants made by the Company. It also provides for customary indemnification by each of the Company and the Underwriters, severally and not jointly, for losses or damages arising out of or in connection with the Offering, including for liabilities under the Securities Act of 1933, as amended, other obligations of the parties and termination provisions. In addition, pursuant to the terms of the Underwriting Agreement, each of the Company's directors and executive officers have entered into "lock-up" agreements with the Underwriters that generally prohibit, without the prior written consent of the Representatives, the sale, transfer or other disposition of securities of the Company until July 21, 2021.

The foregoing description of the Underwriting Agreement does not purport to be complete and is qualified in its entirety by reference to the copy of the Underwriting Agreement, which is filed as Exhibit 1.1 to this Current Report on Form 8-K.

The representations, warranties and covenants contained in the Underwriting Agreement were made only for purposes of such agreement and as of specific dates, were solely for the benefit of the parties to the Underwriting Agreement, and may be subject to limitations agreed upon by the contracting parties. Accordingly, the Underwriting Agreement is incorporated herein by reference only to provide investors with information regarding the terms of the Underwriting Agreement, and not to provide investors with any other factual information regarding the Company or its business, and should be read in conjunction with the disclosures in the Company's periodic reports and other filings with the SEC.

Forward-Looking Statements

This Current Report on Form 8-K contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act. These forward-looking statements include, among other things, statements regarding the Company's expectations on the timing, size and completion of the offering, the amount of proceeds expected from the offering and the anticipated use of proceeds therefrom. These forward-looking statements are distinguished by use of words such as "will," "would," "anticipate," "expect," "believe," "designed," "plan," or "intend," the negative of these terms, and similar references to future periods. These views involve risks and uncertainties that are difficult to predict and, accordingly, our actual results may differ materially from the results discussed in our forward-looking statements. Our forward-looking statements contained herein speak only as of the date of this press release. Factors or events that we cannot predict, including those risk factors contained in our prospectus supplement and related prospectus for this proposed offering filed with the SEC and our other filings with the SEC, may cause our actual results to differ from those expressed in forward-looking statements. The Company may not actually achieve the plans, carry out the intentions or meet the expectations or projections disclosed in the forward-looking statements, and you should not place undue reliance on these forward-looking statements. Because such statements deal with future events and are based on the Company's current expectations, they are subject to various risks and uncertainties, and actual results, performance or achievements of the Company could differ materially from those described in or implied by the statements in this press release, including: risks and uncertainties associated with market conditions; the satisfaction of customary closing conditions related to the proposed public offering; the Company's plans to develop and commercialize its product candidates; the timing of initiation of the Company's planned clinical trials; the timing of the availability of data from the Company's clinical trials; the timing of any planned investigational new drug application or new drug application; the Company's plans to research, develop and commercialize its current and future product candidates; the clinical utility, potential benefits and market acceptance of the Company's product candidates; the Company's commercialization, marketing and manufacturing capabilities and strategy; global health conditions, including the impact of COVID-19; the Company's ability to protect its intellectual property position; and the requirement for additional capital to continue to advance these product candidates, which may not be available on favorable terms or at all, as well as those risk factors contained in our filings with the SEC. Except as otherwise required by law, the Company disclaims any intention or obligation to update or revise any forward-looking statements, which speak only as of the date hereof, whether as a result of new information, future events or circumstances or otherwise.

Item 8.01 Other Events.

On April 22, 2021, the Company issued a press release announcing the pricing of the Offering. A copy of the press release is attached as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
1.1	Underwriting Agreement, dated as of April 22, 2021, by and among NeuBase Therapeutics, Inc. and RBC Capital Markets, LLC, Oppenheimer & Co. Inc. and Chardan Capital Markets LLC, as representatives of the underwriters named therein.
5.1	Opinion of Paul Hastings LLP.
23.1	Consent of Paul Hastings LLP (included in Exhibit 5.1).
99.1	Press Release, dated April 22, 2021.

SIGNATURE

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

NEUBASE THERAPEUTICS, INC.
(Registrant)

Date: April 22, 2021

By: /s/ Sam Backenroth
Sam Backenroth
Chief Financial Officer

NeuBase Therapeutics, Inc.

8,000,000 Shares
Common Stock
(\$0.0001 par value per share)

UNDERWRITING AGREEMENT

New York, New York
April 22, 2021

RBC Capital Markets, LLC
Oppenheimer & Co. Inc.
Chardan Capital Markets LLC
As Representatives of the several Underwriters

c/o RBC Capital Markets, LLC
200 Vesey Street
New York, New York 10281-8098

c/o Oppenheimer & Co. Inc.
85 Broad Street, Floor 23
New York, NY 10004

c/o Chardan Capital Markets LLC
17 State Street
Suite 2100
New York, NY 10004

Ladies and Gentlemen:

NeuBase Therapeutics, a Delaware corporation (the "Company"), proposes to sell to the several underwriters named in Schedule A hereto (the "Underwriters"), for whom you (the "Representatives") are acting as representatives, 8,000,000 shares of common stock, \$0.0001 par value per share ("Common Stock") of the Company (said shares to be issued and sold by the Company being hereinafter called the "Initial Securities"). The Company also proposes to grant to the Underwriters an option to purchase up to 1,200,000 additional shares of Common Stock (the "Option Securities"; the Option Securities, together with the Initial Securities, being hereinafter called the "Securities"). To the extent there are no additional Underwriters listed on Schedule A other than you, the term "Representatives" as used herein shall mean you, as Underwriters.

The Company has filed with the Securities and Exchange Commission (the "Commission") a shelf registration statement on Form S-3 (No. 333-254980), including a base prospectus, which shelf registration statement covers the public offering and sale of certain securities, including the Securities, under the Securities Act of 1933, as amended (the "1933 Act"), and the rules and regulations of the Commission promulgated thereunder (the "1933 Act Regulations"), which shelf registration statement was declared effective on April 14, 2021. Such registration statement, as of any time, means such registration statement as amended by any post-effective amendments thereto to such time, 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 1933 Act and the documents otherwise deemed to be a part thereof as of such time pursuant to Rule 430B under the 1933 Act Regulations ("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 incorporated by reference therein at such time pursuant to Item 12 of Form S-3 under the 1933 Act and the documents otherwise deemed to be a part thereof as of such time pursuant to the Rule 430B. Each preliminary prospectus used in connection with the offering of the Securities, including the documents incorporated or deemed to be incorporated by reference therein pursuant to Item 12 of Form S-3 under the 1933 Act, are collectively referred to herein as a "preliminary prospectus." Not later than the Commission's close of business on the second business day following the execution and delivery of this Agreement, the Company will prepare and file a final prospectus relating to the Securities in accordance with the provisions of Rule 424(b) under the 1933 Act Regulations ("Rule 424(b)"). The final prospectus, in the form first furnished or made available to the Underwriters for use in connection with the offering of the Securities, including the documents incorporated or deemed to be incorporated by reference therein pursuant to Item 12 of Form S-3 under the 1933 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").

As used in this Agreement:

"Applicable Time" means 8:00 a.m., New York City time, on April 22, 2021 or such other time as agreed by the Company and the Representatives.

"General Disclosure Package" means any Issuer General Use Free Writing Prospectuses issued at or prior to the Applicable Time, the most recent preliminary prospectus (including any documents incorporated therein by reference) that is distributed to investors prior to the Applicable Time and the information included on Schedule B-1 hereto, all considered together.

"Issuer Free Writing Prospectus" means any "issuer free writing prospectus," as defined in Rule 433 of the 1933 Act Regulations ("Rule 433"), including without limitation any "free writing prospectus" (as defined in Rule 405 of the 1933 Act Regulations ("Rule 405")) relating to the Securities that is (i) required to be filed with the Commission by the Company, (ii) a "road show for an offering that is a written communication" within the meaning of Rule 433(d)(8)(i), whether or not required to be filed with the Commission, or (iii) exempt from filing with the Commission pursuant to Rule 433(d)(5)(i) because it contains a description of the Securities or of the offering that does not reflect the final terms, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g).

“Issuer General Use Free Writing Prospectus” means any Issuer Free Writing Prospectus that is intended for general distribution to prospective investors (other than a “bona fide electronic road show,” as defined in Rule 433), as evidenced by its being specified in Schedule B-2 hereto.

“Issuer Limited Use Free Writing Prospectus” means any Issuer Free Writing Prospectus that is not an Issuer General Use Free Writing Prospectus.

“Testing-the-Waters Communication” means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the 1933 Act.

“Written Testing-the-Waters Communication” means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the 1933 Act.

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 “1934 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.

SECTION 1. Representations and Warranties by the Company. The Company represents and warrants to each Underwriter as of the date hereof, the Applicable Time, the Closing Date (as defined below) and any Date of Delivery (as defined below), and agrees with each Underwriter, as follows:

(a) Registration Statement and Prospectuses. The Company meets the requirements for use of the Registration Statement. The Registration Statement has become effective under the 1933 Act. No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued by the Commission under the 1933 Act, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued by the Commission and no proceedings for any of those purposes have been instituted by the Commission or are pending or, to the Company’s knowledge, contemplated by the Commission. The Company has complied with each request (if any) from the Commission for additional information.

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Each of the Registration Statement and any post-effective amendment thereto, at the time of its effectiveness and at each deemed effective date with respect to the Underwriters pursuant to Rule 430B(f)(2) under the 1933 Act Regulations, complied in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations. Each preliminary prospectus, the Prospectus and any amendment or supplement thereto, at the time each was filed with the Commission, complied in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations. Each preliminary prospectus delivered to the Underwriters for use in connection with the offering and the Prospectus and each Issuer Free Writing Prospectus that is required to be filed with the SEC pursuant to Rule 433, including any amendments or supplements to any of the foregoing, was or will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

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 or hereafter are filed with the Commission, complied and will comply in all material respects with the requirements of the 1934 Act and the rules and regulations of the Commission under the 1934 Act (the “1934 Act Regulations”), and except to the extent the Representatives shall agree in writing to a modification, the Prospectus is and shall be in all material respects in the form furnished to you prior to the Applicable Time or, to the extent not completed at the Applicable Time, shall contain only such specific additional information and other changes (beyond that contained in the latest Preliminary Prospectus) as the Company has advised you, prior to the Applicable Time, will be included or made therein.

The Registration Statement, any preliminary prospectus and the Prospectus, and the filing of the Registration Statement, any preliminary prospectus and the Prospectus with the Commission have been duly authorized by and on behalf of the Company, and the Registration Statement has been duly executed pursuant to such authorization.

(b) Accurate Disclosure. Neither the Registration Statement nor any amendment thereto, at its effective time, at the Closing Date or at any Date of Delivery, contained, contains or will contain an untrue statement of a material fact or omitted, omits or will omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. As of the Applicable Time, none of (A) the General Disclosure Package, (B) any individual Issuer Limited Use Free Writing Prospectus, when taken together as a whole with the General Disclosure Package, nor (C) any individual Written Testing-the-Waters Communication, when considered together with the General Disclosure Package, included, includes or will include an untrue statement of a material fact or omitted, omits or will 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. Neither the Prospectus nor any amendment or supplement thereto (including any prospectus wrapper), as of its issue date, at the time of any filing with the Commission pursuant to Rule 424(b), at the Closing Date or at any Date of Delivery, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The documents incorporated or deemed to be incorporated by reference in the Registration Statement, the General 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 General 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 not misleading.

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The representations and warranties in this subsection shall not apply to statements in or omissions from the Registration Statement (or any amendment thereto), the General Disclosure Package or the Prospectus (or any amendment or supplement thereto, including any prospectus wrapper) made in reliance upon and in conformity with written information furnished to the Company by any Underwriter through the Representatives expressly for use therein. For purposes of this Agreement, the only information so furnished consists of the information described as such in Section 8 hereof.

(c) Issuer Free Writing Prospectuses. No Issuer Free Writing Prospectus conflicts or will conflict with the information contained in the Registration Statement or the Prospectus, including any document incorporated by reference therein, and any preliminary or other prospectus deemed to be a part thereof that has not been superseded or modified. No filing of any “road show” (as defined in Rule 433(h)) is required in connection with the offering of the Securities. Any Issuer Free Writing Prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the requirements of the 1933 Act and the 1933 Act Regulations. Each Issuer Free Writing Prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the 1933 Act or that was prepared by or behalf of or used or referred to by the Company complies or will comply in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations. Except for the Issuer Free Writing Prospectuses, if any, identified in Schedule B-2 hereto, and electronic road shows, if any, each furnished to the Representatives before first use, the Company has not prepared, used or referred to, and will not, without the prior consent of the Representatives, prepare, use or refer to, any issuer free writing

prospectus.

(d) Testing-the-Waters Materials. The Company (A) has not engaged in any Testing-the-Waters Communication other than Testing-the-Waters Communications with the consent of the Representatives with entities that are qualified institutional buyers within the meaning of Rule 144A under the 1933 Act or institutions that are accredited investors within the meaning of Rule 501 under the 1933 Act and (B) has not authorized anyone other than the Representatives to engage in Testing-the-Waters Communications. The Company reconfirms that the Representatives have been authorized to act on its behalf in undertaking Testing-the-Waters Communications. Any individual Written Testing-the-Waters Communication does not conflict with the information contained in the Registration Statement, the Disclosure Package or the Prospectus. The preceding sentence does not apply to statements in Written Testing-the-Waters Communication based upon and in conformity with written information furnished to the Company by any Underwriter through the Representatives specifically for use therein, it being understood and agreed that the only such information furnished by or on behalf of any Underwriter consists of the information described as such in Section 8 hereof. The Company has not distributed any Written Testing-the-Waters Communications other than those listed on Schedule B-3 hereto.

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(e) Company Not Ineligible Issuer. At the time of filing the Registration Statement and any post-effective amendment thereto, at the earliest time thereafter that the Company or another offering participant made a bona fide offer (within the meaning of Rule 164(h)(2) of the 1933 Act Regulations) of the Securities and at the date hereof, the Company was not and is not an “ineligible issuer,” as defined in Rule 405, without taking account of any determination by the Commission pursuant to Rule 405 that it is not necessary that the Company be considered an ineligible issuer.

(f) Independent Accountants. Marcum LLP, who certified the financial statements and supporting schedules included in the Registration Statement, the General Disclosure Package and the Prospectus are independent public accountants as required by the 1933 Act, the 1933 Act Regulations, the 1934 Act, the 1934 Act Regulations and the Public Company Accounting Oversight Board (United States).

(g) Financial Statements; Non-GAAP Financial Measures. The financial statements included or incorporated by reference in the Registration Statement, the General Disclosure Package and the Prospectus, together with the related schedules and notes, comply as to form in all material respects with Regulation S-X under the 1933 Act and present fairly, in all material respects, the financial position of the Company and its consolidated Subsidiaries (as defined below) at the dates indicated and the statement of operations, stockholders’ equity and cash flows of the Company and its consolidated Subsidiaries for the periods specified; said financial statements have been prepared in conformity with U.S. generally accepted accounting principles (“GAAP”) applied on a consistent basis throughout the periods involved, except in the case of unaudited interim financial statements subject to normal year-end adjustments and the exclusion of certain footnotes. The supporting schedules, if any, present fairly, in all material respects, in accordance with GAAP the information required to be stated therein. The selected financial data and the summary financial information included in the Registration Statement, the General Disclosure Package and the Prospectus present fairly, in all material respects, the information shown therein and have been compiled on a basis consistent with that of the audited financial statements included therein. Except as included therein, no historical or pro forma financial statements or supporting schedules are required to be included or incorporated by reference in the Registration Statement, the General Disclosure Package or the Prospectus under the 1933 Act or the 1933 Act Regulations. All disclosures contained in the Registration Statement, the General Disclosure Package or the Prospectus, or incorporated by reference therein, regarding “non-GAAP financial measures” (as such term is defined by the rules and regulations of the Commission) comply with Regulation G of the 1934 Act, and Item 10 of Regulation S-K, to the extent applicable, and there are no material off-balance sheet arrangements (as defined in Regulation S-K under the 1933 Act, Item 303(a)(4)(ii)) or any other relationships with unconsolidated entities or other persons, that may have a material current or, to the Company’s knowledge, material future effect on the Company’s consolidated financial condition, results of operations, liquidity, capital expenditures, capital resources or significant components of revenue or expenses. The interactive data in eXtensible Business Reporting Language incorporated by reference in the Registration Statement, the General 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. No other financial statements or schedules are required to be included or incorporated by reference in the Registration Statement, the General Disclosure Package or the Prospectus.

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(h) Compliance with the Sarbanes-Oxley Act of 2002. 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 in all material respects with any provision of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith, including Section 402 related to loans and Sections 302 and 906 related to certifications.

(i) No Material Adverse Change in Business. Except as otherwise stated therein, since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, (A) there has been no material adverse effect on the condition (financial or otherwise), prospects, earnings, business or properties of the Company and its Subsidiaries, taken as a whole, whether or not arising from transactions in the ordinary course of business (a “Material Adverse Effect”), (B) there have been no transactions entered into by the Company or any of its Subsidiaries, other than those in the ordinary course of business, which are material with respect to the Company and its Subsidiaries taken as a whole, (C) there have been no material liabilities or obligations, direct or contingent, entered into by the Company or any of its Subsidiaries, and (D) there has been no dividend or distribution of any kind declared, paid or made by the Company on any class of its capital stock.

(j) Good Standing of the Company. The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the State of Delaware and has corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus and to enter into and perform its obligations under this Agreement; and the Company is duly qualified as a foreign corporation to transact business and is in good standing in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to be so qualified or to be in good standing would not result in a Material Adverse Effect.

(k) Good Standing of the Company’s Subsidiaries. Each subsidiary of the Company (each, a “Subsidiary” and, collectively, the “Subsidiaries”) has been duly organized and is validly existing in good standing under the laws of the jurisdiction of its incorporation or organization, has corporate or similar power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to be so qualified or to be in good standing would not result in a Material Adverse Effect. Except as otherwise disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, all of the issued and outstanding capital stock of each Subsidiary has been duly authorized and validly issued, is fully paid and non-assessable and is owned by the Company, directly or through Subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance, claim or equity. None of the outstanding shares of capital stock of any Subsidiary was issued in violation of the preemptive or similar rights of any securityholder of such Subsidiary. The only Subsidiaries of the Company are the entities listed on Exhibit 21 to the Registration Statement.

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(l) Capitalization. The authorized, issued and outstanding shares of capital stock of the Company are as set forth in the Registration Statement, the General Disclosure Package and the Prospectus in the column entitled “Actual” under the caption “Capitalization” (except for subsequent issuances, if any, (A) pursuant to this Agreement, (B) pursuant to reservations, agreements or employee benefit plans referred to in the Registration Statement, the General Disclosure Package and the Prospectus or (C) pursuant to the conversion of convertible securities or exercise of options referred to in the Registration Statement, the General Disclosure Package and the Prospectus). The outstanding shares of capital stock of the Company have been duly authorized and are validly issued, fully paid and non-assessable and were issued in compliance with all applicable state and federal securities. None of the outstanding shares of capital stock of the Company was issued in violation of the preemptive or other similar rights of any securityholder of the Company. All outstanding shares of capital stock of the Subsidiaries are owned by the Company either directly or through wholly owned Subsidiaries free and clear of any perfected security interest or any other security interests, claims, liens or encumbrances.

Except as set forth in the Registration Statement, the General Disclosure Package and the Prospectus, there are no material outstanding options, warrants or other rights to purchase, agreements or other obligations to issue, or rights to convert any obligations into or exchange any securities or interests for capital stock or other ownership interests of any Subsidiary.

No Subsidiary is currently prohibited or restricted, directly or indirectly, from paying any dividends to the Company, from making any other distribution on such Subsidiary’s capital stock, from repaying to the Company any loans or advances to such Subsidiary from the Company or from transferring any of such Subsidiary’s property or assets to the Company or any other Subsidiary of the Company, except as described in or contemplated by the Registration Statement, the General Disclosure Package and the Prospectus (exclusive of any supplement thereto).

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

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(n) Authorization and Description of Securities. The Securities to be purchased by the Underwriters from the Company have been duly authorized for issuance and sale to the Underwriters pursuant to this Agreement and, when issued and delivered by the Company pursuant to this Agreement against payment of the consideration set forth herein, will be validly issued, fully paid and non-assessable; and the issuance of the Securities is not subject to the preemptive or other similar rights of any securityholder of the Company. The Common Stock conforms in all material respects to the statements relating thereto contained in the Registration Statement, the General Disclosure Package and the Prospectus and such description conforms in all material respects to the rights set forth in the instruments defining the same. No holder of Securities will be subject to personal liability by reason of being such a holder. The certificates for the Securities are in valid and sufficient form.

(o) Registration Rights. There are no persons with registration rights or other similar rights to have any securities registered for sale pursuant to the Registration Statement or otherwise registered for sale or sold by the Company under the 1933 Act pursuant to this Agreement, other than those rights that have been disclosed in the Registration Statement, the General Disclosure Package and the Prospectus and have been waived.

(p) Absence of Violations, Defaults and Conflicts. Neither the Company nor any Subsidiary is (A) in violation of its charter, by-laws or similar organizational document, (B) in default in the performance or observance of any obligation, agreement, covenant or condition contained in any contract, indenture, mortgage, deed of trust, loan or credit agreement, note, lease or other agreement or instrument to which the Company or any Subsidiary is a party or by which either of them may be bound or to which any of the properties or assets of the Company or any Subsidiary is subject (collectively, “Agreements and Instruments”), except for such defaults that would not, singly or in the aggregate, result in a Material Adverse Effect, or (C) in violation of any law, statute, rule, regulation, judgment, order, writ or decree of any arbitrator, court, governmental body, regulatory body, administrative agency or other authority, body or agency having jurisdiction over the Company or its Subsidiaries or any of their respective properties, assets or operations (each, a “Governmental Entity”), except for such violations that would not, singly or in the aggregate, result in a Material Adverse Effect.

The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated herein and in the Registration Statement, the General Disclosure Package and the Prospectus (including the issuance and sale of the Securities and the use of the proceeds from the sale of the Securities as described therein under the caption “Use of Proceeds”) and compliance by the Company with its obligations hereunder have been duly authorized by all necessary corporate action and do not and will not, whether with or without the giving of notice or passage of time or both, conflict with or constitute a breach of, or default or Repayment Event (as defined below) under, or result in the creation or imposition of any lien, charge or encumbrance upon any properties or assets of the Company or its Subsidiaries pursuant to, the Agreements and Instruments (except for such conflicts, breaches, defaults or Repayment Events or liens, charges or encumbrances that would not, singly or in the aggregate, result in a Material Adverse Effect), nor will such action result in any violation of the provisions of the charter, by-laws or similar organizational document of the Company or its Subsidiaries or any law, statute, rule, regulation, judgment, order, writ or decree of any Governmental Entity. As used herein, a “Repayment Event” means any event or condition which gives the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder’s behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company or its Subsidiaries.

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(q) Listing. The Securities have been approved for listing on The Nasdaq Capital Market, subject to notice of issuance.

(r) Absence of Labor Dispute. No labor dispute with the employees of the Company or its Subsidiaries exists or, to the knowledge of the Company, is threatened or imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its or its Subsidiaries’ principal suppliers, manufacturers, customers or contractors, which, in either case, would result in a Material Adverse Effect. Neither the Company nor any of its Subsidiaries has received any notice of cancellation or termination with respect to any collective bargaining agreement to which it is a party.

(s) Absence of Proceedings. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, there is no action, suit, proceeding, inquiry or investigation before or brought by any Governmental Entity (including, without limitation, any action, suit proceeding, inquiry or investigation before or brought by the U.S. Food and Drug Administration (the “FDA”) or the European Medicines Agency (the “EMA”)) now pending or, to the knowledge of the Company, threatened, against or affecting the Company or its Subsidiaries, which would reasonably be expected to result in a Material Adverse Effect, or which would reasonably be expected to materially and adversely affect their respective properties or assets or the consummation of the transactions contemplated in this Agreement or the performance by the Company of its obligations hereunder; and the aggregate of all pending legal or governmental proceedings to which the Company or any such Subsidiary is a party or of which any of their respective properties or assets is the subject which are not described in the Registration Statement, the General Disclosure Package and the Prospectus, including ordinary routine litigation incidental to the business, would not reasonably be expected to result in a Material Adverse Effect.

(t) Accuracy of Exhibits and Statements. There are no contracts or documents which are required to be described in the Registration Statement, the General Disclosure Package or the Prospectus or to be filed as exhibits to the Registration Statement which have not been so described and filed as required. The statements in the Preliminary Prospectus and the Prospectus under the heading “Description of Common Stock” insofar as such statements summarize legal matters, agreements, documents or proceedings discussed therein, are accurate and fair summaries, in all material respects, of such legal matters, agreements, documents or proceedings.

(u) Absence of Further Requirements. No filing with, or authorization, approval, consent, license, order, registration, qualification or decree of, any Governmental Entity is necessary or required for the performance by the Company of its obligations hereunder, in connection with the offering, issuance or sale of the Securities

(v) Possession of Licenses and Permits. The Company and its Subsidiaries possess such permits, licenses, approvals, consents and other authorizations (collectively, "Governmental Licenses") issued by the appropriate Governmental Entities necessary to conduct the business now operated by them (including, without limitation, all such permits, licenses, approvals, consents and other authorizations required by the FDA, the EMA, or any other federal, state, local or foreign agencies or bodies engaged in the regulation of clinical or preclinical studies, pharmaceuticals, biologics, biohazardous substances or activities related to the business now operated by the Company and its Subsidiaries), except where the failure so to possess would not, singly or in the aggregate, result in a Material Adverse Effect. The Company and its Subsidiaries are in compliance with the terms and conditions of all Governmental Licenses, except where the failure so to comply would not, singly or in the aggregate, result in a Material Adverse Effect. The Company has fulfilled and performed all of its material obligations with respect to the Governmental Licenses and, to the knowledge of the Company, no event has occurred which allows, or after notice or lapse of time would allow, revocation or termination thereof or results in any other material impairment of the rights of the Company as a holder of any permit, except where the failure to so fulfill or perform, or the occurrence of such event, would not, singly or in the aggregate, result in a Material Adverse Effect. All of the Governmental Licenses are valid and in full force and effect, except where the invalidity of such Governmental Licenses or the failure of such Governmental Licenses to be in full force and effect would not, singly or in the aggregate, result in a Material Adverse Effect. Neither the Company nor its Subsidiaries has received any notice of proceedings relating to the revocation or modification of any Governmental Licenses which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would result in a Material Adverse Effect.

(w) Title to Property. The Company and its Subsidiaries have good and marketable title to all real property owned by them and good title to all other properties owned by them, in each case, free and clear of all mortgages, pledges, liens, security interests, claims, restrictions or encumbrances of any kind except such as (A) are described in the Registration Statement, the General Disclosure Package and the Prospectus or (B) do not, singly or in the aggregate, materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company or its Subsidiaries; and all of the leases and subleases material to the business of the Company and its Subsidiaries, considered as one enterprise, and under which the Company or its Subsidiaries holds properties described in the Registration Statement, the General Disclosure Package or the Prospectus, are in full force and effect, and neither the Company nor any such Subsidiary has any notice of any material claim of any sort that has been asserted by anyone adverse to the rights of the Company or any Subsidiary under any of the leases or subleases mentioned above, or affecting or questioning the rights of the Company or such Subsidiary to the continued possession of the leased or subleased premises under any such lease or sublease.

(x) Title to Intellectual Property. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, the Company owns or has valid, binding and enforceable licenses or other rights under the patents, patent applications, licenses, inventions, copyrights, know how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, service marks, trade names or other intellectual property necessary for, or used in the conduct, or the proposed conduct, of the business of the Company in the manner described in the Registration Statement, the General Disclosure Package and the Prospectus (collectively, the "Intellectual Property"); to the knowledge of the Company, the patents, trademarks, and copyrights, if any, included within the Intellectual Property are valid, enforceable, and subsisting; other than as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, (A) the Company is not obligated to grant a license to, or provide other material consideration to any third party in connection with the Intellectual Property, (B) the Company has not received any notice of any claim of infringement, misappropriation or conflict with any asserted rights of others with respect to any of the Company's drug candidates, services, processes or Intellectual Property, except, solely with respect to this clause (B), as would not reasonably be expected to have a Material Adverse Effect, (C) to the knowledge of the Company, neither the sale nor use of any of the discoveries, inventions, drug candidates, services or processes of the Company referred to in the Registration Statement, the General Disclosure Package or the Prospectus do or will, to the knowledge of the Company, infringe, misappropriate or violate any right or valid patent claim of any third party, (D) none of the technology employed by the Company has been obtained or is being used by the Company in material violation of any contractual obligation binding on the Company or, to the Company's knowledge, upon any of its officers, directors or employees or otherwise in violation of the rights of any persons, (E) to the knowledge of the Company, no third party has any ownership right in or to any Intellectual Property that is owned by the Company, other than any co-owner of any patent constituting Intellectual Property who is listed on the records of the U.S. Patent and Trademark Office (the "USPTO") and any co-owner of any patent application constituting Intellectual Property who is named in such patent application, and, to the knowledge of the Company, no third party has any ownership right in or to any Intellectual Property in any field of use that is exclusively licensed to the Company, other than any licensor to the Company of such Intellectual Property, (F) there is no material infringement by third parties of any Intellectual Property, (G) there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others challenging the Company's rights in or to any Intellectual Property and (H) there is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others challenging the validity or scope of any Intellectual Property. The Company is in compliance in all material respects 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.

(y) Patents and Patent Applications. All patents and patent applications owned by or licensed to the Company or under which the Company has rights have, to the knowledge of the Company, been duly and properly filed and maintained; to the knowledge of the Company, the parties prosecuting such patent applications have complied with their duty of candor and disclosure to the USPTO in connection with such applications; and the Company is not aware of any facts required to be disclosed to the USPTO that were not disclosed to the USPTO and which would preclude the grant of a patent in connection with any such application or would reasonably be expected to form the basis of a finding of invalidity with respect to any patents that have issued with respect to such applications. To the Company's knowledge, all patents and patent applications owned by the Company and filed with the USPTO or any foreign or international patent authority (the "Company Patent Rights") and all patents and patent applications in-licensed by the Company and filed with the USPTO or any foreign or international patent authority (the "In-licensed Patent Rights") have been duly and properly filed; the Company believes it has complied with its duty of candor and disclosure to the USPTO for the Company Patent Rights and, to the Company's knowledge, the licensors of the In-licensed Patent Rights have complied with their duty of candor and disclosure to the USPTO for the In-licensed Patent Rights.

(z) FDA Compliance. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, the Company: (A) is and at all times has been in material compliance with all statutes, rules or regulations of the FDA 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"); (B) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or written notice from the FDA or any Governmental Entity alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, exemptions, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws ("Authorizations"); (C) possesses all material 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; (D) has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from the FDA or any Governmental Entity or third party alleging that any product operation or activity is in material violation of any Applicable Laws or Authorizations and has no knowledge

that the FDA or any Governmental Entity or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (E) has not received notice that the FDA or any Governmental Entity has taken, is taking or intends to take action to limit, suspend, modify or revoke any material Authorizations and has no knowledge that the FDA or any Governmental Entity is considering such action; and (F) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission).

(aa) Compliance with Health Care Laws. The Company has operated and currently is in compliance with all applicable health care laws, rules and regulations (except where such failure to operate or non-compliance would not, singly or in the aggregate, result in a Material Adverse Effect), including, without limitation, (i) the Federal Food, Drug and Cosmetic Act (21 U.S.C. §§ 301 et seq.); (ii) all applicable federal, state, local and all applicable foreign healthcare related fraud and abuse laws, including, without limitation, the federal Anti-kickback Statute (42 U.S.C. § 1320a-7b(b)), the U.S. Physician Payments Sunshine Act (42 U.S.C. § 1320a-7h), the civil False Claims Act (31 U.S.C. §§ 3729 et seq.), the criminal False Claims Law (42 U.S.C. § 1320a-7b(a)), all criminal laws relating to healthcare fraud and abuse, including but not limited to 18 U.S.C. Sections 286 and 287, the healthcare 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 exclusion laws (42 U.S.C. § 1320a-7), and the civil monetary penalties law (42 U.S.C. § 1320a-7a); (iii) HIPAA, as amended by the Health Information Technology for Economic Clinical Health Act (42 U.S.C. Section 17921 et seq.); (iv) the regulations promulgated pursuant to such laws; and (v) any other similar local, state, federal, or foreign laws (collectively, the “Health Care Laws”). Neither the Company, nor to the Company’s knowledge, any of its officers, directors, employees or agents have engaged in activities which are, as applicable, cause for false claims liability, civil penalties, or mandatory or permissive exclusion from Medicare, Medicaid, or any other state or federal healthcare program. The Company has not received written notice or other correspondence of any claim, action, suit, audit, survey, proceeding, hearing, enforcement, investigation, arbitration or other action (“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, and, to the Company’s knowledge, no such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action is threatened. The Company is not a party to and does not have any ongoing reporting obligations pursuant to any corporate integrity agreement, deferred prosecution agreement, monitoring agreement, consent decree, settlement order, plan of correction or similar agreement imposed by any governmental or regulatory authority. Additionally, neither the Company, nor to the Company’s knowledge, any of its employees, officers or directors, has been excluded, suspended or debarred from participation in any U.S. state or federal health care program or human clinical research or, to the knowledge of the Company, is subject to a governmental inquiry, investigation, proceeding, or other similar action that could reasonably be expected to result in debarment, suspension, or exclusion.

(bb) Environmental Laws. (i) Except as described in the Registration Statement, the General Disclosure Package and the Prospectus or would not, singly or in the aggregate, result in a Material Adverse Effect, (A) neither the Company nor any Subsidiary is in violation of any federal, state, local or foreign statute, law, rule, regulation, ordinance, code, policy or rule of common law or any judicial or administrative interpretation thereof, including any judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum or petroleum products, asbestos-containing materials or mold (collectively, “Hazardous Materials”) or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, “Environmental Laws”), (B) the Company and its Subsidiaries have all permits, authorizations and approvals required under any applicable Environmental Laws and are each in compliance with their requirements, (C) there are no pending or, to the knowledge of the Company threatened, administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, investigation or proceedings relating to any Environmental Law against the Company or any Subsidiary and (D) there are no events or circumstances that would reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or Governmental Entity, against or affecting the Company or any Subsidiary relating to Hazardous Materials or any Environmental Laws; (ii) there are no costs or liabilities associated with Environmental Laws of or relating to the Company or its Subsidiaries for any such failure to comply, or failure to receive required permits, licenses or approvals, or cost or liability, as would not, individually or in the aggregate, have a Material Adverse Effect; and (iii) except as described in each of the Registration Statement, the General Disclosure Package and the Prospectus, none of the Company and its Subsidiaries anticipates material capital expenditures relating to any Environmental Laws. Neither the Company nor any of its Subsidiaries has been named as a “potentially responsible party” under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, or any similar U.S. or non-U.S. state or local Environmental Laws or regulation requiring the Company or any of its Subsidiaries to investigate or remediate any pollutants or contaminants, except where such requirements would not, individually or in the aggregate, have a Material Adverse Effect, whether or not arising from transactions in the ordinary course of business.

(cc) Accounting Controls and Disclosure Controls. The Company and its Subsidiaries maintain a system of “internal control over financial reporting” (as defined in Rule 13a-15(f) of the 1934 Act) that comply with the requirements of the 1934 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 GAAP. The Company and its Subsidiaries maintain internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management’s general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management’s general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company and its Subsidiaries’ internal controls over financial reporting are effective and the Company and its Subsidiaries are not aware of any material weakness in their internal controls over financial reporting. The Company’s independent auditors and board of directors have been advised of: (i) all “material weaknesses” and “significant deficiencies” (each, as defined in Rule 12b-2 of the 1934 Act), if any, in the design or operation of internal controls which could adversely affect the Company’s ability to record, process, summarize and report financial data and (ii) all fraud, if any, whether or not material, that involves management or other employees who have a role in the Company’s internal controls (whether or not remediated); all such material weaknesses, if any, have been disclosed in the Registration Statement, the General Disclosure Package and the Prospectus in all material respects; and except as described in or contemplated by the Registration Statement, the General Disclosure Package and the Prospectus (exclusive of any supplement thereto), since the date of the most recent evaluation of such disclosure controls and procedures and internal controls, there have been no significant changes in internal controls or in other factors that could significantly affect internal controls, including any corrective actions with regard to material weaknesses.

The Company and its Subsidiaries maintain “disclosure controls and procedures” (as such term is defined in Rule 13a-15(e) under the 1934 Act) which (i) are designed to ensure that material information relating to the Company and its Subsidiaries is made known to the Company’s principal executive officer and its principal financial officer by others within those entities, especially during the periods in which the periodic reports required under the 1934 Act are being prepared, (ii) have been evaluated by management of the Company for effectiveness as of the end of the Company’s most recent fiscal quarter, and (iii) are effective in all material respects to perform the functions

for which they were established.

(dd) 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 experimental protocols, procedures and controls pursuant to accepted professional scientific standards and all Authorizations and Applicable Laws, including, without limitation, the Federal Food, Drug and Cosmetic Act and the rules and regulations promulgated thereunder; the descriptions of the results of such studies, tests and trials contained in the Registration Statement, the General Disclosure Package and the Prospectus are, to the Company's knowledge, accurate and complete in all material respects and fairly present the data derived from such studies, tests and trials; except to the extent disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company is not aware of any studies, tests or trials, the results of which the Company believes reasonably call into question the study, test, or trial results described or referred to in the Registration Statement, the General Disclosure Package and the Prospectus when viewed in the context in which such results are described and the clinical state of development; and, except to the extent disclosed in the Registration Statement, the General Disclosure Package or the Prospectus, the Company has not received any 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, copies of which communications have been made available to you.

(ee) Payment of Taxes. All United States federal income tax returns of the Company and its Subsidiaries required by law to be filed have been filed and all taxes shown by such returns or otherwise assessed, which are due and payable, have been paid, except assessments against which appeals have been or will be promptly taken and as to which adequate reserves have been provided in conformity with GAAP. The United States federal income tax returns of the Company through the fiscal year ended September 30, 2017 have been settled and, to the knowledge of the Company, no assessment in connection therewith has been made against the Company. The Company and its Subsidiaries have filed all other tax returns that are required to have been filed by them pursuant to applicable foreign, state, local or other law except insofar as the failure to file such returns would not result in a Material Adverse Effect, and have paid all taxes due pursuant to such returns or pursuant to any assessment received by the Company and its Subsidiaries, except for such taxes, if any, as are being contested in good faith and as to which adequate reserves have been established by the Company, or insofar as the failure to pay such taxes would not result in a Material Adverse Effect. The charges, accruals and reserves on the books of the Company in respect of any income and corporation tax liability for any years not finally determined are, in conformity with GAAP, adequate to meet any assessments or re-assessments for additional income tax for any years not finally determined, except to the extent of any inadequacy that would not result in a Material Adverse Effect. There are no transfer taxes or other similar fees or charges under federal law or the laws of any state, or any political subdivision thereof, required to be paid in connection with the execution and delivery of this Agreement or the issuance by the Company or sale by the Company of the Securities.

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(ff) Insurance. The Company and its Subsidiaries carry or are entitled to the benefits of insurance, with financially sound and reputable insurers, in such amounts and covering such risks as is generally maintained by companies of established repute engaged in the same or similar business, and all such insurance is in full force and effect. The Company has no reason to believe that it or its Subsidiaries will not be able (A) to renew its existing insurance coverage as and when such policies expire or (B) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not reasonably be expected to have a Material Adverse Effect.

(gg) Investment Company Act. The Company is not required, and upon the issuance and sale of the Securities as herein contemplated and the application of the net proceeds therefrom as described in the Registration Statement, the General Disclosure Package and the Prospectus will not be required, to register as an "investment company" under the Investment Company Act of 1940, as amended.

(hh) Absence of Manipulation. Neither the Company nor any affiliate of the Company has taken, nor will the Company or any affiliate take, directly or indirectly, any action which is designed, or would be expected, to cause or result in, or which constitutes, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities or to result in a violation of Regulation M under the 1934 Act.

(ii) Foreign Corrupt Practices Act. None of the Company, its Subsidiaries or, to the knowledge of the Company, any director, officer, agent, employee, affiliate of the Company or its Subsidiaries is aware of or 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 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 law; 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 and, to the knowledge of the Company, its affiliates have conducted their businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith.

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(jj) Money Laundering Laws. The operations of the Company and its Subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all applicable jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any Governmental Entity (collectively, the "Money Laundering Laws"); and no action, suit or proceeding by or before any Governmental Entity involving the Company or its Subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(kk) OFAC. None of the Company, its Subsidiaries or, to the knowledge of the Company, any director, officer, agent, employee, affiliate or representative of the Company or its Subsidiaries is an individual or entity ("Person") currently the subject or target of any sanctions administered or enforced by the United States Government, including, without limitation, the U.S. Department of the Treasury's Office of Foreign Assets Control, 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 of Sanctions; and the Company will not directly or indirectly use the proceeds of the sale of the Securities, or lend, contribute or otherwise make available such proceeds to any Subsidiary, joint venture partners or other Person, to fund any activities of or business with any Person, or in any country or territory, that, at the time of such funding, is the subject of Sanctions or in any other manner that will result in a violation by any Person (including any Person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions. For the past five years, the Company and its Subsidiaries have not knowingly engaged in, are not now knowingly engaged in and will not engage 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 country or territory that is the subject or target of Sanctions.

(ll) Lending Relationship. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company (i) does not have any material lending or other relationship with any banking or lending affiliate of any Underwriter and (ii) does not intend to use any of the proceeds from the sale of the Securities to repay any outstanding debt owed to any affiliate of any Underwriter.

(mm) Statistical and Market-Related Data. Any statistical and market-related data included in the Registration Statement, the General Disclosure Package or the Prospectus are based on or derived from sources that the Company believes, after reasonable inquiry, to be reliable and accurate and, to the extent required, the Company has obtained the written consent to the use of such data from such sources.

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(nn) Maintenance of Rating. The Company has no debt securities or preferred stock that is rated by any “nationally recognized statistical rating organization” (as that term is defined by the Commission for purposes of Rule 436(g)(2) under the 1933 Act).

(oo) Privacy and Data Protection. The Company and its Subsidiaries have operated their business in a manner compliant in all material respects with all United States federal, state, local and non-United States privacy, data security and data protection laws and regulations applicable to the Company’s collection, use, transfer, protection, disposal, disclosure, handling, storage and analysis of personal data. The Company and its Subsidiaries are presently in compliance in all material respects with internal policies and procedures designed to ensure the integrity and security of the data collected, handled or stored in connection with its business; the Company and its Subsidiaries are presently in compliance in all material respects with internal policies and procedures designed to ensure compliance with the Health Care Laws that govern privacy and data security and take, and have taken reasonably appropriate steps designed to assure compliance with such policies and procedures. The Company and its Subsidiaries have taken reasonable steps to maintain the confidentiality of its personally identifiable information, protected health information, consumer information and other confidential information of the Company, its Subsidiaries and any third parties in its possession (“Sensitive Company Data”). The tangible or digital information technology systems (including computers, screens, servers, workstations, routers, hubs, switches, networks, data communications lines, technical data and hardware), software and telecommunications systems used or held for use by the Company and its Subsidiaries (the “Company IT Assets”) are in all material respects adequate and operational for, in accordance with their documentation and functional specifications, the business of the Company and its Subsidiaries as now operated and as currently proposed to be conducted as described in the Registration Statement, the General Disclosure Package and the Prospectus. The Company and its Subsidiaries have used reasonable efforts to establish, and have established, commercially reasonable disaster recovery and security plans, procedures and facilities for the business consistent with industry standards and practices in all material respects, including, without limitation, for the Company IT Assets and data held or used by or for the Company and its Subsidiaries. The Company and its Subsidiaries have not suffered or incurred any security breaches, compromises or incidents with respect to any Company IT Asset or, to the knowledge of the Company, any Sensitive Company Data, except where such breaches, compromises or incidents would not reasonably be expected to, singly or in the aggregate, result in a Material Adverse Effect; and there has been no unauthorized or illegal use of or access to any Company IT Asset or, to the knowledge of the Company, any Sensitive Company Data, by any unauthorized third party. The Company and its Subsidiaries have not been required to notify any individual of any information security breach, compromise or incident involving Sensitive Company Data.

(pp) No Broker Fees. Except as disclosed in the General Disclosure Package, there are no contracts, agreements or understandings between the Company and any person that would give rise to a valid claim against the Company or any Underwriter for a brokerage commission, finder’s fee or other like payment in connection with the offering of the Securities contemplated hereby.

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(qq) No Employment Violations. None of the following events has occurred or exists: (i) a failure to fulfill the obligations, if any, under the minimum funding standards of Section 302 of the United States Employee Retirement Income Security Act of 1974, as amended (“ERISA”), and the regulations and published interpretations thereunder with respect to a Plan (as defined below), determined without regard to any waiver of such obligations or extension of any amortization period; (ii) an audit or investigation by the Internal Revenue Service, the U.S. Department of Labor, the Pension Benefit Guaranty Corporation or any other federal or state governmental agency or any foreign regulatory agency with respect to the employment or compensation of employees by any of the Company or any of its Subsidiaries that would reasonably be expected to have a Material Adverse Effect; (iii) any breach of any contractual obligation, or any violation of law or applicable qualification standards, with respect to the employment or compensation of employees by the Company or any of its Subsidiaries that would reasonably be expected to have a Material Adverse Effect. None of the following events has occurred or is reasonably likely to occur: (i) a material increase in the aggregate amount of contributions required to be made to all Plans in the current fiscal year of the Company and its Subsidiaries compared to the amount of such contributions made in the most recently completed fiscal year of the Company and its Subsidiaries; (ii) a material increase in the “accumulated post-retirement benefit obligations” (within the meaning of Statement of Financial Accounting Standards 106) of the Company and its Subsidiaries compared to the amount of such obligations in the most recently completed fiscal year of the Company and its Subsidiaries; (iii) any event or condition giving rise to a liability under Title IV of ERISA that would reasonably be expected to have a Material Adverse Effect; or (iv) the filing of a claim by one or more employees or former employees of the Company or any of its Subsidiaries related to their employment that would reasonably be expected to have a Material Adverse Effect. For purposes of this paragraph, the term “Plan” means a plan (within the meaning of Section 3(3) of ERISA) subject to Title IV of ERISA with respect to which the Company or any of its Subsidiaries may have any liability.

(rr) Disclosure of Relationships. No relationship, direct or indirect, exists between or among the Company or any of its Subsidiaries on the one hand, and the directors, officers, customers, suppliers, shareholders or other affiliates of the Company on the other hand, which is required to be described in the Registration Statement, the Disclosure Package and the Prospectus and which is not so described.

(ss) No Violation of the Board of Governors of the Federal Reserve System. 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 General Disclosure Package and the Prospectus will violate Regulation T, U or X of the Board of Governors of the Federal Reserve System.

Any certificate signed by any officer of the Company or any of its Subsidiaries delivered to the Representatives or to counsel for the Underwriters shall be deemed a representation and warranty by the Company to each Underwriter as to the matters covered thereby.

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SECTION 2. Purchase and Sale.

(a) Initial Securities. On the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company agrees to sell to each Underwriter, severally and not jointly, and each Underwriter, severally and not jointly, agrees to purchase from the Company, at the price per share set forth in Schedule A, that number of Initial Securities set forth in Schedule A opposite the name of such Underwriter, plus any additional number of Initial Securities which such Underwriter may become obligated to purchase pursuant to the provisions of Section 11 hereof, subject, in each case, to such adjustments among the Underwriters as the Representatives in their sole discretion shall make to eliminate any sales or purchases of fractional shares.

(b) Option Securities. In addition, on the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the

Company hereby grants an option to the Underwriters, severally and not jointly, to purchase up to an additional 1,200,000 shares of Common Stock, at the price per share set forth in Schedule A, less an amount per share equal to any dividends or distributions declared by the Company and payable on the Initial Securities but not payable on the Option Securities. The option hereby granted may be exercised for 30 days after the date hereof and may be exercised in whole or in part at any time from time to time upon notice by the Representatives to the Company setting forth the number of Option Securities as to which the several Underwriters are then exercising the option and the time and date of payment and delivery for such Option Securities.

SECTION 3. Delivery and Payment

Delivery of and payment for the Initial Securities and the Option Securities (if the option provided for in Section 2(b) hereof shall have been exercised on or before the second Business Day immediately preceding the Closing Date) shall be made at 9:00 AM, New York City time, on April 26, 2021, or at such time on such later date not more than two Business Days after the foregoing date as the Representatives shall designate, which date and time may be postponed by agreement between the Representatives and the Company or as provided in Section 11 hereof (such date and time of delivery and payment for the Securities being herein called the "Closing Date"). Delivery of the Securities shall be made to the Representatives for the respective accounts of the several Underwriters against payment by the several Underwriters through the Representatives of the purchase price thereof to or upon the order of the Company by wire transfer payable in same-day funds to an account specified by the Company. Delivery of the Initial Securities and the Option Securities shall be made through the facilities of The Depository Trust Company unless the Representatives shall otherwise instruct.

If the option provided for in Section 2(b) hereof is exercised after the second Business Day immediately preceding the Closing Date, the Company will deliver the Option Securities (at the expense of the Company) to the Representatives, at 200 Vesey Street, New York, New York, on the date specified by the Representatives (which shall be within three Business Days after exercise of said option) for the respective accounts of the several Underwriters, against payment by the several Underwriters through the Representatives of the purchase price thereof to or upon the order of the Company by wire transfer payable in same-day funds to an account specified by the Company. If settlement for the Option Securities occurs after the Closing Date, the Company will deliver to the Representatives on the settlement date for the Option Securities, and the obligation of the Underwriters to purchase the Option Securities shall be conditioned upon receipt of, supplemental opinions, certificates and letters confirming as of such date the opinions, certificates and letters delivered on the Closing Date pursuant to Section 6 hereof.

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SECTION 4. Offering by Underwriters. It is understood that the several Underwriters propose to offer the Securities for sale to the public as set forth in the Prospectus.

SECTION 5. Agreements. The Company covenants with each Underwriter as follows:

(a) Compliance with Securities Regulations and Commission Requests. Prior to the termination of the offering of the Securities, the Company will not file any amendment of the Registration Statement or supplement to the Prospectus or any Rule 462(b) Registration Statement unless the Company has furnished you a copy for your review a reasonable period of time prior to the proposed time of filing and will not file any such proposed amendment or supplement to which you reasonably object. The Company will cause the Prospectus, properly completed, and any supplement thereto to be filed in a form approved by the Representatives with the SEC pursuant to the applicable paragraph of Rule 424(b) within the time period prescribed and will provide evidence satisfactory to the Representatives of such timely filing. The Company, subject to Section 5(b), will comply with the requirements of Rule 430B, and will notify the Representatives as soon as practicable, and confirm the notice in writing, (i) when the Prospectus, any supplement thereto, and any Written Testing-the-Waters Communications shall have been filed (if required) with the SEC pursuant to Rule 424(b) or when any Rule 462(b) Registration Statement shall have been filed with the SEC, (ii) when any post-effective amendment to the Registration Statement shall become effective or any amendment or supplement to the Prospectus shall have been filed, (iii) of the receipt of any comments from the Commission, (iv) 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 for additional information, (v) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment or of any order preventing or suspending the use of any Written Testing-the-Waters Communication, preliminary prospectus or the Prospectus, or of the suspension of the qualification of the Securities for offering or sale in any jurisdiction, or of the initiation or threatening of any proceedings for any of such purposes or of any examination pursuant to Section 8(d) or 8(e) of the 1933 Act concerning the Registration Statement and (vi) if the Company becomes the subject of a proceeding under Section 8A of the 1933 Act in connection with the offering of the Securities. The Company will effect all filings required under Rule 424(b), in the manner and within the time period required by Rule 424(b) (without reliance on Rule 424(b)(8)), and will take such steps as it deems necessary to ascertain promptly whether the form of prospectus transmitted for filing under Rule 424(b) was received for filing by the Commission and, in the event that it was not, it will promptly file such prospectus. The Company will make every reasonable effort to prevent the issuance of any stop order, prevention or suspension and, if any such order is issued, to obtain the lifting thereof at the earliest possible moment, including, if necessary, by filing an amendment to the Registration Statement or a new registration statement and using its best efforts to have such amendment or new registration statement declared effective as soon as practicable.

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(b) Continued Compliance with Securities Laws. The Company will comply with the 1933 Act, the 1933 Act Regulations, the 1934 Act and the 1934 Act Regulations so as to permit the completion of the distribution of the Securities as contemplated in this Agreement and in the Registration Statement, the General Disclosure Package and the Prospectus. If at any time prior to the filing of the Prospectus, or at any time when a prospectus relating to the Securities is (or, but for the exception afforded by Rule 172 of the 1933 Act Regulations ("Rule 172"), would be) required by the 1933 Act to be delivered in connection with sales of the Securities, any event shall occur or condition shall exist as a result of which it is necessary, in the opinion of counsel for the Underwriters or for the Company, to (i) amend the Registration Statement in order that the Registration Statement 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 not misleading, (ii) amend or supplement the General Disclosure Package or the Prospectus in order that the General Disclosure Package or the Prospectus, as the case may be, will not include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein not misleading in the light of the circumstances existing at the time it is delivered to a purchaser or (iii) amend the Registration Statement or amend or supplement the General Disclosure Package or the Prospectus, as the case may be, in order to comply with the requirements of the 1933 Act or the 1933 Act Regulations, the Company will promptly (A) give the Representatives notice of such event, (B) prepare any amendment or supplement as may be necessary to correct such statement or omission or to make the Registration Statement, the General Disclosure Package or the Prospectus comply with such requirements and, a reasonable amount of time prior to any proposed filing or use, furnish the Representatives with copies of any such amendment or supplement and (C) file with the Commission any such amendment or supplement; provided that the Company shall not file or use any such amendment or supplement to which the Representatives or counsel for the Underwriters shall reasonably object. The Company will furnish to the Underwriters such number of copies of such amendment or supplement as the Underwriters may reasonably request. The Company has given the Representatives notice of any filings made pursuant to the 1934 Act or the 1934 Act Regulations within 48 hours prior to the Applicable Time; the Company will give the Representatives notice of its intention to make any such filing from the Applicable Time to the Closing Date and will furnish the Representatives with copies of any such documents a reasonable amount of time prior to such proposed filing, as the case may be, and will not file or use any such document to which the Representatives or counsel for the Underwriters shall reasonably object.

(c) Delivery of Registration Statements. The Company has furnished or will deliver to the Representatives and counsel for the Underwriters, without charge, signed copies of the Registration Statement as originally filed and each amendment thereto (including exhibits filed therewith or incorporated by reference therein and documents incorporated or deemed incorporated by reference therein) and signed copies of all consents and certificates of experts, and, upon request, will also deliver to the Representatives, without charge, a conformed copy of the Registration Statement as originally filed and each amendment thereto (without exhibits) for each of the Underwriters. The copies of the Registration Statement and each amendment thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with

(d) Delivery of Prospectuses. The Company has delivered to each Underwriter, without charge, as many copies of each preliminary prospectus, Issuer Free Writing Prospectus and any supplement thereto as such Underwriter reasonably requested, and the Company hereby consents to the use of such copies for purposes permitted by the 1933 Act. The Company will furnish to each Underwriter, without charge, during the period when a prospectus relating to the Securities is (or, but for the exception afforded by Rule 172, would be) required to be delivered under the 1933 Act, such number of copies of the Prospectus (as amended or supplemented) as such Underwriter may reasonably request. The Prospectus and any amendments or supplements thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(e) Blue Sky Qualifications. The Company will arrange, if necessary, to qualify the Securities for offering and sale under the applicable securities laws of such states and other jurisdictions (domestic or foreign) as the Representatives may designate and to maintain such qualifications in effect so long as required to complete the distribution of the Securities; provided, however, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise so subject.

(f) Rule 158. The Company will timely file such reports pursuant to the 1934 Act as are necessary in order to make generally available to its securityholders and to the Representatives as soon as practicable an earning statement for the purposes of, and to provide to the Underwriters the benefits contemplated by, the last paragraph of Section 11(a) of the 1933 Act.

(g) Use of Proceeds. The Company will use the net proceeds received by it from the sale of the Securities in all material respects in the manner specified in the Registration Statement, the General Disclosure Package and the Prospectus under the heading "Use of Proceeds."

(h) Listing. The Company will use its best efforts to effect and maintain the listing of the Common Stock (including the Securities) on The Nasdaq Capital Market.

(i) Restriction on Sale of Securities. The Company will not, without the prior written consent of RBC Capital Markets, LLC, offer, sell, contract to sell, pledge, or otherwise dispose of, (or enter into any transaction which is designed to, or might reasonably be expected to, result in the disposition (whether by actual disposition or effective economic disposition due to cash settlement or otherwise) by the Company or any affiliate of the Company or any person in privity with the Company or any affiliate of the Company) directly or indirectly, including the filing (or participation in the filing) of a registration statement with the SEC in respect of, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the 1934 Act, any other shares of Common Stock or any securities convertible into, or exercisable, or exchangeable for, shares of Common Stock or shares of any class of capital stock of the Company or any securities convertible into, or exercisable, or exchangeable for, any of the foregoing; or publicly announce an intention to effect any such transaction, for a period of 90 days after the date of this Agreement; provided, however, that the foregoing restrictions shall not apply to (A) the Securities to be sold hereunder; (B) any shares of Common Stock issued by the Company upon the exercise of an option or warrant or the conversion of a convertible security outstanding as of the Applicable Time; (C) any shares of Common Stock issued or options to purchase Common Stock granted pursuant to existing employee benefit plans of the Company; (D) any shares of Common Stock issued pursuant to any existing non-employee director stock plan or dividend reinvestment plan; (E) the filing by the Company of any registration statement on Form S-8 or a successor form thereto; (F) shares of Common Stock issuable as consideration with respect to the Company's acquisition of assets of Vera Therapeutics, Inc. ("Vera") pursuant to that certain Asset Purchase Agreement, dated as of January 27, 2021 (as amended, the "Asset Purchase Agreement"), by and among the Company, Vera and NeuBase Corporation, the Company's wholly-owned Subsidiary (as may be amended or restated from time to time), as well as the filing of a resale registration statement that the Company is obligated to file pursuant to the terms of the Asset Purchase Agreement to register for resale the Common Stock issuable to Vera; or (G) the filing of an "at the market offering" (as defined in Rule 415 under the 1933 Act) prospectus supplement supplementing the base prospectus in the Registration Statement, provided that (i) such filing may not occur during the first 60 days of the restrictive period contemplated by this Section 5(i) and (ii) no sales of Common Stock shall occur pursuant to such prospectus supplement during the 90 day restrictive period contemplated by this Section 5(i).

(j) Reporting Requirements. The Company, during the period when a Prospectus relating to the Securities is (or, but for the exception afforded by Rule 172, would be) required to be delivered under the 1933 Act, will file all documents required to be filed with the Commission pursuant to the 1934 Act within the time periods required by the 1934 Act and 1934 Act Regulations.

(k) Issuer Free Writing Prospectuses. The Company agrees that, unless it obtains the prior written consent of the Representatives, it will not make any offer relating to the Securities that would constitute an Issuer Free Writing Prospectus or that would otherwise constitute a "free writing prospectus," or a portion thereof, required to be filed by the Company with the Commission or retained by the Company under Rule 433; provided that the Representatives will be deemed to have consented to the Issuer Free Writing Prospectuses listed on Schedule B-2 hereto and any "road show that is a written communication" within the meaning of Rule 433(d)(8)(i) that has been reviewed by the Representatives. The Company represents that it has treated or agrees that it will treat each such free writing prospectus consented to, or deemed consented to, by the Representatives as an "issuer free writing prospectus," as defined in Rule 433, and that it has complied and will comply with the applicable requirements of Rule 433 with respect thereto, including timely filing with the Commission where required, legending and record keeping. If at any time following issuance of an Issuer Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer Free Writing Prospectus conflicted or would conflict with the information contained in the Registration Statement, any preliminary prospectus or the Prospectus or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representatives and will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

(l) Testing-the-Waters Materials. If at any time following the distribution of any Written Testing-the-Waters Communication there occurred or occurs an event or development as a result of which such Written Testing-the-Waters Communication included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representatives and will promptly amend or supplement, at its own expense, such Written Testing-the-Waters Communication to eliminate or correct such untrue statement or omission.

(m) Stabilization. The Company will not take, directly or indirectly, any action designed to or that would constitute or that might reasonably be expected to cause or result in, under the 1934 Act or otherwise, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities.

(n) Expenses. The Company will pay or cause to be paid all expenses incident to the performance of its obligations under this Agreement, including (i) the preparation, printing and filing of the Registration Statement (including financial statements and exhibits) as originally filed and each amendment thereto, (ii) the preparation, printing and delivery (including postage, air freight charges and charges for counting and packaging) to the Underwriters of copies of each preliminary prospectus, each Issuer Free Writing Prospectus and the Prospectus and any amendments or supplements thereto and any costs associated with electronic delivery of any of the foregoing by the Underwriters to investors, (iii) the preparation, printing, authentication, issuance and delivery of the certificates or security entitlements for the Securities to the Underwriters, including any stock or other transfer taxes and any stamp or other duties payable upon the sale, issuance or delivery of the Securities to the Underwriters, (iv) the printing (or reproduction) and delivery of this Agreement and all other agreements or documents printed (or reproduced) and delivered in connection with the offering of the Securities; (v) the fees and disbursements of the Company's counsel (including local and special counsel), accountants and other advisors, (vi) the qualification of the Securities under securities laws in accordance with the provisions of Section 5(e) hereof, including filing fees in connection therewith, (vii) the fees and expenses of any transfer agent or registrar for the Securities; (viii) the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in connection with the marketing of the Securities, including without limitation, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations, travel and lodging expenses of the representatives and officers of the Company and any such consultants, and the cost of aircraft and other transportation chartered in connection with the road show; (ix) the printing and delivery of a blue sky memorandum, any registration or qualification of the Securities for offer and sale under the securities or blue sky laws of the several states, and any filings required to be made with FINRA (including filing fees and the reasonable and documented fees and expenses of counsel for the Underwriter relating to such filings, memorandum, registration and qualification in an aggregate amount up to \$25,000); (x) the fees and expenses incurred in connection with the listing of the Securities on The Nasdaq Capital Market; and (xi) the costs and expenses (including, without limitation, any damages or other amounts payable in connection with legal or contractual liability) associated with the reforming of any contracts for sale of the Securities made by the Underwriters caused by a breach of the representation contained in the third sentence of Section 1(b). Except as provided in this Section 5(n), and Sections 7 and 8 hereof, the Underwriters will pay all of their own costs and expenses, including the fees of their counsel and stock transfer taxes on resale of any of the Securities by the Underwriters.

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(o) Use of Proceeds. The Company will use the net proceeds received by the Company from the sale of the Securities in the manner specified in the Preliminary Prospectus and Prospectus under the caption "Use of Proceeds."

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

SECTION 6. Conditions of Underwriters' Obligations. The obligations of the several Underwriters hereunder are subject to the accuracy of the representations and warranties of the Company contained herein or in certificates of any officer of the Company or any of its Subsidiaries delivered pursuant to the provisions hereof, to the performance by the Company of its covenants and other obligations hereunder in all material respects, and to the following further conditions:

(a) Effectiveness of Registration Statement. The Registration Statement has become effective and, at the Closing Date, no stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued under the 1933 Act, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued and no proceedings for any of those purposes have been instituted or are pending or, to the Company's knowledge, contemplated; and the Company has complied with each request (if any) from the Commission for additional information to the reasonable satisfaction of counsel to the Underwriters.

(b) Opinion of Counsel for Company. At the Closing Date, the Representatives shall have received the opinion and the negative assurance letter, each dated the Closing Date, of Paul Hastings LLP, counsel for the Company, together with the opinion of Wilson Sonsini Goodrich & Rosati, special counsel for the Company with respect to intellectual property matters, each in form and substance reasonably satisfactory to counsel for the Underwriters.

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(c) Opinion of Counsel for Underwriters. At the Closing Date, the Representatives shall have received the opinion, and negative assurance letter, each dated the Closing Date, of Wilmer Cutler Pickering Hale and Dorr LLP, counsel for the Underwriters, together with signed or reproduced copies of such letters for each of the other Underwriters in form and substance satisfactory to the Representatives. In giving such opinion such counsel may rely, as to all matters governed by the laws of jurisdictions other than the law of the State of New York, the General Corporation Law of the State of Delaware and the federal securities laws of the United States, upon the opinions of counsel satisfactory to the Representatives. Such counsel may also state that, insofar as such opinion involves factual matters, they have relied, to the extent they deem proper, upon certificates of officers and other representatives of the Company and its Subsidiaries and certificates of public officials.

(d) Officers' Certificate. At the Closing Date, there shall not have been, since the date hereof or since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, any Material Adverse Effect, and the Representatives shall have received a certificate of the principal executive officer of the Company and the principal financial officer of the Company, dated the Closing Date, to the effect that (i) there has been no such Material Adverse Effect, (ii) the representations and warranties of the Company in this Agreement are true and correct with the same force and effect as though expressly made at and as of the Closing Date, (iii) the Company, in all material respects, has complied with all agreements and satisfied all conditions on its part to be performed or satisfied at or prior to the Closing Date, and (iv) the Registration Statement has become effective and no stop order suspending the effectiveness of the Registration Statement under the 1933 Act has been issued, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued and no proceedings for any of those purposes have been instituted or are pending or, to their knowledge, contemplated.

(e) Accountants' Comfort Letters. At the time of the execution of this Agreement, the Representatives shall have received from Marcum LLP a letter, dated such date, in form and substance reasonably satisfactory to the Representatives, together with signed or reproduced copies of such letter for each of the other Underwriters containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement, the General Disclosure Package and the Prospectus.

(f) Bring-down Comfort Letters. At the Closing Date, the Representatives shall have received from Marcum LLP a letter, dated as of the Closing Date, to the effect that they reaffirm the statements made in the letter furnished pursuant to subsection (e) of this Section, except that the specified date referred to shall be a date not more than three business days prior to the Closing Date.

(g) Approval of Listing. At the Closing Date, the Securities shall have been approved for listing on The Nasdaq Capital Market, subject only to official notice of issuance.

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(h) No Objection. FINRA has confirmed that it has not raised any objection with respect to the fairness and reasonableness of the underwriting terms and arrangements relating to the offering of the Securities.

(i) Lock-up Agreements. At the date of this Agreement, the Representatives shall have received an agreement substantially in the form of Exhibit A hereto signed by all of the Company's directors and officers, in each case as identified on Schedule C hereto.

(j) No Rated Securities. Neither the Company nor its Subsidiaries have any debt securities or preferred stock that are rated by any "nationally recognized statistical rating agency" (as defined in Section 3(a)(62) of the 1934 Act).

(k) Conditions to Purchase of Option Securities. In the event that the Underwriters exercise their option provided in Section 2(b) hereof to purchase all or any portion of the Option Securities, the representations and warranties of the Company contained herein and the statements in any certificates furnished by the Company and any of its Subsidiaries hereunder shall be true and correct as of the time and date of payment and delivery for any such Option Securities (each, a "Date of Delivery") and, at the relevant Date of Delivery, the Representatives shall have received:

- i. Officers' Certificate. A certificate, dated such Date of Delivery, of the principal executive officer of the Company and of the principal financial officer of the Company confirming that the certificate delivered at the Closing Date pursuant to Section 6(d) hereof remains true and correct as of such Date of Delivery.
- ii. Opinion of Counsel for Company. If requested by the Representatives, the opinion, and negative assurance letter, of Paul Hastings LLP, counsel for the Company, together with the opinion of Wilson Sonsini Goodrich & Rosati, special counsel for the Company with respect to intellectual property matters, each in form and substance reasonably satisfactory to counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinions and negative assurance letter required by Section 6(b) hereof.
- iii. Opinion of Counsel for Underwriters. If requested by the Representatives, the opinion, and negative assurance letter, of Wilmer Cutler Pickering Hale and Dorr LLP, counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinion and negative assurance letter required by Section 6(c) hereof.
- iv. Bring-down Comfort Letter. If requested by the Representatives, a letter from Marcum LLP, in form and substance reasonably satisfactory to the Representatives and dated such Date of Delivery, substantially in the same form and substance as the letter furnished to the Representatives pursuant to subsection (f) of this Section, except that the "specified date" in the letter furnished pursuant to this paragraph shall be a date not more than three business days prior to such Date of Delivery.

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(l) Additional Documents. At the Closing Date and at each Date of Delivery (if any), counsel for the Underwriters shall have been furnished with such other documents and opinions as they may reasonably require for the purpose of enabling them to pass upon the issuance and sale of the Securities as herein contemplated, or in order to evidence the accuracy of any of the representations or warranties, or the fulfillment of any of the conditions, herein contained; and all proceedings taken by the Company in connection with the issuance and sale of the Securities as herein contemplated shall be reasonably satisfactory in form and substance to the Representatives and counsel for the Underwriters.

(m) Termination of Agreement. If any condition specified in this Section shall not have been fulfilled when and as required to be fulfilled, this Agreement, or, in the case of any condition to the purchase of Option Securities on a Date of Delivery which is after the Closing Date, the obligations of the several Underwriters to purchase the relevant Option Securities, may be terminated by the Representatives by notice to the Company at any time at or prior to Closing Date or such Date of Delivery, as the case may be, and such termination shall be without liability of any party to any other party except that Sections 7 and 8 shall survive any such termination and remain in full force and effect.

SECTION 7. Reimbursement of Underwriters' Expenses. If the sale of the Securities provided for herein is not consummated because any condition to the obligations of the Underwriters set forth in Section 6 hereof is not satisfied or because of any refusal, inability or failure on the part of the Company to perform any agreement herein or comply with any provision hereof other than by reason of a default by any of the Underwriters, or if this Agreement is terminated pursuant to Section 9, the Company will reimburse the Underwriters severally through RBC Capital Markets, LLC on demand for all reasonable, actual and documented expenses (including reasonable, actual and documented fees and disbursements of counsel) that shall have been incurred by them in connection with the proposed purchase and sale of the Securities; provided, however, that if this Agreement is terminated pursuant to Section 9, the Company shall have no obligation to reimburse any out-of-pocket expenses incurred solely by the defaulting Underwriter.

SECTION 8. Indemnification and Contribution

(a) The Company agrees to indemnify and hold harmless each Underwriter, the directors, officers, employees and agents of each Underwriter and each person who controls any Underwriter within the meaning of either the 1933 Act or the 1934 Act against any and all losses, claims, damages or liabilities, joint or several, to which they or any of them may become subject under the 1933 Act, the 1934 Act or other federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement as originally filed or in any amendment thereof, or in any Preliminary Prospectus, the Prospectus, any Issuer Free Writing Prospectus, any roadshow, or any Written Testing-the-Waters Communication or in any amendment thereof or supplement thereto or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and agrees to reimburse each such indemnified party, as incurred, for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon any such untrue statement or alleged untrue statement or omission or alleged omission made therein in reliance upon and in conformity with written information furnished to the Company by or on behalf of any Underwriter through the Representatives specifically for inclusion therein. This indemnity agreement will be in addition to any liability which the Company may otherwise have.

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(b) Each Underwriter severally and not jointly agrees to indemnify and hold harmless the Company, each of its directors, each of its officers who signs the Registration Statement, and each person who controls the Company within the meaning of either the 1933 Act or the 1934 Act, to the same extent as the foregoing indemnity from the Company to each Underwriter, but only with reference to written information relating to such Underwriter furnished to the Company by or on behalf of such Underwriter through the Representatives specifically for inclusion in the documents referred to in the foregoing indemnity. This indemnity agreement will be in addition to any liability which any Underwriter may otherwise have. The Company acknowledges that the following statements set forth in the Preliminary Prospectus and the Prospectus under the heading "Underwriting" constitute the only information furnished in writing by or on behalf of the several Underwriters for inclusion in the Preliminary Prospectus,

the Prospectus, any Issuer Free Writing Prospectus, or any Written Testing-the-Waters Communication: (i) the first paragraph under the heading “Underwriting – Discounts and Commissions” and (ii) the paragraphs under the heading “Underwriting – Price Stabilization, Short Positions and Penalty Bids.”

(c) Promptly after receipt by an indemnified party under this Section 8 of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against the indemnifying party under this Section 8, notify the indemnifying party in writing of the commencement thereof; but the failure so to notify the indemnifying party (i) will not relieve it from liability under paragraph (a) or (b) above unless and to the extent it did not otherwise learn of such action and such failure results in the forfeiture by the indemnifying party of substantial rights and defenses and (ii) will not, in any event, relieve the indemnifying party from any obligations to any indemnified party other than the indemnification obligation provided in paragraph (a) or (b) above. The indemnifying party shall be entitled to appoint counsel of the indemnifying party’s choice at the indemnifying party’s expense to represent the indemnified party in any action for which indemnification is sought (in which case the indemnifying party shall not thereafter be responsible for the fees and expenses of any separate counsel retained by the indemnified party or parties except as set forth below); provided, however, that such counsel shall be satisfactory to the indemnified party. Notwithstanding the indemnifying party’s election to appoint counsel to represent the indemnified party in an action, the indemnified party shall have the right to employ separate counsel (including local counsel), and the indemnifying party shall bear the reasonable fees, costs and expenses of such separate counsel if (i) the use of counsel chosen by the indemnifying party to represent the indemnified party would present such counsel with a conflict of interest, (ii) the actual or potential defendants in, or targets of, any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded that there may be legal defenses available to it and/or other indemnified parties which are different from or additional to those available to the indemnifying party, (iii) the indemnifying party shall not have employed counsel satisfactory to the indemnified party to represent the indemnified party within a reasonable time after notice of the institution of such action or (iv) the indemnifying party shall authorize the indemnified party to employ separate counsel at the expense of the indemnifying party. It is understood and agreed that the indemnifying party shall not, in connection with any proceeding or related proceeding 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 parties, and that all such fees and expenses shall be reimbursed as they are incurred. Any such separate firm for any Underwriter, its affiliates, directors and officers and any control persons of such Underwriter shall be designated in writing by RBC Capital Markets, LLC and any such separate firm for the Company, its directors and officers and any control persons of the Company shall be designated in writing by the Company. The indemnifying party shall not be liable for any settlement of any proceeding effected without its written consent (which consent shall not be unreasonably withheld or delayed), but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify each indemnified party from and against any loss or liability by reason of such settlement or judgment. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested that an indemnifying party reimburse the indemnified party for fees and expenses of counsel as contemplated by this paragraph, the indemnifying party shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than 30 days after receipt by the indemnifying party of such request and (ii) the indemnifying party shall not have reimbursed the indemnified party in accordance with such request prior to the date of such settlement. No indemnifying party shall, without the written consent of the indemnified party, effect any settlement of any pending or threatened proceeding in respect of which any indemnified party is or could have been a party and indemnification could have been sought hereunder by such indemnified party, unless such settlement (x) includes an unconditional release of such indemnified party, in form and substance reasonably satisfactory to such indemnified party, 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 party.

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(d) In the event that the indemnity provided in paragraph (a), (b) or (c) of this Section 8 is unavailable to or insufficient to hold harmless an indemnified party for any reason, the Company and the Underwriters severally agree to contribute to the aggregate losses, claims, damages and liabilities (including legal or other expenses reasonably incurred in connection with investigating or defending the same) (collectively “Losses”) to which the Company and one or more of the Underwriters may be subject in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and by the Underwriters on the other from the offering of the Securities; provided, however, that in no case shall any Underwriter (except as may be provided in any agreement among underwriters relating to the offering of the Securities) be responsible for any amount in excess of the underwriting discount or commission applicable to the Securities purchased by such Underwriter hereunder. If the allocation provided by the immediately preceding sentence is unavailable for any reason, the Company and the Underwriters severally shall contribute in such proportion as is appropriate to reflect not only such relative benefits but also the relative fault of the Company on the one hand and of the Underwriters on the other in connection with the statements or omissions which resulted in such Losses as well as any other relevant equitable considerations. Benefits received by the Company shall be deemed to be equal to the total net proceeds from the offering (before deducting expenses) received by it, and benefits received by the Underwriters shall be deemed to be equal to the total underwriting discounts and commissions, in each case as set forth on the cover page of the Prospectus. Relative fault shall be determined by reference to, among other things, whether any untrue or any alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information provided by the Company on the one hand or by the Underwriters on the other, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contribution were determined by pro rata allocation or any other method of allocation which does not take account of the equitable considerations referred to above. Notwithstanding the provisions of this paragraph (d), no person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 8, each person who controls an Underwriter within the meaning of either the 1933 Act or the 1934 Act and each director, officer, employee and agent of an Underwriter shall have the same rights to contribution as such Underwriter, and each person who controls the Company within the meaning of either the 1933 Act or the 1934 Act, each officer of the Company who shall have signed the Registration Statement and each director of the Company shall have the same rights to contribution as the Company, subject in each case to the applicable terms and conditions of this paragraph (d).

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SECTION 9. Default by an Underwriter. If any one or more Underwriters shall fail to purchase and pay for any of the Securities agreed to be purchased by such Underwriter or Underwriters hereunder and such failure to purchase shall constitute a default in the performance of its or their obligations under this Agreement, the remaining Underwriters shall be obligated severally to take up and pay for (in the respective proportions which the amount of Securities set forth opposite their names in Schedule A hereto bears to the aggregate amount of Securities set forth opposite the names of all the remaining Underwriters) the Securities which the defaulting Underwriter or Underwriters agreed but failed to purchase; provided, however, that in the event that the aggregate amount of Securities which the defaulting Underwriter or Underwriters agreed but failed to purchase shall exceed 10% of the aggregate amount of Securities set forth in Schedule A hereto, the remaining Underwriters shall have the right to purchase all, but shall not be under any obligation to purchase any, of the Securities, and if such nondefaulting Underwriters do not purchase all the Securities, this Agreement will terminate without liability to any nondefaulting Underwriter or the Company. In the event of a default by any Underwriter as set forth in this Section 9, the Closing Date shall be postponed for such period, not exceeding five Business Days, as the Representatives shall determine in order that the required changes in the Registration Statement and the Prospectus or in any other documents or arrangements may be effected. Nothing contained in this Agreement shall relieve any defaulting Underwriter of its liability, if any, to the Company and any nondefaulting Underwriter for damages occasioned by its default hereunder.

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SECTION 10. Termination of Agreement. The Representatives may terminate this Agreement, by notice to the Company, at any time at or prior to the Closing Date (i) if there has been, in the judgment of the Representatives, since the time of execution of this Agreement or since the respective dates as of which information is given in the

Registration Statement, the General Disclosure Package or the Prospectus, any material adverse change in the condition, financial or otherwise, or in the earnings or business affairs of the Company and its Subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business, or (ii) if there has occurred any material adverse change in the financial markets in the United States or the international financial markets, any outbreak of hostilities or escalation thereof or other calamity or crisis or any change or development involving a prospective change in U.S. or international political, financial or economic conditions, in each case the effect of which is such as to make it, in the judgment of the Representatives, impracticable or inadvisable to proceed with the completion of the offering or to enforce contracts for the sale of the Securities, or (iii) if trading in any securities of the Company has been suspended or materially limited by the Commission or The Nasdaq Capital Market, or (iv) if trading generally on The Nasdaq Stock Market has been suspended or materially limited, or minimum or maximum prices for trading have been fixed, or maximum ranges for prices have been required, by any of said exchanges or by order of the Commission, FINRA or any other governmental authority, or (v) a material disruption has occurred in commercial banking or securities settlement or clearance services in the United States or with respect to Clearstream or Euroclear systems in Europe, or (vi) if a banking moratorium has been declared by either Federal or New York authorities.

SECTION 11. Default by One or More of the Underwriters. If one or more of the Underwriters shall fail at the Closing Date or a Date of Delivery to purchase the Securities which it or they are obligated to purchase under this Agreement (the "Defaulted Securities"), the Representatives shall have the right, within 24 hours thereafter, to make arrangements for one or more of the non-defaulting Underwriters, or any other underwriters, to purchase all, but not less than all, of the Defaulted Securities in such amounts as may be agreed upon and upon the terms herein set forth; if, however, the Representatives shall not have completed such arrangements within such 24-hour period, then:

(i) if the number of Defaulted Securities does not exceed 10% of the number of Securities to be purchased on such date, each of the non-defaulting Underwriters shall be obligated, severally and not jointly, to purchase the full amount thereof in the proportions that their respective underwriting obligations hereunder bear to the underwriting obligations of all non-defaulting Underwriters, or

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(ii) if the number of Defaulted Securities exceeds 10% of the number of Securities to be purchased on such date, this Agreement or, with respect to any Date of Delivery which occurs after the Closing Date, the non-defaulting Underwriters shall have the right to purchase all, but shall not be under any obligation to purchase any, of the Securities, and if such nondefaulting Underwriters do not purchase all the Securities, this Agreement shall terminate without liability on the part of any non-defaulting Underwriter.

No action taken pursuant to this Section shall relieve any defaulting Underwriter from liability in respect of its default.

In the event of any such default which does not result in a termination of this Agreement or, in the case of a Date of Delivery which is after the Closing Date, which does not result in a termination of the obligation of the Underwriters to purchase and the Company to sell the relevant Option Securities, as the case may be, either the (i) Representatives or (ii) the Company shall have the right to postpone Closing Date or the relevant Date of Delivery, as the case may be, for a period not exceeding five days in order to effect any required changes in the Registration Statement, the General Disclosure Package or the Prospectus or in any other documents or arrangements. As used herein, the term "Underwriter" includes any person substituted for an Underwriter under this Section 11.

SECTION 12. Notices. All notices and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed or transmitted by any standard form of telecommunication. Notices to the Underwriters shall be directed to RBC Capital Markets, LLC, 200 Vesey Street, 8th Floor, New York, New York 10281-8098, Attention: Michael Goldberg, Syndicate Director, Fax: (212) 428-6260, with copy to Wilmer Cutler Pickering Hale and Dorr, LLP, 7 World Trade Center, 250 Greenwich Street, New York, New York 10007, Attention: Glenn R. Pollner. Notices to the Company shall be directed to Neubase Therapeutics, Inc., 350 Technology Drive, Pittsburgh, Pennsylvania 15219, Attn: Sam Backenroth, Chief Financial Officer, with a copy to Paul Hastings LLP, 1117 S. California Avenue, Palo Alto, CA 94304, Attn: Jeffrey Hartlin.

SECTION 13. No Advisory or Fiduciary Relationship. The Company acknowledges and agrees that (a) the purchase and sale of the Securities pursuant to this Agreement, including the determination of the initial public offering price of the Securities and any related discounts and commissions, is an arm's-length commercial transaction between the Company, on the one hand, and the several Underwriters, on the other hand, (b) in connection with the offering of the Securities and the process leading thereto, each Underwriter is and has been acting solely as a principal and is not the agent or fiduciary of the Company, any of its Subsidiaries or their respective stockholders, creditors, employees or any other party, (c) no Underwriter has assumed or will assume an advisory or fiduciary responsibility in favor of the Company with respect to the offering of the Securities or the process leading thereto (irrespective of whether such Underwriter has advised or is currently advising the Company or any of its Subsidiaries on other matters) and no Underwriter has any obligation to the Company with respect to the offering of the Securities except the obligations expressly set forth in this Agreement, (d) the Underwriters and their respective affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Company, (e) the Underwriters have not provided any legal, accounting, regulatory or tax advice with respect to the offering of the Securities and the Company has consulted its own respective legal, accounting, regulatory and tax advisors to the extent it deemed appropriate and (f) the Company's engagement of the Underwriters in connection with the offering and the process leading up to the offering is as independent contractors and not in any other capacity.

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SECTION 14. Parties. This Agreement shall each inure to the benefit of and be binding upon the Underwriters and the Company and their respective successors. Nothing expressed or mentioned in this Agreement is intended or shall be construed to give any person, firm or corporation, other than the Underwriters and the Company and their respective successors and the controlling persons and officers and directors referred to in Section 8 and their heirs and legal representatives, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision herein contained. This Agreement and all conditions and provisions hereof are intended to be for the sole and exclusive benefit of the Underwriters and the Company and their respective successors, and said controlling persons and officers and directors and their heirs and legal representatives, and for the benefit of no other person, firm or corporation. No purchaser of Securities from any Underwriter shall be deemed to be a successor by reason merely of such purchase.

SECTION 15. Waiver of Trial by Jury. The Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates) and each of the Underwriters hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

SECTION 16. 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 WITHOUT REGARD TO ITS CHOICE OF LAW PROVISIONS.

SECTION 17. Consent to Jurisdiction; Waiver of Immunity. Any legal suit, action or proceeding arising out of or based upon this Agreement or the transactions contemplated hereby (including without limitation, any claims sounding in equity, statutory law, contract law or tort law arising out of the subject matter hereof) shall be instituted in (i) the federal courts of the United States of America located in the City and County of New York, Borough of Manhattan or (ii) the courts of the State of New York located in the City and County of New York, Borough of Manhattan (collectively, the "Specified Courts"), and each party irrevocably submits to the exclusive jurisdiction

(except for proceedings instituted in regard to the enforcement of a judgment of any such court, as to which such jurisdiction is non-exclusive) of such courts in any such suit, action or proceeding. Service of any process, summons, notice or document by mail to such party's address set forth above shall be effective service of process for any suit, action or other proceeding brought in any such court. The parties irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or other proceeding in the Specified Courts and irrevocably and unconditionally waive and agree not to plead or claim in any such court that any such suit, action or other proceeding brought in any such court has been brought in an inconvenient forum.

SECTION 18. Recognition of the U.S. Special Resolution Regimes

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

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

As used in this Section 18,

"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.

SECTION 19. Partial Unenforceability. The invalidity or unenforceability of any Section, paragraph or provision of this Agreement shall not affect the validity or enforceability of any other Section, paragraph or provision hereof. If any Section, paragraph or provision of this Agreement is for any reason determined to be invalid or unenforceable, there shall be deemed to be made such minor changes (and only such minor changes) as are necessary to make it valid and enforceable.

SECTION 20. Counterparts. This Agreement may be executed in any number of counterparts (which may include counterparts delivered by any standard form of telecommunication), each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same agreement.

SECTION 21. Effect of Headings. The Section headings herein are for convenience only and shall not affect the construction hereof.

SECTION 22. Entire Agreement. This Agreement supersedes all prior agreements and understandings (whether written or oral) between the Company and the Underwriters, or any of them, with respect to the subject matter hereof.

SECTION 23. Electronic Signatures. The words "execution," "signed," "signature," and words of like import in this Agreement or in any amendment or other modification hereof (including waivers and consents) shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

[SIGNATURE PAGES FOLLOW]

If the foregoing is in accordance with your understanding of our agreement, please sign and return to the Company a counterpart hereof, whereupon this instrument, along with all counterparts, will become a binding agreement among the Underwriters and the Company in accordance with its terms.

Very truly yours,

NeuBase Therapeutics, Inc.

/s/ Sam Backenroth

By:

Name: Sam Backenroth

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

RBC Capital Markets, LLC
Oppenheimer & Co. Inc.
Chardan Capital Markets LLC

RBC Capital Markets, LLC

By: /s/ Vincent Lozada
Name: Vincent Lozada
Title: Managing Director

Oppenheimer & Co. Inc.

By: /s/ Michael Margolis R.Ph.
Name: /s/ Michael Margolis R.Ph.
Title: Senior Managing Director, Co-Head Healthcare Investment Banking

Chardan Capital Markets LLC

By: /s/ Shai Gerson
Name: Shai Gerson
Title: Managing Partner

For themselves and the other several Underwriters named in Schedule A to the foregoing Agreement.

SCHEDULE A

The public offering price per share for the Securities shall be \$5.00.

The purchase price per share for the Securities to be paid by the several Underwriters shall be \$4.70, being an amount equal to the public offering price set forth above less \$0.30 per share, subject to adjustment in accordance with Section 2(b) for dividends or distributions declared by the Company and payable on the Initial Securities but not payable on the Option Securities.

Name of Underwriter	Number of Initial Securities
RBC Capital Markets, LLC	3,320,000
Oppenheimer & Co. Inc.	1,960,000
Chardan Capital Markets LLC	1,800,000
National Securities Corporation	920,000
Total	8,000,000

SCHEDULE B-1

Pricing Terms

1. The Company is selling 8,000,000 shares of Common Stock.
2. The Company has granted an option to the Underwriters, severally and not jointly, to purchase up to an additional 1,200,000 shares of Common Stock.
3. The public offering price per share for the Securities shall be \$5.00.

SCHEDULE B-2

None

SCHEDULE B-3

List of Written Testing-the-Waters Communications

None

SCHEDULE C

Lock-Up Agreement

1. Dietrich Stephan
 2. Sam Backenroth
 3. Dov A. Goldstein
 4. Franklyn Prendergast
 5. Eric Richman
 6. William Mann
 7. Curt Bradshaw
-

Exhibit A

FORM OF LOCK-UP AGREEMENT

PAUL
HASTINGS

April 22, 2021
NeuBase Therapeutics, Inc.
350 Technology Drive
Pittsburgh, Pennsylvania 15219

Ladies and Gentlemen:

We have acted as counsel to NeuBase Therapeutics, Inc., a Delaware corporation (the “*Company*”), in connection with the preparation and filing with the Securities and Exchange Commission (the “*Commission*”) pursuant to Rule 424(b) of the rules and regulations of the Securities Act of 1933, as amended (the “*Act*”), of a prospectus supplement, dated April 22, 2021 (the “*Prospectus Supplement*”), to the Company’s Registration Statement on Form S-3 (File No. 333-254980) originally filed with the Commission under the Act on April 1, 2021 (the “*Registration Statement*”), and the related prospectus, dated April 14, 2021, included in the Registration Statement at the time it originally became effective (the “*Base Prospectus*” and, together with the Prospectus Supplement, the “*Prospectus*”), relating to the offering by the Company of up to 8,000,000 shares (the “*Shares*”) of the Company’s common stock, par value \$0.0001 per share, and up to an additional 1,200,000 Shares subject to an over-allotment option granted to the underwriters of the offering. The Shares are being sold to the several underwriters named in, and pursuant to, an underwriting agreement among the Company and RBC Capital Markets, LLC, Oppenheimer & Co. Inc., and Chardan Capital Markets LLC as the representatives of such underwriters, dated as of April 22, 2021 (the “*Underwriting Agreement*”).

In connection with this opinion, we have examined and relied upon the Registration Statement, the Prospectus, the Underwriting Agreement, the Company’s Amended and Restated Certificate of Incorporation and the Company’s Amended and Restated Bylaws, each as currently in effect, and the originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters. We have assumed the genuineness and authenticity of all documents submitted to us as originals, and the conformity to originals of all documents submitted to us as copies thereof.

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

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when issued and sold against payment therefor in accordance with the Underwriting Agreement, will be validly issued, fully paid and nonassessable.

Paul Hastings LLP | 1117 S. California Avenue | Palo Alto, California 94304
T: + 1.650.320.1800 | www.paulhastings.com

PAUL
HASTINGS

April 22, 2021
Page 2

We consent to the reference to our firm under the caption “Legal Matters” in the Prospectus included in the Registration Statement and to the filing of this opinion as an exhibit to a Current Report of the Company on Form 8-K.

Very truly yours,

/s/ Paul Hastings LLP

neubase

NeuBase Therapeutics Announces Pricing of \$40 Million Public Offering of Common Stock

PITTSBURGH, PA, April 22, 2021 -- NeuBase Therapeutics, Inc. (Nasdaq: NBSE) (“NeuBase”), a biotechnology company accelerating the genetic revolution with a new class of precision genetic medicines, announced today the pricing of an underwritten public offering of 8,000,000 shares of its common stock, at a price to the public of \$5.00 per share. The gross proceeds to NeuBase from the offering, before deducting the underwriting discounts and commissions and offering expenses payable by NeuBase, are expected to be approximately \$40 million, excluding any exercise of the underwriters’ option to purchase additional shares of common stock. In addition, NeuBase has granted the underwriters a 30-day option to purchase up to an additional 1,200,000 shares of its common stock at the public offering price, less underwriting discounts and commissions, to cover over-allotments, if any. All of the shares of common stock in the offering are being sold by NeuBase.

RBC Capital Markets, Oppenheimer & Co. Inc. and Chardan are acting as the joint book-running managers for the offering, and National Securities Corporation is acting as co-manager.

NeuBase intends to use the net proceeds from the offering for general corporate purposes, working capital and development of its product candidates and pipeline expansion. This offering is expected to close on or about April 26, 2021, subject to the satisfaction of customary closing conditions.

The securities described above were offered by NeuBase pursuant to a shelf registration statement on Form S-3 (File No. 333-254980) previously filed with the Securities and Exchange Commission (the “SEC”) on April 1, 2021 and declared effective by the SEC on April 14, 2021. The securities may be offered only by means of a prospectus. A preliminary prospectus supplement and the accompanying prospectus relating to and describing the offering has been filed with the SEC. Electronic copies of the preliminary prospectus supplement and, when available, copies of the final prospectus supplement and the accompanying prospectus relating to the offering may be obtained by visiting the SEC’s website at www.sec.gov or by contacting RBC Capital Markets, Attention: Equity Syndicate, 200 Vesey Street, 8th Floor, New York, NY 10281, or by telephone at (877) 822-4089 or by e-mail at equityprospectus@rbccm.com, Oppenheimer & Co. Inc., Attention: Syndicate Prospectus Department, 85 Broad Street, 26th Floor, New York, NY 10004, or by telephone at (212) 667-8055 or by e-mail at equityprospectus@opco.com, or Chardan, 17 State Street, 21st floor, New York, New York 10004, by telephone at (646) 465-9032 or by e-mail at prospectus@chardan.com.

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

About NeuBase Therapeutics:

NeuBase is accelerating the genetic revolution by developing a new class of precision genetic medicines which can be designed to increase, decrease, or change gene function, as appropriate, to resolve genetic defects that drive disease. NeuBase’s targeted PATrOL™ therapies are centered around its proprietary drug scaffold to address genetic diseases at the DNA or RNA level by combining the highly targeted approach of traditional genetic therapies with the broad organ distribution capabilities of small molecules. With an initial focus on silencing disease-causing mutations in debilitating neurological, neuromuscular, and oncologic disorders, NeuBase is committed to redefining medicine for the millions of patients with both common and rare conditions. To learn more, visit www.neubasetherapeutics.com.

Forward-Looking Statements:

This press release contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act. These forward-looking statements include, among other things, statements regarding NeuBase’s expectations on the timing, size and completion of the offering, the amount of proceeds expected from the offering and the anticipated use of proceeds therefrom. These forward-looking statements are distinguished by use of words such as “will,” “would,” “anticipate,” “expect,” “believe,” “designed,” “plan,” or “intend,” the negative of these terms, and similar references to future periods. These views involve risks and uncertainties that are difficult to predict and, accordingly, our actual results may differ materially from the results discussed in our forward-looking statements. Our forward-looking statements contained herein speak only as of the date of this press release. Factors or events that we cannot predict, including those risk factors contained in our prospectus supplement and related prospectus for this proposed offering filed with the U.S. Securities and Exchange Commission (the “SEC”) and our other filings with the SEC, may cause our actual results to differ from those expressed in forward-looking statements. NeuBase may not actually achieve the plans, carry out the intentions or meet the expectations or projections disclosed in the forward-looking statements, and you should not place undue reliance on these forward-looking statements. Because such statements deal with future events and are based on NeuBase’s current expectations, they are subject to various risks and uncertainties, and actual results, performance or achievements of NeuBase could differ materially from those described in or implied by the statements in this press release, including: risks and uncertainties associated with market conditions; the satisfaction of customary closing conditions related to the proposed public offering; NeuBase’s plans to develop and commercialize its product candidates; the timing of initiation of NeuBase’s planned clinical trials; the timing of the availability of data from NeuBase’s clinical trials; the timing of any planned investigational new drug application or new drug application; NeuBase’s plans to research, develop and commercialize its current and future product candidates; the clinical utility, potential benefits and market acceptance of NeuBase’s product candidates; NeuBase’s commercialization, marketing and manufacturing capabilities and strategy; global health conditions, including the impact of COVID-19; NeuBase’s ability to protect its intellectual property position; and the requirement for additional capital to continue to advance these product candidates, which may not be available on favorable terms or at all, as well as those risk factors contained in our filings with the SEC. Except as otherwise required by law, NeuBase disclaims any intention or obligation to update or revise any forward-looking statements, which speak only as of the date hereof, whether as a result of new information, future events or circumstances or otherwise.

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