

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

**FORM 8-K**

**CURRENT REPORT  
Pursuant to Section 13 OR 15(d)  
of The Securities Exchange Act of 1934**

**Date of Report (Date of earliest event reported): March 19, 2024**

**FATE THERAPEUTICS, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction  
of incorporation)

**001-36076**  
(Commission  
File Number)

**65-1311552**  
(IRS Employer  
Identification No.)

**12278 Scripps Summit Dr.**  
**San Diego, CA**  
(Address of principal executive offices)

**92131**  
(Zip Code)

**(858) 875-1800**  
(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, \$0.001 par value per share	FATE	The Nasdaq Global Market

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

Emerging growth company

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**

### *Underwriting Agreement*

On March 19, 2024, Fate Therapeutics, Inc. (the “Company”) entered into an underwriting agreement (the “Underwriting Agreement”) with BofA Securities, Inc., Jefferies LLC and Leerink Partners LLC, as representatives of the several underwriters (the “Underwriters”), pursuant to which the Company agreed to issue and sell 14,545,454 shares of the Company’s common stock, par value \$0.001 per share (the “Shares”), at an offering price of \$5.50 per Share (the “Offering”).

The Company estimates that net proceeds from the Offering will be approximately \$74.7 million, after deducting the Underwriters’ discounts and commissions and estimated offering expenses payable by the Company. The Company intends to use the net proceeds from the Offering, together with the net proceeds from the private placement described under the heading “Securities Purchase Agreement” below, for funding clinical trials and nonclinical studies of the Company’s product candidates, manufacturing expenses associated with the development of the Company’s product candidates, the conduct of preclinical research and development, and for other working capital and general corporate purposes.

The Offering is being made pursuant to the Company’s shelf registration statement on Form S-3 (Registration No. 333-275402), which was filed with the Securities and Exchange Commission (the “SEC”) on November 8, 2023 and which was declared effective by the SEC on November 27, 2023, as supplemented by a prospectus supplement, dated March 19, 2024, filed with the SEC on March 20, 2024.

The Offering is expected to close on March 21, 2024, subject to customary closing conditions. The Underwriting Agreement contains customary representations, warranties and agreements by the Company, customary conditions to closing, indemnification obligations of the Company and the Underwriters, including for liabilities under the Securities Act of 1933, as amended (the “Securities Act”), other obligations of the parties and termination provisions.

A copy of the Underwriting Agreement is attached as Exhibit 1.1 hereto and is incorporated herein by reference. The foregoing description of the Underwriting Agreement does not purport to be complete and is qualified in its entirety by reference to such exhibit.

A copy of the legal opinion of Goodwin Procter LLP relating to the validity of the Shares is filed herewith as Exhibit 5.1 and is incorporated herein by reference.

## *Securities Purchase Agreement*

On March 19, 2024, the Company entered into a securities purchase agreement (the “Purchase Agreement”) with a fund affiliated with Redmile Group, LLC (collectively, “Redmile”). The Purchase Agreement provides that, subject to the closing of the Offering and the satisfaction of other customary closing conditions, Redmile will purchase pre-funded warrants to purchase up to 3,636,364 shares of the Company’s common stock (the “Pre-Funded Warrants”) at an aggregate purchase price of up to approximately \$20.0 million for a purchase price per Pre-Funded Warrant of \$5.499, which is equal to the per share offering price for the shares of common stock in the Offering, less \$0.001, which is the exercise price of each Pre-Funded Warrant. The issuance of the Pre-Funded Warrants will be made in a private placement exempt from the registration requirements of the Securities Act.

The net proceeds to the Company from the sale of the Pre-Funded Warrants are expected to be approximately \$20.0 million. The issuance of the Pre-Funded Warrants is expected to occur on March 21, 2024 (the “Closing”), subject to the satisfaction of the closing conditions referenced above.

Pursuant to the Purchase Agreement, the Company has agreed to file a resale registration statement with the SEC as soon as practicable, and in all events within 30 days after the Closing, to register the resale of the shares of the Company’s common stock issuable upon the exercise of the Pre-Funded Warrants.

Redmile is affiliated with one of the Company’s directors, Michael Lee, and is a significant stockholder of the Company.

The foregoing description of the Purchase Agreement does not purport to be complete and is qualified in its entirety by reference to the Purchase Agreement, which is filed as Exhibit 10.1 hereto and is incorporated herein by reference. The form of Pre-Funded Warrant is filed as Exhibit 4.1 hereto and the foregoing description of the terms of the Pre-Funded Warrants is qualified in its entirety by reference to such exhibit.

### **Item 3.02 Unregistered Sales of Equity Securities.**

See the description set forth in Item 1.01 above under the caption “Securities Purchase Agreement”, which is incorporated into this Item 3.02 by reference. The Pre-Funded Warrants will be issued in reliance upon the exemption from registration pursuant to Section 4(a)(2) under the Securities Act in a transaction not involving a public offering of such pre-funded warrants.

### **Item 8.01. Other Events**

On March 19, 2024, the Company issued a press release announcing that it had priced the Offering, the text of which is included as Exhibit 99.1 hereto and is incorporated herein by reference.

### **Forward-Looking Statements**

This report contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including statements regarding the Company’s intended use of proceeds from the Offering and the private placement described herein. These and any other forward-looking statements in this report are based on management’s current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, the risks and uncertainties associated with market conditions and the satisfaction of customary closing conditions related to the offering and private placement, as well as risks and uncertainties detailed in the Company’s periodic filings with the SEC, including but not limited to the Company’s Annual Report on Form 10-K for the year ended December 31, 2023, and from time to time the Company’s other investor communications. The Company is providing the information in this report as of this date and does not undertake any obligation to update any forward-looking statements contained in this report as a result of new information, future events or otherwise, except to the extent required by law.

## Item 9.01. Financial Statements and Exhibits

### (d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
1.1	<a href="#"><u>Underwriting Agreement, dated as of March 19, 2024, among Fate Therapeutics, Inc., BofA Securities, Inc., Jefferies LLC and Leerink Partners LLC, as representatives of the underwriters named therein</u></a>
4.1	<a href="#"><u>Form of Pre-Funded Warrant</u></a>
5.1	<a href="#"><u>Opinion of Goodwin Procter LLP</u></a>
10.1	<a href="#"><u>Securities Purchase Agreement, dated as of March 19, 2024, between Fate Therapeutics, Inc. and RedCo II Master Fund, L.P.</u></a>
23.1	<a href="#"><u>Consent of Goodwin Procter LLP (contained in Exhibit 5.1)</u></a>
99.1	<a href="#"><u>Press Release dated March 19, 2024</u></a>
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

**SIGNATURES**

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

**Fate Therapeutics, Inc.**

Date: March 20, 2024

By: /s/ J. Scott Wolchko

Name: J. Scott Wolchko

Title: President and Chief Executive Officer

FATE THERAPEUTICS, INC.

(a Delaware corporation)

14,545,454 Shares of Common Stock

UNDERWRITING AGREEMENT

Dated: March 19, 2024

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FATE THERAPEUTICS, INC.

(a Delaware corporation)

14,545,454 Shares of Common Stock

**UNDERWRITING AGREEMENT**

March 19, 2024

BofA Securities, Inc.  
Jefferies LLC  
Leerink Partners LLC  
as Representatives of the several Underwriters

c/o BofA Securities, Inc.  
One Bryant Park  
New York, New York 10036

c/o Jefferies LLC  
520 Madison Avenue  
New York, New York 10022

c/o Leerink Partners LLC  
53 State Street, 40th Floor  
Boston, Massachusetts 02109

Ladies and Gentlemen:

Fate Therapeutics, Inc., a Delaware corporation (the “Company”), confirms its agreement with BofA Securities, Inc. (“BofA”), Jefferies LLC (“Jefferies”) and Leerink Partners LLC (“Leerink Partners”) and each of the other Underwriters named in Schedule A hereto (collectively, the “Underwriters,” which term shall also include any underwriter substituted as hereinafter provided in Section 10 hereof), for whom BofA, Jefferies and Leerink Partners are acting as representatives (in such capacity, the “Representatives”), with respect to the sale by the Company and the purchase by the Underwriters, acting severally and not jointly, of the respective numbers of shares of Common Stock, par value \$0.001 per share, of the Company (“Common Stock”), set forth in Schedule A hereto. The aforesaid 14,545,454 shares of Common Stock to be purchased by the Underwriters are herein called the “Securities.”

The Company understands that the Underwriters propose to make a public offering of the Securities as soon as the Representatives deem advisable after this Agreement has been executed and delivered.

The Company has prepared and filed with the Securities and Exchange Commission (the “Commission”) a shelf registration statement on Form S-3 (File No. 333-275402) covering 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 promulgated thereunder (the “1933 Act Regulations”), which shelf registration statement has been declared effective by the Commission. 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. The related prospectus covering the Securities in the form first used to confirm sales of the Securities (or in the form first made available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 under the 1933 Act) is hereinafter referred to as the “Base Prospectus.” Each preliminary prospectus used in connection with the offering of the Securities, if any, 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.” Promptly after 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 Base Prospectus, as supplemented by 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 P.M., New York City time, on March 18, 2024 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 Base Prospectus as amended or supplemented immediately prior to the Applicable Time (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 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 of the Securities 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.

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, the General Disclosure Package 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, the General Disclosure Package 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.

The Company represents and warrants to each Underwriter as of the date hereof, the Applicable Time and the Closing Time (as defined in Section 2(c) hereof), and agrees with each Underwriter, as follows:

(a) *Registration Statement and Prospectuses.* The Company meets the requirements for use of Form S-3 under the 1933 Act. Each of the Registration Statement and any post-effective amendment thereto 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 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. The Company has complied with each request (if any) from the Commission for additional information.

Each of the Registration Statement and any post-effective amendment thereto, at the time of its effectiveness, each deemed effective with respect to the Underwriters pursuant to Rule 430B(f)(2) under the 1933 Act Regulations, the Applicable Time and the Closing Time complied and will comply in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations. Any preliminary prospectus, the Prospectus and any amendment or supplement thereto, at the time each was filed with the Commission, and, in each case, at the Applicable Time and the Closing Time complied and will comply in all material respects with the requirements of the 1933 Act Regulations and any preliminary prospectus and the Prospectus delivered to the Underwriters for use in connection with this offering was 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, any preliminary prospectus 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”).

(b) *Accurate Disclosure.* Neither the Registration Statement nor any amendment thereto, at its effective time, on the date hereof, at the Closing Time, 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. At the Applicable Time and the Closing Time, neither (A) the General Disclosure Package nor (B) any individual Issuer Limited Use Free Writing Prospectus, when considered together with the General Disclosure Package, 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, as of its issue date, at the time of any filing with the Commission pursuant to Rule 424(b), at the Closing Time, 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.

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) 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 shall be the information in the first paragraph under the heading “Underwriting–Commissions and Discounts,” the information in the second, third and fourth paragraphs under the heading “Underwriting–Price Stabilization, Short Positions” and the information under the heading “Underwriting–Electronic Distribution” in each case contained in the Prospectus (collectively, the “Underwriter Information”).

(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. Any offer that is a written communication relating to the Securities made prior to the initial filing of the Registration Statement by the Company or any person acting on its behalf (within the meaning, for this paragraph only, of Rule 163(c) of the 1933 Act Regulations) has been filed with the Commission in accordance with the exemption provided by Rule 163 under the 1933 Act Regulations (“Rule 163”) and otherwise complied with the requirements of Rule 163, including without limitation the legending requirement, to qualify such offer for the exemption from Section 5(c) of the 1933 Act provided by Rule 163.

(d) *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.

(e) *Forward-looking Statements.* No forward-looking statement (within the meaning of Section 27A of the 1933 Act and Section 21E of the 1934 Act) contained in the Registration Statement, the General Disclosure Package or the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(f) *Good Standing of the Company.* The Company has been duly incorporated, is validly existing as a corporation and in good standing under the laws of the State of Delaware, with full power and authority (corporate and other) to own, lease and operate its properties and conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus. The Company is duly qualified to transact business as a foreign corporation and is in good standing in each jurisdiction in which its ownership or leasing of property or the conduct of its business requires such qualification, except where the failure to be so qualified or be in good standing would not reasonably be expected to, individually or in the aggregate, result in a material adverse effect on the condition (financial or otherwise), results of operations, business, properties or prospects of the Company and its subsidiaries, taken as a whole (a “Material Adverse Effect”).

(g) *Subsidiaries.* Each subsidiary of the Company has been duly incorporated, organized or formed and is validly existing and in good standing (where such concept exists) under the laws of the jurisdiction of its incorporation or organization, with full power and authority (corporate and other) to acquire, own, lease and operate its properties and to conduct its business as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus. Each subsidiary of the Company is duly qualified to transact business as a foreign corporation and is in good standing (where such concept exists) in each jurisdiction in which its ownership or leasing of property or the conduct of its business requires such qualification, except where the failure to be so qualified or be in good standing would not reasonably be expected to, individually or in the aggregate, result in a Material Adverse Effect. All of the issued and outstanding capital stock of each subsidiary of the Company has been duly authorized and validly issued, is fully paid and nonassessable. Except as disclosed in the Registration Statement, the General Disclosure Package or the Prospectus, the capital stock of each subsidiary owned by the Company, directly or through other wholly-owned subsidiaries, is owned free and clear of any security interests, claims, liens, or encumbrances. None of the outstanding capital stock or equity interest in any subsidiary was issued in violation of preemptive or similar rights of any security holder of such subsidiary. The constitutive or organizational documents of each of the subsidiaries comply in all material respects with the requirements of applicable laws of its jurisdiction of incorporation or organization and are in full force and effect. The Company does not own or control, directly or indirectly, any corporation, association or other entity other than the subsidiaries listed in Exhibit 21.1 to the Company’s most recent annual report on Form 10-K.

(h) *No Private Placements.* Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, neither the Company nor any subsidiary has sold, issued or distributed any shares of Common Stock during the six-month period preceding the date hereof, including any sales pursuant to Rule 144A under, or Regulation D or S of, the 1933 Act, other than shares issued pursuant to employee benefit plans, qualified stock option plans or other employee compensation plans, or pursuant to outstanding options, rights or warrants disclosed in the Registration Statement, the General Disclosure Package and the Prospectus.

(i) *Stock Options.* The description of the Company’s stock options, stock bonus and other stock plans or arrangements (each, a “Company Stock Plan”), and the options or other rights granted thereunder, set forth in the Registration Statement, the General Disclosure Package and the Prospectus, accurately and fairly presents, in all material respects, the information required to be shown with respect to such Company Stock Plan, stock options and rights.

(j) *Authorization and Description of Securities.* The Securities and all other outstanding shares of capital stock of the Company have been duly authorized; the authorized shares of capital stock of the Company is as set forth in the Registration Statement, the General Disclosure Package and the Prospectus; all outstanding shares of capital stock of the Company are, and, when the Securities have been issued, delivered and paid for in accordance with this Agreement, such Securities will be validly issued, fully paid and nonassessable; the Securities, when issued, will conform in all material respects to the information in the Registration Statement, the General Disclosure Package and the Prospectus and to the description of such Securities contained in the Prospectus; and none of the outstanding shares of capital stock of the Company have been issued in violation of any preemptive rights, rights of first refusal or similar rights of any security holder. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, there are no (i) equity or debt securities of the Company convertible into or exchangeable or exercisable for, (ii) restrictions upon the voting or transfer of (other than pursuant to Securities Laws (as defined below)) or (iii) options, warrants, preemptive rights, rights of first refusal or other rights in existence to purchase or acquire from the Company or any subsidiary of the Company, any shares of capital stock of the Company or any subsidiary of the Company. "Securities Laws" means, collectively, the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley"), the 1933 Act, the 1934 Act, the rules and regulations of the Commission (the "Rules and Regulations"), the auditing principles, rules, standards and practices applicable to auditors of "issuers" (as defined in Sarbanes-Oxley) promulgated or approved by the Public Company Accounting Oversight Board (the "PCAOB") and, as applicable, the rules of the Nasdaq Stock Market (the "Exchange Rules").

(k) *No Finder's Fee.* 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 the Underwriter for a brokerage commission, finder's fee or other like payment in connection with this offering and sale of the Securities.

(l) *No Applicable Registration Rights.* Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, there are no contracts, agreements or understandings between the Company and any person granting such person the right to require the Company to file a registration statement under the 1933 Act with respect to any securities of the Company owned or to be owned by such person or to require the Company to include such securities in the securities registered pursuant to the Registration Statement or in any securities being registered pursuant to any other registration statement filed by the Company under the 1933 Act (collectively, "Registration Rights").

(m) *Certain Agreements.* There is no document, contract or other agreement required to be described in the Registration Statement, the General Disclosure Package or the Prospectus or to be filed as an exhibit to any of the foregoing which is not described or filed as required by the 1933 Act or the Rules and Regulations. Each description of a contract, document or other agreement in the Registration Statement, the General Disclosure Package or the Prospectus accurately reflects in all material respects the terms of the underlying contract, document or other agreement. Neither the Company nor any of its subsidiaries has received any written communication regarding termination of, or suspension of, any of the contracts or agreements described in the Registration Statement, the General Disclosure Package or the Prospectus, or filed as an exhibit to any of the foregoing, for convenience or default, and, to the Company's knowledge, no such termination or suspension is pending or threatened.

(n) *Related Party Transactions.* To the Company's knowledge, no transaction has occurred between or among the Company and its subsidiaries, on the one hand, and any of the Company's officers, directors or 5% stockholders or any affiliate or affiliates of any such officer, director or 5% stockholder that is required to be described that is not so described in the Registration Statement, the General Disclosure Package and the Prospectus. There are no outstanding loans, advances (except normal advances for business expenses in the ordinary course of business) or guarantees of indebtedness by the Company or any of its subsidiaries to, or for the benefit of, any of the directors or executive officers of the Company, any of its subsidiaries or any of their respective family members. All transactions by the Company with officers or control persons of the Company have been duly approved by the Company's Board of Directors (the "Board"), or duly appointed committees or officers thereof, if and to the extent required under U.S. law.

(o) *Margin Securities.* Neither the Company nor any of its subsidiaries own any “margin securities” as that term is defined in Regulation U of the Board of Governors of the Federal Reserve System (the “Federal Reserve Board”), and none of the proceeds of the sale of the Securities will be used, directly or indirectly, for the purpose of purchasing or carrying any margin security, for the purpose of reducing or retiring any indebtedness which was originally incurred to purchase or carry any margin security or for any other purpose which might cause any of the Securities to be considered a “purpose credit” within the meanings of Regulation T, U or X of the Federal Reserve Board.

(p) *Restrictions on Subsidiary Payments to the Company.* No subsidiary of the Company is currently prohibited, 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 disclosed in or contemplated by the Registration Statement, the General Disclosure Package and the Prospectus.

(q) *No Additional Actions.* Since the date as of which information is given in the Registration Statement, the General Disclosure Package and the Prospectus through the date hereof, and except as set forth in the Registration Statement, the General Disclosure Package and the Prospectus, the Company has not (i) issued or granted any securities other than pursuant to the Company Stock Plans or securities issued upon exercise of stock options in the ordinary course of business, (ii) incurred any material liability or obligation, direct or contingent, other than liabilities and obligations which were incurred in the ordinary course of business, (iii) entered into any material transaction other than in the ordinary course of business or (iv) declared or paid any dividend on its capital stock.

(r) *FINRA Matters.* All of the information provided to the Underwriters or to counsel for the Underwriters by the Company, its officers and directors and the holders of any securities (debt or equity) or options to acquire any securities of the Company in connection with the offering of the Securities in connection with letters, filings or other supplemental information provided to FINRA pursuant to FINRA Rule 5110 or 5121 is, to the Company’s knowledge with respect to all other persons except for the Company, true, correct and complete, in all material respects, as of the date hereof. Neither the Company nor, to the Company’s knowledge, any of its affiliates (within the meaning of FINRA Rule 5121(f)(1)) directly or indirectly controls, is controlled by, or is under common control with, or is an associated person (within the meaning of Article I, Section 1(ee) of the By-laws of FINRA) of, any member firm of FINRA.

(s) *Listing.* The Common Stock is registered pursuant to Section 12(b) or 12(g) of the 1934 Act and are listed on the Nasdaq Global Market (“Nasdaq”), and the Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the 1934 Act or delisting the Common Stock from Nasdaq, nor has the Company received any notification that the Commission or Nasdaq is contemplating terminating such registration or listing. To the Company’s knowledge, it is in compliance in all material respects with all applicable listing requirements of Nasdaq for the maintenance of inclusion of the Common Stock thereon. The Securities, when issued, will be listed on Nasdaq.

(t) *Absence of Further Requirements.* No consent, approval, authorization, or order of, or filing or registration with (each an “Authorization”), any person (including any governmental agency or body, regulatory authority, or any court, domestic or foreign (collectively, a “Governmental Agency”)) is required to be obtained or made by or on behalf of the Company for the consummation of the transactions contemplated by this Agreement in connection with the offering, issuance and sale of the Securities by the

Company, except such as have been obtained, or made and such as may be required under state securities laws or the 1933 Act; and no event has occurred that allows or results in, or after notice or lapse of time or both would allow or result in, revocation, suspension, termination or invalidation of any such Authorization or any other impairment of the rights of the holder or maker of any such Authorization.

(u) *Title to Properties.* Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company and its subsidiaries have good and marketable title to all real or personal property owned by them, which are material to the business of the Company and its subsidiaries as a whole, in each case free and clear of any security interests, claims, liens or other encumbrances and defects that would materially impair the value thereof or the use made or proposed to be made of them as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus. Any real or personal property held under lease by the Company and its subsidiaries is held by them under valid, subsisting and enforceable leases with such exceptions as are not material and do not interfere in any material respect with the conduct of the business of the Company or its subsidiaries, and neither the Company nor any 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 foregoing, or affecting or questioning the rights of the Company or such subsidiary to the continued possession of the leased premises under any such lease.

(v) *Absence of Defaults and Conflicts Resulting from Transaction.* The execution, delivery and performance of this Agreement, and the issuance and sale of the Securities, will not conflict with, result in a breach or violation of any of the terms and provisions of, constitute a default or a Debt Repayment Triggering Event (as defined below) under, or result in the imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to, (i) the charter or by-laws of the Company or any of its subsidiaries, (ii) any law or statute, rule, regulation or order of any Governmental Agency having jurisdiction over the Company or any of its subsidiaries or any of their properties, or (iii) any agreement or instrument to which the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries is bound or to which any of the properties of the Company or any of its subsidiaries is subject, including any indenture, mortgage, deed of trust or loan agreement, except, in the case of clauses (ii) and (iii) where such breach, violation or default would not, individually or in the aggregate, result in a Material Adverse Change (as defined in Section 1(mm) hereof); a “Debt Repayment Triggering Event” means any event or condition that gives, or with the giving of notice or lapse of time would give, 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 any of its subsidiaries.

(w) *Absence of Existing Defaults and Conflicts.* Neither the Company nor any of its subsidiaries is in violation of its respective charter or by-laws or in default (or with the giving of notice or lapse of time would be in default) under any existing obligation, agreement, covenant or condition contained in any indenture, loan agreement, mortgage, lease or other agreement or instrument to which any of them is a party or by which any of them is bound or to which any of the properties of any of them is subject, except such defaults that would not, individually or in the aggregate, result in a Material Adverse Effect. The Company and its subsidiaries, individually and on a consolidated basis, are not as of the date hereof, and after giving effect to the transactions contemplated hereby to occur at the Closing Time, will not be Insolvent (as defined below). For purposes of this Section 1(w), “Insolvent” means, with respect to any Person, (i) the present fair saleable value of such Person’s assets is less than the amount required to pay such Person’s total indebtedness, (ii) such Person is unable to pay its debts and liabilities, subordinated, contingent or otherwise, as such debts and liabilities become absolute and matured, (iii) such Person intends to incur or believes that it will incur debts that would be beyond its ability to pay as such debts mature or (iv) such Person has unreasonably small capital with which to conduct the business in which it is engaged as such business is now conducted.

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

(y) *Possession of Licenses and Permits.* The Company and its subsidiaries (i) possess, and are in compliance with the terms of, all certificates, authorizations, licenses and permits (“Licenses”), including, without limitation, from the U.S. Food and Drug Administration (“FDA”) and equivalent foreign regulatory authorities, in each case that are necessary to the conduct of the business now conducted or proposed in the Registration Statement, the General Disclosure Package and the Prospectus to be conducted by them, except where the failure to so possess or be in compliance with would not reasonably be expected to have a Material Adverse Effect, and (ii) have not received notification of any revocation, material modification, suspension, termination or invalidation (or proceedings related thereto) of any Licenses. To the knowledge of the Company, no event has occurred that allows or results in, or after notice or lapse of time or both would allow or result in, revocation, material modification, suspension, termination or invalidation (or proceedings related thereto) of any such License and the Company has no reason to believe that any such License will not be renewed. All such Licenses are (i) valid and in full force and effect, except where the validity or failure to be in full force and effect would not reasonably be expected to have a Material Adverse Effect, and (ii) free and clear of any restriction or condition that are materially different from those normally applicable to similar licenses, certificates, authorizations and permits held by biopharmaceutical companies similarly situated with the Company.

(z) *Absence of Labor Dispute; Compliance with Occupational Laws.* There is (A) no significant unfair labor practice complaint pending or, to the Company’s knowledge, threatened against the Company or any subsidiary before the National Labor Relations Board, and no significant grievance or significant arbitration proceeding arising out of or under collective bargaining agreements is pending or, to the Company’s knowledge, threatened and (B) no strike, labor dispute, slowdown or stoppage exists or, to the Company’s knowledge, is imminent. The Company does not have any obligations under any collective bargaining agreement with any union and no organization efforts are underway with respect to Company employees.

(aa) *ERISA and Employee Benefits Matters.* To the knowledge of the Company, no “prohibited transaction” as defined under Section 406 of ERISA (as defined herein) or Section 4975 of the Code (as defined herein) and not exempt under ERISA Section 408 and the regulations and published interpretations thereunder has occurred with respect to any Employee Benefit Plan (as defined herein) which would have a Material Adverse Effect. Each Employee Benefit Plan is and has been operated in material compliance with its terms and all applicable laws, including but not limited to ERISA and the Code and, to the knowledge of the Company, no event has occurred (including a “reportable event” as such term is defined in Section 4043 of ERISA) and no condition exists that would subject the Company to any material tax, fine, lien, penalty or liability imposed by ERISA, the Code or other applicable law. Each Employee Benefit Plan intended to be qualified under Code Section 401(a) is so qualified and, to the knowledge of the Company, nothing has occurred since the date of any such determination or opinion letter that is reasonably likely to cause the loss of such qualification. As used in this Agreement, “Code” means the Internal Revenue Code of 1986, as amended; “Employee Benefit Plan” means any “employee benefit plan” within the meaning of Section 3(3) of ERISA, including, without limitation, all stock purchase, stock option, stock-based severance, employment, change-in-control, medical, disability, fringe benefit, bonus, incentive, deferred compensation, employee loan and all other employee benefit plans, agreements, programs, policies or other arrangements, whether or not subject to ERISA, under which (1) any current or former employee, director or independent contractor of the Company or its subsidiaries has any present or future right to benefits and which are contributed to, sponsored by or maintained by the Company or any of its respective subsidiaries or (2) the Company or any of its subsidiaries has had or has any present or future obligation or liability; and “ERISA” means the Employee Retirement Income Security Act of 1974, as amended.

(bb) *Intellectual Property*. The Company and its subsidiaries own, possess or can acquire on reasonable terms sufficient rights to all trademarks, trade names, patent rights, copyrights, domain names, licenses, approvals, trade secrets, inventions, technology, know-how and other intellectual property and similar rights, including registrations and applications for registration thereof (collectively, “Intellectual Property Rights”) necessary or material to the business now conducted or proposed to be conducted in the Registration Statement, the General Disclosure Package and the Prospectus and, to the knowledge of the Company, the conduct of their respective businesses does not infringe, misappropriate or otherwise conflict in any material respect with any such valid Intellectual Property Rights of others, provided that the foregoing representation is made only to the Company’s knowledge as it concerns third party patent rights, trade secrets and trademarks. The Intellectual Property Rights of the Company have not been adjudged by a court of competent jurisdiction to be invalid or unenforceable, in whole or in part. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus: (i) there are no rights of third parties to any of the Intellectual Property Rights owned or purported to be owned by the Company or its subsidiaries other than rights that may be granted to the U.S. government pursuant to applicable law other than as disclosed in Schedule 1(bb) hereto; (ii) there is no known material infringement, misappropriation, breach, default or other violation by any third party of any of the Intellectual Property Rights of the Company or any of its subsidiaries; (iii) there is no pending or threatened action, suit, proceeding or claim by any third party challenging the Company’s or any of its subsidiaries’ rights in or to, or the violation of any of the terms of, any of their Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (iv) there is no pending or threatened action, suit, proceeding or claim by any third party challenging the validity, enforceability or scope of any Intellectual Property Rights of the Company or any of its subsidiaries, and the Company is unaware of any facts which would form a reasonable basis for any other claim; (v) there is no pending or threatened action, suit, proceeding or claim by any third party that the Company or any of its subsidiaries infringes, misappropriates or otherwise violates or conflicts with any Intellectual Property Rights or other proprietary rights of any third party, neither the Company nor any of its subsidiaries has received any written notice of such claim, and the Company is unaware of any other fact which would form a reasonable basis for any such claim; (vi) none of the Intellectual Property Rights used or held for use by the Company or any of its subsidiaries in their businesses has been obtained or is being used or held for use by the Company or any of its subsidiaries in violation of any contractual obligation binding on the Company or any of its subsidiaries, including but not limited to any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement, or in violation of any rights of any third party; and (vii) the Company and its subsidiaries have taken reasonable steps in accordance with normal industry practice to maintain the confidentiality of all Intellectual Property Rights the value of which to the Company or any subsidiary is contingent upon maintaining the confidentiality thereof, except in each case covered by clauses (i) and (vi) such as would not, if determined adversely to the Company or any of its subsidiaries, individually or in the aggregate, have a Material Adverse Effect.

(cc) *Environmental Laws*. Neither the Company nor any of its subsidiaries is in violation of any statute, rule, regulation, decision or order of any Governmental Agency relating to the use, disposal or release of hazardous or toxic substances or relating to the protection or restoration of the environment or human exposure to hazardous or toxic substances (collectively, “Environmental Laws”), owns or operates any real property contaminated with any substance that is subject to any Environmental Laws, is liable for any off-site disposal or contamination pursuant to any Environmental Laws, or is subject to any claim relating to any Environmental Laws, which violation, contamination, liability or claim would individually or in the aggregate result in a Material Adverse Change; and the Company is not aware of any pending investigation which might lead to such a claim. There has been no storage, generation, transportation, handling, treatment, disposal, discharge, emission, or other release of any kind of toxic or other wastes or other hazardous substances by, due to, or caused by the Company or any of its subsidiaries (or, to the Company’s knowledge, any other entity for whose acts or omissions the Company is or may reasonably be



expected to otherwise be liable) upon any of the property now or previously owned or leased by the Company or any of its subsidiaries, or upon any other property, in violation of any law, statute, ordinance, rule, regulation, order, judgment, decree or permit or which would, under any law, statute, ordinance, rule (including rule of common law), regulation, order, judgment, decree or permit, give rise to any liability that would result in a Material Adverse Change. In the ordinary course of business, the Company conducts periodic reviews of the effect of Environmental Laws on the business and assets of the Company and its subsidiaries, in the course of which the Company identifies and evaluates associated costs and liabilities (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws or Licenses issued thereunder, any related constraints on operating activities and any potential liabilities to third parties). The Company has not identified any such associated costs and liabilities that would, individually or in the aggregate, result in a Material Adverse Change.

(dd) *[Reserved]*

(ee) *No Price Stabilization or Manipulation; Compliance with Regulation M.* Neither the Company nor any of its subsidiaries has taken, directly or indirectly, any action designed to or that might reasonably be expected to cause or result in stabilization or manipulation of the price of the shares of Common Stock or of any “reference security” (as defined in Rule 100 of Regulation M under the 1934 Act (“Regulation M”)) with respect to the Securities, whether to facilitate the sale or resale of the Securities or otherwise, and has taken no action which would directly or indirectly violate Regulation M.

(ff) *Statistical and Market-Related Data.* All statistical, demographic 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. To the extent required, the Company has obtained the written consent to the use of such data from such sources.

(gg) *Internal Controls and Compliance with Sarbanes-Oxley.* The Company, its subsidiaries and the Board are in compliance with applicable provisions of Sarbanes-Oxley and all applicable Exchange Rules. The Company maintains a system of internal controls over financial reporting (as such term is defined in Rule 13a-15 of the 1934 Act) (collectively, “Internal Controls”) that comply with the Securities Laws and are 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 U.S. Generally Accepted Accounting Principles (“GAAP”) and to maintain accountability for assets; (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. Since the Company’s initial public offering, the Company has not publicly disclosed or reported to the audit committee of the Board (the “Audit Committee”) or the Board, and within the next 135 days the Company does not reasonably expect to publicly disclose or report to the Audit Committee or the Board, a significant deficiency, material weakness, negative change in Internal Controls or fraud involving management or other employees who have a significant role in Internal Controls, any violation of, or failure to comply with, the Securities Laws, or any matter which, if determined adversely, would have a Material Adverse Effect.

(hh) *Disclosure Controls.* The Company maintains an effective system of “disclosure controls and procedures” (as defined in Rule 13a-15(e) of the 1934 Act) that complies with the requirements of the 1934 Act and that has been designed to ensure that information required to be disclosed by the Company in reports that it files or submits under the 1934 Act is recorded, processed, summarized and reported within the time periods specified in the Commission’s rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to the Company’s management as appropriate to allow timely decisions regarding required disclosure. The Company has carried out evaluations of the effectiveness of its disclosure controls and procedures as required by Rule 13a-15 of the 1934 Act.

(ii) *Books and Records.* The Company and each of its subsidiaries have made and keep books, records and accounts, which, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company and its subsidiaries in all material respects. The minute books of the Company have been made available to counsel for the Underwriters, and such books (i) contain a complete summary of all meetings and actions of the Board (including each committee thereof) and stockholders of the Company since the time of its initial public offering through the date of the latest meeting and action and (ii) accurately, in all material respects, reflect all transactions referred to in such minutes.

(jj) *Litigation.* There are no pending actions, suits or proceedings (including any inquiries or investigations by any Governmental Agency) against or affecting the Company, any of its subsidiaries or any of their respective properties that, if determined adversely to the Company or any of its subsidiaries, would individually or in the aggregate result in a Material Adverse Change; and no such actions, suits or proceedings (including any inquiries or investigations by any Governmental Agency) are to the Company's knowledge, threatened or contemplated.

(kk) *Auditor Certification.* Ernst & Young LLP, who have certificated certain financial statements included in the Registration Statement, the General Disclosure Package and the Prospectus, is an independent registered public accounting firm within the meaning of Article 2-01 of Regulation S-X and the PCAOB.

(ll) *Financial Statements.* The consolidated financial statements included in the Registration Statement, the General Disclosure Package and the Prospectus, together with the related schedules and notes thereto, comply as to form in all material respects with the applicable accounting requirements of the 1933 Act and present fairly in all material respects the consolidated financial position of the Company and its consolidated subsidiaries as of the dates shown and their results of operations and cash flows for the periods shown, and such financial statements have been prepared in conformity with GAAP applied on a consistent basis; and the assumptions used in preparing the pro forma financial information included in the Registration Statement, the General Disclosure Package and the Prospectus provide a reasonable basis for presenting the significant effects directly attributable to the transactions or events described therein, the related pro forma adjustments give appropriate effect to those assumptions, and the pro forma columns therein reflect the proper application of those adjustments to the corresponding historical financial statement amounts. The Registration Statement, the General Disclosure Package and the Prospectus comply in all material respects with Regulation S-X. No other financial statements or supporting schedules or exhibits are required by Regulation S-X to be described or included in the Registration Statement, the General Disclosure Package and the Prospectus. The summary and selected financial data included in the Registration Statement, the General Disclosure Package and the Prospectus present fairly the information shown therein as at the respective dates and for the respective periods specified and are derived from the consolidated financial statements set forth in the Registration Statement, the General Disclosure Package and the Prospectus. Any information contained in the Registration Statement, the General Disclosure Package and the Prospectus regarding "non-GAAP financial measures" (as defined in Regulation G) complies in all material respects with Regulation G and Item 10 of Regulation S-K, to the extent applicable.

(mm) *No Material Adverse Change in Business.* Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, since the end of the period covered by the latest audited financial statements included in the Registration Statement, the General Disclosure Package and the Prospectus (i) there has been no material adverse change, or any development that could be expected

to result in a material adverse change, in (A) the condition (financial or otherwise), results of operations, business, properties or prospects of the Company and its subsidiaries, taken as a whole that is material and adverse or (B) the ability of the Company to consummate the transactions contemplated by this Agreement or perform its obligations hereunder (any such change being referred to herein as a “Material Adverse Change”), (ii) there has been no dividend or distribution of any kind declared, paid or made by the Company on any class of its capital stock, (iii) there has been no change in the capital stock (other than a change in the number of outstanding Shares due to the issuance of Shares upon the exercise of outstanding options or warrants, vesting and settlement of restricted stock units or conversion of convertible securities, as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus), or any change in the short-term indebtedness, long-term indebtedness (other than as a result of the conversion of convertible securities, as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus), net current assets or net assets of the Company and its subsidiaries, or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock, of the Company or any of its subsidiaries and (iv) the Company has not sustained any material loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance.

(nn) *Investment Company Act.* The Company is not and, after giving effect to the offering and sale of the Securities and the application of the proceeds thereof as described in the Registration Statement, the General Disclosure Package or the Prospectus, will not be an “investment company” as defined in the Investment Company Act of 1940, as amended (the “Investment Company Act”).

(oo) *Ratings.* Neither the Company nor its subsidiaries have any debt securities or preferred stock that are rated by any “nationally recognized statistical rating organization” (as defined in Section 3(a)(62) of the 1934 Act).

(pp) *Taxes.* The Company and each of its subsidiaries have (i) timely filed all federal, state, local and foreign tax returns required to be filed through the date of this Agreement or have requested extensions thereof, (ii) have paid all taxes required to be paid thereon (except as currently being contested in good faith and for which reserves required by GAAP have been created in the financial statements of the Company), and (iii) no tax deficiency has been determined adversely to the Company or any of its subsidiaries, and to the Company’s knowledge, is any proposed against any of them, except in each of the cases described in clauses (i), (ii) and (iii) that would not have a Material Adverse Effect. The accruals and reserves on the books and records of the Company and its subsidiaries in respect of tax liabilities for any taxable period not yet finally determined are adequate to meet any assessments and related liabilities for any such period.

(qq) *Insurance.* The Company and each of its subsidiaries maintains insurance in such amounts and covering such risks as is adequate for the conduct of its business and the value of its properties and as is customary for companies engaged in similar businesses in similar industries. All such insurance is fully in force on the date hereof and will be fully in force as of the Closing Time; the Company and its subsidiaries are in compliance with the terms of such policies and instruments in all material respects; and there are no material claims by the Company or any of its subsidiaries under any of the Company’s insurance policies or instruments as to which any insurance company is denying liability or defending under a reservation of rights clause. Neither the Company nor any of its subsidiaries has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not result in a Material Adverse Change.

(rr) *PFIC Status*. The Company was not a “passive foreign investment company” (“PFIC”) as defined in Section 1297 of the Code for its most recently completed taxable year and, based on the Company’s current projected income, assets and activities, the Company does not expect to be classified as a PFIC for any subsequent taxable year.

(ss) *Compliance with Laws*. The Company and its subsidiaries have been and are in compliance with all applicable laws, rules and regulations, except where failure to be so in compliance could not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Change.

(tt) *Sarbanes-Oxley*. There is, and has been, no material failure on the part of the Company or, to the knowledge of the Company, any of the Company’s directors or officers, in their capacities as such, to comply with any applicable provision of Sarbanes-Oxley and the rules and regulations promulgated in connection therewith, including Section 402 related to loans and Sections 302 and 906 related to certifications.

(uu) *No Unlawful Contributions or Other Payments*. Neither the Company nor any of its subsidiaries nor, to the best of the Company’s knowledge, any employee or agent of the Company or any subsidiary, has made any contribution or other payment to any official of, or candidate for, any federal, state or foreign office in violation of any law or of the character required to be disclosed in the Registration Statement, the General Disclosure Package or the Prospectus.

(vv) *Anti-Corruption and Anti-Bribery Laws*. Neither the Company nor any of its subsidiaries, nor any director, officer, or employee of the Company or any of its subsidiaries, nor to the knowledge of the Company, any agent, Affiliate or other person acting on behalf of the Company or any of its subsidiaries has, in the course of its actions for, or on behalf of, the Company or any of its subsidiaries (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expenses relating to political activity; (ii) made or taken any act in furtherance of an offer, payment, promise to pay, 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 public international organization, or any political party, party official, or candidate for political office; (iii) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended (the “FCPA”), the UK Bribery Act 2010, or any other applicable anti-bribery or anti-corruption law; or (iv) made, offered, authorized, requested, or taken any act in furtherance of any unlawful bribe, rebate, payoff, influence payment, kickback or other unlawful payment or benefit. The Company and its subsidiaries and, to the knowledge of the Company, the Company’s affiliates have conducted their respective businesses in compliance with the FCPA and have instituted and maintained and will continue to maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance with such laws and with the representations and warranties contained herein.

(ww) *Money Laundering Laws*. The operations of the Company and each of its subsidiaries are and have been conducted at all times in compliance with all 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 applicable rules, regulations or guidelines issued, administered or enforced by any governmental agency (collectively, the “Money Laundering Laws”) and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(xx) *Sanctions*. Neither the Company nor any of its subsidiaries, directors, officers, or employees, nor, to the knowledge of the Company, any agent, affiliate or other person acting on behalf of the Company or any of its subsidiaries is currently the subject or the target of any U.S. sanctions administered or enforced by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, the United Nations Security Council, the European Union, His Majesty's Treasury of the United Kingdom, or other relevant sanctions authority (collectively, "Sanctions"); nor is the Company or any of its subsidiaries located, organized or resident in a country or territory that is the subject or the target of Sanctions, including, without limitation, Crimea, Cuba, Iran, North Korea, Syria and the so called Donetsk People's Republic and the so called Luhansk People's Republic located in Ukraine (each, a "Sanctioned Country"); and the Company will not, directly or indirectly, use the proceeds of this offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, or any joint venture partner or other person or entity, for the purpose of unlawfully funding or financing the activities of or business with any person, or in any country or territory, that, at the time of such funding or financing, is the subject or the target 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 applicable Sanctions. For the past five years, the Company and each of its subsidiaries have not engaged in and are not now engaged in any unlawful dealings or transactions with any person that at the time of the dealing or transaction is or was the subject or the target of Sanctions or with any Sanctioned Country.

(yy) *Cybersecurity*. The Company and its subsidiaries' information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, and databases (collectively, "IT Systems") are adequate for, and operate and perform in all material respects as required in connection with the operation of the business of the Company and its subsidiaries as currently conducted, and to the Company's knowledge, are free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants. The Company and its subsidiaries have implemented and maintain commercially reasonable physical, technical and administrative controls, policies, procedures, and safeguards to maintain and protect their material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and data, including "Personal Data," used in connection with their businesses. "Personal Data" means (i) a natural person's name, street address, telephone number, e-mail address, photograph, social security number or tax identification number, driver's license number, passport number, credit card number, bank information, or customer or account number; (ii) any information which would qualify as "personally identifying information" under the Federal Trade Commission Act, as amended; and (iii) any other piece of information that allows the identification of such natural person as defined or described in applicable Privacy Laws (as defined below). There have been no breaches, violations, outages or unauthorized uses of or accesses to same, except for those that have been remedied without material cost or liability, nor are there any incidents under internal review or investigations relating to the same. The Company and its subsidiaries are presently in material compliance with all applicable Privacy Laws, internal policies and contractual obligations relating to the privacy and security of IT Systems and Personal Data and to the protection of such IT Systems and Personal Data from unauthorized use, access, misappropriation or modification. Neither the Company nor its subsidiaries (i) conduct any operations in the European Union or the European Economic Area or maintain any "personal data", as defined by the European Union General Data Protection Regulation (EU 2016/679) within either the European Union or the European Economic Area or (ii) is a covered entity, business associate, or otherwise receives any protected health information as such terms are defined under HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act.

(zz) *Compliance with Data Privacy Laws*. The Company and its subsidiaries are in material compliance with all applicable data privacy and security laws and regulations (collectively, the "Privacy Laws"). The Company and its subsidiaries have complied and are presently in compliance in all material respects with their respective policies and procedures relating to data privacy and security and the collection, storage, use, disclosure, handling and processing of Personal Data (the "Policies"). The Company and its subsidiaries have at all times made all disclosures to users or customers required by Privacy Laws, and none of such disclosures made or contained in any Policy have, to the knowledge of the Company, been inaccurate or in violation of any Privacy Laws in any material respect. The Company further certifies that neither it nor any subsidiary: (i) has received any written notice of any actual or

potential liability under or relating to, or actual or potential violation of, any of the Privacy Laws, and has no knowledge of any event or condition that would reasonably be expected to result in any such notice; (ii) is currently conducting or paying for, in whole or in part, any material investigation, remediation or other corrective action pursuant to any Privacy Law; or (iii) is a party to any order or decree that imposes any obligation or liability under any Privacy Law.

(aaa) *Regulatory Matters: Products and Product Candidates.* The Company and its subsidiaries (i) currently operate their respective businesses in compliance in all material respects with all statutes, rules and regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, storage, import, export or disposal of any of the Company's product candidates or any product manufactured or distributed by or for the Company, including, without limitation, requirements under the U.S. Federal Food, Drug, and Cosmetic Act and rules and regulations thereunder, including regulations relating to Good Clinical Practices, Good Tissue Practices, and Good Laboratory Practices, and the U.S. Animal Welfare Act and rules and regulations thereunder (collectively, "Applicable Laws"), except where the failure to comply would not reasonably be expected to have a Material Adverse Effect, and (ii) have not received any Form FDA 483, written notice of adverse finding, warning letter, untitled letter or other correspondence or written notice from any Governmental Agency alleging or asserting non-compliance with (A) any Applicable Laws or (B) any Licenses and supplements or amendments thereto required by any such Applicable Laws. To the Company's knowledge, the Company's product candidates described in the Registration Statement, the General Disclosure Package or the Prospectus ("Product Candidates") are manufactured or processed in compliance in all material respects with all Applicable Laws.

(bbb) *Regulatory Matters: Clinical Trials.* None of the Company's Product Candidates have received marketing approval from any regulatory authority. All clinical trials and preclinical studies conducted by or on behalf of the Company that are described in the Registration Statement, the General Disclosure Package and the Prospectus, (collectively, "Company Trials"), were and, if still pending, are being conducted in all material respects in accordance with all Applicable Laws, and accepted professional scientific standards, except where the failure to so conduct would not be reasonably expected to have a Material Adverse Effect; the descriptions in the Registration Statement, the General Disclosure Package and the Prospectus of the results of any Company Trials are accurate and non-misleading descriptions in all material respects; the Company has no knowledge of any other studies or trials not described in the Registration Statement, the General Disclosure Package and the Prospectus, the results of which reasonably contradict in any material respect the results of the Company Trials described in the Registration Statement, the General Disclosure Package and the Prospectus; the Company has not received any written notices, correspondence, or other communication from the FDA or any other Governmental Agency requiring the termination, material modification or suspension of any Company Trials, where such termination, material modification or suspension would reasonably be expected to have a Material Adverse Effect. To the Company's knowledge, none of the Company Trials involved any investigator who has been disqualified as a clinical investigator or has been found by the FDA to have engaged in scientific misconduct.

(ccc) *Compliance with Health Care Laws.* The Company and its subsidiaries are, and at all times have been, in compliance in all material respects with all Health Care Laws. For purposes of this Agreement, "Health Care Laws" means: (i) the Federal Food, Drug, and Cosmetic Act (21 U.S.C. Section 301 et seq.), the Public Health Service Act (42 U.S.C. Section 201 et seq.), and the regulations promulgated thereunder; (ii) licensure, quality, safety and accreditation requirements under applicable federal, state, local or foreign laws or regulatory bodies; (iii) all other applicable local, state, federal, national, supranational and foreign laws relating to the regulation of the Company or its subsidiaries; and (iv) the directives and regulations promulgated pursuant to such statutes and any state or non-U.S. counterpart thereof. Neither the Company nor any of its subsidiaries has received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any court or arbitrator or governmental

or regulatory authority or third party alleging that any product operation or activity is in violation of any Health Care Laws nor, to the Company's knowledge, is any such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action threatened. The Company and its subsidiaries have filed, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Health Care Laws, and all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and accurate on the date filed in all material respects (or were corrected or supplemented by a subsequent submission). Neither the Company nor any of its subsidiaries is a party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any governmental or regulatory authority. Additionally, neither the Company, any of its subsidiaries nor, to the Company's knowledge, any of their respective employees, officers, directors, or agents has been excluded, suspended or debarred from participation in any U.S. federal health care program or human clinical research or, to the knowledge of the Company, is subject to a governmental inquiry, investigation, proceeding, or other similar action that could reasonably be expected to result in debarment, suspension, or exclusion.

(ddd) *No Rights to Purchase Preferred Stock.* The issuance and sale of the Securities as contemplated hereby will not cause any holder of any shares of capital stock, securities convertible into or exchangeable or exercisable for capital stock or options, warrants or other rights to purchase capital stock or any other securities of the Company to have any right to acquire any shares of preferred stock of the Company.

(eee) *[Reserved]*

(fff) *Officer's Certificates.* Any certificate signed by any officer of the Company or any of its subsidiaries and 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.

## SECTION 2. Sale and Delivery to Underwriters; Closing.

(a) *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 proportion of the number of Securities set forth in Schedule A opposite the name of such Underwriter, which number of Securities set forth in Schedule A opposite the name of such Underwriter, plus any additional number of Securities which such Underwriter may become obligated to purchase pursuant to the provisions of Section 10 hereof, bears to the total number of Securities, subject, in each case, to such adjustments among the Underwriters as the Representatives in their absolute discretion shall make to eliminate any sales or purchases of fractional shares.

(b) *[Reserved]*

(c) *Payment.* Payment of the purchase price for, and delivery of certificates or security entitlements for, the Securities shall be made at the offices of Perkins Coie LLP, 1900 Sixteenth Street, Suite 1400, Denver, Colorado 80202, or at such other place as shall be agreed upon by the Representatives and the Company, at 9:00 A.M. (New York City time) on the second (third, if the pricing occurs after 4:30 P.M. (New York City time) on any given day) business day after the date hereof (unless postponed in accordance with the provisions of Section 10), or such other time not later than ten business days after such date as shall be agreed upon by the Representatives and the Company (such time and date of payment and delivery being herein called "Closing Time"). Delivery of the Securities at the Closing Time shall be made through the facilities of The Depository Trust Company unless the Representatives shall otherwise instruct.

Payment shall be made to the Company by wire transfer of immediately available funds to a bank account designated by the Company against delivery to the Representatives for the respective accounts of the Underwriters of certificates or security entitlements for the Securities to be purchased by them. It is understood that each Underwriter has authorized the Representatives, for its account, to accept delivery of, receipt for, and make payment of the purchase price for, the Securities, which it has agreed to purchase. BofA, individually and not as representative of the Underwriters, may (but shall not be obligated to) make payment of the purchase price for the Securities to be purchased by any Underwriter whose funds have not been received by the Closing Time, but such payment shall not relieve such Underwriter from its obligations hereunder.

SECTION 3. Covenants of the Company. The Company covenants with each Underwriter as follows:

(a) *Compliance with Securities Regulations and Commission Requests*. The Company, subject to Section 3(b), will comply with the requirements of Rule 430B, and will notify the Representatives immediately, and confirm the notice in writing, (i) when any post-effective amendment to the Registration Statement shall become effective or any amendment or supplement to the Prospectus shall have been filed, (ii) of the receipt of any comments from the Commission, (iii) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus, including any document incorporated by reference therein or for additional information, (iv) 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 preliminary prospectus or the Prospectus, or of the suspension of the qualification of the Securities for offering or sale in any jurisdiction, or, if the Company gains knowledge of such proceeding, 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 (v) if the Company becomes the subject of a proceeding under Section 8A of the 1933 Act in connection with the offering of the Securities, if the Company gains knowledge of such proceeding. 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 as soon as reasonably practicable. The Company shall pay the required Commission filing fees relating to the Securities within the time required by Rule 456(b)(1)(i) under the 1933 Act Regulations without regard to the proviso therein and otherwise in accordance with Rules 456(b) and 457(r) under the 1933 Act Regulations (including, if applicable, by updating the "Calculation of Registration Fee" table in accordance with Rule 456(b)(1)(ii) either in a post-effective amendment to the Registration Statement or on the cover page of a prospectus filed pursuant to Rule 424(b)).

(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 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 in a timely manner. 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 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 Time 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 in a timely manner.

(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 to be incorporated by reference therein) and signed copies of all consents and certificates of experts, and 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 the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(d) *Delivery of Prospectuses.* The Company has delivered to each Underwriter, without charge, as many copies of each preliminary prospectus, if any, 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.* If required by applicable law, the Company will use its reasonable best efforts, in cooperation with the Underwriters, 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 reasonably 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 as soon as practicable an earnings 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; provided the Company will be deemed to have furnished such statement to securityholders and the Representatives to the extent it is filed with the Commission pursuant to EDGAR.

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

(i) *Restriction on Sale of Securities.* During a period of 60 days from the date of the Prospectus, the Company will not, without the prior written consent of the Representatives, (i) directly or indirectly, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or file any registration statement under the 1933 Act with respect to any of the foregoing or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the Common Stock, whether any such swap or transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise. The foregoing sentence shall not apply to (A) the Securities to be sold hereunder, (B) any shares of Common Stock, options to purchase shares of Common Stock or restricted stock units issued by the Company, or any shares of Common Stock issued upon the exercise of an option or warrant or vesting and settlement of restricted stock units, pursuant to any stock option, warrants, stock bonus or other stock plan or arrangement described in the Registration Statement, the General Disclosure Package and the Prospectus, and (C) any shares of Common Stock or Related Securities in connection with any acquisition, collaboration, merger, licensing or other joint venture or strategic transaction involving the Company; provided that in the case of clause (C), such issuances shall not be greater than 5% of the total outstanding shares of the Company immediately following the Closing Date and the recipients of such shares of Common Stock or Related Securities agree in writing to be bound by the terms of an agreement substantially in the form of Exhibit A hereto signed by the persons listed on Schedule C hereto, (D) any shares of Common Stock issued in an “at-the-market” offering pursuant to that certain Open Market Sale Agreement<sup>SM</sup>, by and between the Company and Jefferies, dated November 8, 2023, as amended from time to time, and (E) the filing of any Resale Registration Statement (as defined in and as required pursuant to the Company’s obligations under the Securities Purchase Agreement (the “SPA”) by and between the Company and the parties listed therein, dated as of the date of this Underwriting Agreement) and the inclusion of shares issuable upon exercise of the Pre-Funded Warrants pursuant to the SPA in such Resale Registration Statement. For purposes of the foregoing, “Related Securities” shall mean any options or warrants or other rights to acquire shares of Common Stock or any securities exchangeable or exercisable for or convertible into shares of Common Stock, or to acquire other securities or rights ultimately exchangeable or exercisable for, or convertible into, shares of Common Stock.

(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. Additionally, the Company shall report the use of proceeds from the issuance of the Securities as may be required under Rule 463 under the 1933 Act.

(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.

#### SECTION 4. Payment of Expenses.

(a) *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 to the Underwriters of copies of each preliminary prospectus, if any, each Issuer Free Writing Prospectus, if any, and the Prospectus and any amendments or supplements thereto and the reasonable costs associated with electronic delivery of any of the foregoing by the Underwriters to investors, (iii) the preparation, 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 fees and disbursements of the Company’s counsel, accountants and other advisors, (v) the qualification of the Securities under securities laws in accordance with the provisions of Section 3(e) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Underwriters in connection therewith and in connection with the preparation of the Blue Sky Survey and any supplement thereto, (vi) the fees and expenses of any transfer agent or registrar for the Securities, (vii) 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 by the Company or with the Company’s prior written consent 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, (viii) the fees and expenses incurred in connection with the listing of the Securities on Nasdaq and (ix) 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).

(b) *Termination of Agreement.* If this Agreement is terminated by the Representatives in accordance with the provisions of Section 5, Section 9(a) (i) or (iii) or Section 10 hereof, the Company shall reimburse the Underwriters (or, in the case of a termination pursuant to Section 10, the non-defaulting Underwriters) for all of their reasonable and documented out-of-pocket expenses actually incurred, including the reasonable fees and disbursements of counsel for the Underwriters provided that in the case of a termination pursuant to Section 10, the Company shall have no obligation to reimburse a defaulting Underwriter for such costs and expenses.

SECTION 5. 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, and to the following further conditions:

(a) *Effectiveness of Registration Statement*. The Registration Statement has become effective under the 1933 Act and, at the Closing Time, 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. The Company shall have paid the required Commission filing fees relating to the Securities within the time period required by Rule 456(b)(1)(i) under the 1933 Act Regulations without regard to the proviso therein and otherwise in accordance with Rules 456(b) and 457(r) under the 1933 Act Regulations and, if applicable, shall have updated the "Calculation of Registration Fee" table in accordance with Rule 456(b)(1)(ii) either in a post-effective amendment to the Registration Statement or on the cover page of a prospectus filed pursuant to Rule 424(b).

(b) *Opinion of Counsel for Company*. At the Closing Time, the Representatives shall have received the favorable opinion, dated the Closing Time, of Goodwin Procter LLP, counsel for the Company, in form and substance satisfactory to counsel for the Underwriters, together with signed or reproduced copies of such letter for each of the other Underwriters.

(c) *Opinion of Intellectual Property Counsel for Company*. At the Closing Time, the Representatives shall have received the favorable opinion, dated the Closing Time, of Greenberg Traurig LLP, counsel for the Company with respect to intellectual property matters, in form and substance satisfactory to counsel for the Underwriters, together with signed or reproduced copies of such letter for each of the other Underwriters.

(d) *Opinion of Counsel for Underwriters*. At the Closing Time, the Representatives shall have received the favorable opinion, dated the Closing Time, of Perkins Coie LLP, counsel for the Underwriters, together with signed or reproduced copies of such letter for each of the other Underwriters. 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.

(e) *Officers' Certificate*. At the Closing Time, 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 change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business, and the Representatives shall have received a certificate of the chief executive officer or the president of the Company and of the chief financial or chief accounting officer of the Company, dated the Closing Time, to the effect that (i) there has been no such material adverse change, (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 Time, (iii) the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied at or prior to the Closing Time, and (iv) 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.

(f) *Accountant's Comfort Letter.* At the time of the execution of this Agreement, the Representatives shall have received from Ernst & Young LLP a letter, dated such date, in form and substance 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.

(g) *Bring-down Comfort Letter.* At the Closing Time, the Representatives shall have received from Ernst & Young LLP a letter, dated as of the Closing Time, to the effect that they reaffirm the statements made in the letter furnished pursuant to subsection (f) of this Section, except that the specified date referred to shall be a date not more than three (3) business days prior to the Closing Time.

(h) *Approval of Listing.* At the Closing Time, the Securities shall have been approved for listing on Nasdaq, subject only to official notice of issuance.

(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 the persons listed on Schedule C hereto.

(j) *[Reserved]*

(k) *[Reserved]*

(l) *Additional Documents.* At the Closing Time counsel for the Underwriters shall have been furnished with such customary 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, the obligations of the several Underwriters to purchase the Securities, may be terminated by the Representatives by notice to the Company at any time at or prior to the Closing Time, and such termination shall be without liability of any party to any other party except as provided in Section 4 and except that Sections 1, 6, 7, 8, 14, 15, 16 and 17 shall survive any such termination and remain in full force and effect.

#### SECTION 6. Indemnification.

(a) *Indemnification of Underwriters.* The Company agrees to indemnify and hold harmless each Underwriter, its affiliates (as such term is defined in Rule 501(b) under the 1933 Act (each, an "Affiliate")), its selling agents and each person, if any, who controls any Underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act as follows:

(i) against any and all loss, liability, claim, damage and reasonable and documented expense whatsoever, as incurred, arising out of any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), including any information deemed to be a part thereof pursuant to Rule 430B, or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading or arising out of any untrue statement or alleged untrue statement of a material fact included (A) in any preliminary prospectus, any Issuer Free Writing Prospectus, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) or (B) in any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the offering of the Securities (“Marketing Materials”), including any roadshow or investor presentations made to investors by the Company (whether in person or electronically), or the omission or alleged omission in any preliminary prospectus, any Issuer Free Writing Prospectus, the General Disclosure Package, the Prospectus or in any Marketing Materials of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(ii) against any and all loss, liability, claim, damage and reasonable and documented expense whatsoever, as incurred, to the extent of the aggregate amount paid in settlement of any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission; provided that (subject to Section 6(d) below) any such settlement is effected with the written consent of the Company; and

(iii) against any and all reasonable and documented out-of-pocket expense, as incurred (including the reasonable and documented fees and disbursements of counsel chosen by the Representatives), reasonably incurred in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, to the extent that any such expense is not paid under (i) or (ii) above;

provided, however, that this indemnity agreement shall not apply to any loss, liability, claim, damage or expense to the extent arising out of any untrue statement or omission or alleged untrue statement or omission made in the Registration Statement (or any amendment thereto), including any information deemed to be a part thereof pursuant to Rule 430B, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the Underwriter Information.

(b) *Indemnification of Company, Directors and Officers.* Each Underwriter severally agrees to indemnify and hold harmless the Company, its directors, each of its officers who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act, against any and all loss, liability, claim, damage and reasonable and documented expense described in the indemnity contained in subsection (a) of this Section, as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendment thereto), including any information deemed to be a part thereof pursuant to Rule 430B, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the Underwriter Information.

(c) *Actions against Parties; Notification.* Each indemnified party shall give notice as promptly as reasonably practicable to each indemnifying party of any action commenced against it in respect of which indemnity may be sought hereunder, but failure to so notify an indemnifying party shall not relieve such indemnifying party from any liability hereunder to the extent it is not materially prejudiced as a result thereof and in any event shall not relieve it from any liability which it may have otherwise than on account of this indemnity agreement. In the case of parties indemnified pursuant to Section 6(a) above, counsel to the indemnified parties shall be selected by the Representatives, and, in the case of parties indemnified pursuant to Section 6(b) above, counsel to the indemnified parties shall be selected by the Company. An indemnifying party may participate at its own expense in the defense of any such action; provided, however, that counsel to the indemnifying party shall not (except with the consent of the indemnified party) also be counsel to the indemnified party. In no event shall the indemnifying parties be liable for fees and the reasonable and documented out-of-pocket expenses of more than one counsel (in addition to any local counsel) separate from their own counsel for all indemnified parties in connection with any one action or separate but similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances. No indemnifying party shall, without the prior written consent of the indemnified parties, settle or compromise or consent to the entry of any judgment with respect to any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever in respect of which indemnification or contribution could be sought under this Section 6 or Section 7 hereof (whether or not the indemnified parties are actual or potential parties thereto), unless such settlement, compromise or consent (i) includes an unconditional release of each indemnified party from all liability arising out of such litigation, investigation, proceeding or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

(d) *Settlement without Consent if Failure to Reimburse.* If at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and the reasonable and documented out-of-pocket expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 6(a)(ii) effected without its written consent if (i) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (ii) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into and (iii) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.

SECTION 7. Contribution. If the indemnification provided for in Section 6 hereof is for any reason unavailable to or insufficient to hold harmless an indemnified party in respect of any losses, liabilities, claims, damages or expenses referred to therein, then each indemnifying party shall contribute to the aggregate amount of such losses, liabilities, claims, damages and expenses incurred by such indemnified party, as incurred, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, from the offering of the Securities pursuant to this Agreement or (ii) if the allocation provided by clause (i) is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company, on the one hand, and of the Underwriters, on the other hand, in connection with the statements or omissions which resulted in such losses, liabilities, claims, damages or expenses, as well as any other relevant equitable considerations.

The relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, in connection with the offering of the Securities pursuant to this Agreement shall be deemed to be in the same respective proportions as the total net proceeds from the offering of the Securities pursuant to this Agreement (before deducting expenses) received by the Company, on the one hand, and the total underwriting discount received by the Underwriters, on the other hand, in each case as set forth on the cover of the Prospectus, bear to the aggregate initial public offering price of the Securities as set forth on the cover of the Prospectus.

The relative fault of the Company, on the one hand, and the Underwriters, on the other hand, shall be determined by reference to, among other things, whether any such untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 7 were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section 7. The aggregate amount of losses, liabilities, claims, damages and expenses incurred by an indemnified party and referred to above in this Section 7 shall be deemed to include any legal or other documented expenses reasonably incurred by such indemnified party in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue or alleged untrue statement or omission or alleged omission.

Notwithstanding the provisions of this Section 7, no Underwriter shall be required to contribute any amount in excess of the underwriting commissions received by such Underwriter in connection with the Securities underwritten by it and distributed to the public.

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 7, each person, if any, who controls an Underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act and each Underwriter's Affiliates and selling agents shall have the same rights to contribution as such Underwriter, and each director of the Company, each officer of the Company who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act shall have the same rights to contribution as the Company. The Underwriters' respective obligations to contribute pursuant to this Section 7 are several in proportion to the number of Securities set forth opposite their respective names in Schedule A hereto and not joint.

**SECTION 8. Representations, Warranties and Agreements to Survive.** All representations, warranties and agreements contained in this Agreement or in certificates of officers of the Company or any of its subsidiaries submitted pursuant hereto, shall remain operative and in full force and effect regardless of (i) any investigation made by or on behalf of any Underwriter or its Affiliates or selling agents, any person controlling any Underwriter, its officers or directors, any person controlling the Company and (ii) delivery of and payment for the Securities.

**SECTION 9. Termination of Agreement.**

(a) *Termination.* The Representatives may terminate this Agreement, by notice to the Company, at any time at or prior to the Closing Time (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, business affairs or business prospects 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 national 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 of the Securities 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 Nasdaq, or (iv) if trading generally on the NYSE MKT or the New York Stock Exchange or Nasdaq 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) if 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.

(b) *Liabilities.* If this Agreement is terminated pursuant to this Section, such termination shall be without liability of any party to any other party except as provided in Section 4 hereof, and provided further that Sections 1, 6, 7, 8, 14, 15, 16 and 17 shall survive such termination and remain in full force and effect.

SECTION 10. Default by One or More of the Underwriters. If one or more of the Underwriters shall fail at the Closing Time 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 reasonably satisfactory to the Company, 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

(ii) if the number of Defaulted Securities exceeds 10% of the number of Securities to be purchased on such date, 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, either the (i) Representatives or (ii) the Company shall have the right to postpone Closing Time for a period not exceeding seven 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 10.

SECTION 11. 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 BofA at One Bryant Park, New York, New York 10036, attention of Syndicate Department (email: dg.ecm\_execution\_services@bofa.com), with a copy to ECM Legal (email: dg.ecm\_legal@bofa.com); Jefferies at 520 Madison Avenue, New York, New York 10022, attention of General Counsel (facsimile: (646) 619-4437); Leerink Partners at 1301 Avenue of the Americas, 12th Floor, New York, New York 10019, attention of Stuart Nayman (facsimile: (646) 499-7051); notices to the Company shall be directed to it at 11278 Scripps Summit Drive, San Diego, California 92131, attention of Chief Executive Officer, with a copy (which shall not constitute notice) to Goodwin Procter LLP at Three Embarcadero Center, 28th Floor, San Francisco, California 94111, Attention of Maggie Wong.

**SECTION 12. 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, and does not constitute a recommendation, investment advice, or solicitation of any action by the Underwriters, (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 its stockholders, creditors, employees or any other party, (c) no Underwriter has assumed or will assume an advisory or fiduciary responsibility in favor of the Company with respect to the offering 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, and (e) the Underwriters have not provided any legal, accounting, regulatory, investment or tax advice with respect to the offering of the Securities and the Company has consulted its own respective legal, accounting, financial, regulatory and tax advisors to the extent it deemed appropriate, and (f) none of the activities of the Underwriters in connection with the transactions contemplated herein constitutes a recommendation, investment advice or solicitation of any action by the Underwriters with respect to any entity or natural person.

**SECTION 13. Recognition of the U.S. Special Resolution Regimes.**

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

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

For purposes of this Section 13, a "BHC Act Affiliate" has the meaning assigned to the term "affiliate" in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k). "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 14. Parties.** This Agreement shall each inure to the benefit of and be binding upon the Underwriters, 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 Sections 6 and 7 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, 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. 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 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. TIME. TIME SHALL BE OF THE ESSENCE OF THIS AGREEMENT. EXCEPT AS OTHERWISE SET FORTH HEREIN, SPECIFIED TIMES OF DAY REFER TO NEW YORK CITY TIME.

SECTION 19. Counterparts and Electronic Signatures. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same Agreement. Electronic signatures complying with the New York Electronic Signatures and Records Act (N.Y. State Tech. §§ 301-309), as amended from time to time, or other applicable law will be deemed original signatures for purposes of this Agreement. Transmission by telecopy, electronic mail (including pdf or any electronic signature complying with the U.S. federal E-SIGN Act of 2000, e.g., [www.docuSign.com](http://www.docuSign.com)) or other transmission method of an executed counterpart of this Agreement will constitute due and sufficient delivery of such counterpart.

SECTION 20. Effect of Headings. The Section headings herein are for convenience only and shall not affect the construction hereof.

[Signature Page Follows]

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 between the Underwriters and the Company in accordance with its terms.

Very truly yours,

**FATE THERAPEUTICS, INC.**

By /s/ J. Scott Wolchko

Name: J. Scott Wolchko

Title: Chief Executive Officer and President

*[Signature Page to Underwriting Agreement]*

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CONFIRMED AND ACCEPTED,  
as of the date first above written:

**BOFA SECURITIES, INC.**  
**JEFFERIES LLC**  
**LEERINK PARTNERS LLC**

For themselves and as Representatives of the other  
Underwriters named in Schedule A hereto.

**BOFA SECURITIES, INC.**

By /s/ John Bishai  
Name: John Bishai  
Title: Authorized Signatory

**JEFFERIES LLC**

By /s/ Dustin Tyner  
Name: Dustin Tyner  
Title: Authorized Signatory

**LEERINK PARTNERS LLC**

By /s/ Dan Dubin  
Name: Dan Dubin, M.D.  
Title: Authorized Signatory

*[Signature Page to Underwriting Agreement]*

SCHEDULE A

The initial public offering price per share for the Securities shall be \$5.50 in respect of the shares of Common Stock.

The purchase price per share for the Securities to be paid by the several Underwriters shall be \$5.17 in respect of the shares of Common Stock, being an amount equal to the initial public offering price set forth above less \$0.33 per share, subject to adjustment in accordance with Section 2(b) for dividends or distributions declared by the Company and payable on the Securities.

Name of Underwriter	Number of Securities
BofA Securities, Inc.	4,945,454
Jefferies LLC	4,800,000
Leerink Partners LLC	4,800,000
Total	<u>14,545,454</u>

Schedule A

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SCHEDULE B-1

Pricing Terms

1. The Company is selling 14,545,454 shares of Common Stock.
2. The initial public offering price per share for the Securities shall be \$5.50.

Schedule B - 1

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SCHEDULE B-2

Free Writing Prospectuses

None.

Schedule B - 2



SCHEDULE C

List of Persons and Entities Subject to Lock-up

**Directors:**

J. Scott Wolchko\*  
William H. Rastetter  
The Rastetter Family Trust  
The Investment 2002 Trust dated November 11, 2001  
John D. Mendlein  
Timothy P. Coughlin  
Coughlin Family Trust u/a DTD 12/07/2006  
Robert S. Epstein  
Robert Hershberg  
Michael Lee  
Shefali Agarwal  
Karin Jooss  
Yuan Xu

**Executive Officers:**

Edward J. Dulac III  
Cindy R. Tahl  
Bahram Valamehr

\* Also an executive officer.

Schedule C

FORM OF LOCK-UP FROM DIRECTORS, OFFICERS OR OTHER  
STOCKHOLDERS PURSUANT TO SECTION 5(i)

March 19, 2024

BofA Securities, Inc.  
Jefferies LLC  
Leerink Partners LLC

as Representatives of the several  
Underwriters to be named in the  
within-mentioned Underwriting Agreement

c/o BofA Securities, Inc.  
One Bryant Park  
New York, New York 10036

c/o Jefferies LLC  
520 Madison Avenue  
New York, New York 10022

c/o Leerink Partners LLC  
53 State Street, 40th Floor  
Boston, Massachusetts 02109

Re: Proposed Public Offering of Common Stock by Fate Therapeutics, Inc.

Dear Ladies and Gentlemen:

The undersigned, a securityholder and/or an officer and/or a director, as applicable, of Fate Therapeutics, Inc., a Delaware corporation (the "Company"), understands that BofA Securities, Inc., Jefferies LLC and Leerink Partners LLC (the "Representatives") proposes to enter into an Underwriting Agreement (the "Underwriting Agreement") with the Company providing for the public offering (the "Public Offering") of shares of the Company's common stock, par value \$0.001 per share (the "Common Stock").

In recognition of the benefit that the Public Offering will confer upon the undersigned as a securityholder and/or an officer and/or a director, as applicable, of the Company, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned agrees with each underwriter to be named in the Underwriting Agreement that, during the period beginning on the date hereof and ending on the date that is 60 days from the date of the Underwriting Agreement (the "Lock-Up Period"), the undersigned will not, without the prior written consent of the Representatives (i) directly or indirectly, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of any shares of the Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, whether now owned or hereafter acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition (including, without limitation, Common Stock or such other securities which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the U.S. Securities and Exchange Commission (the

“Commission”) and securities which may be issued upon exercise of a stock option or warrant) (collectively, the “Lock-Up Securities”), or exercise any right with respect to the registration of any of the Lock-Up Securities, or file, cause to be filed or cause to be confidentially submitted any registration statement in connection therewith, under the Securities Act of 1933, as amended (the “Securities Act”), except as otherwise permitted in the Underwriting Agreement, or (ii) enter into any hedging, swap, loan or any other agreement or any transaction (including, without limitation, any short sale or the purchase or sale of, or entry into, any put or call option, or combination thereof, forward or any other derivative transaction or instrument, however described or defined) that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the Lock-Up Securities, whether any such hedging, swap, loan or transaction is to be settled by delivery of Common Stock or other securities, in cash or otherwise, or (iii) publicly disclose the intention to do any of the foregoing described in clauses (i) and (ii) above.

Notwithstanding the foregoing, and subject to the conditions below, the undersigned may transfer or otherwise dispose of the Lock-Up Securities without the prior written consent of the Representatives, as described below, provided that (1) the Representatives receives a signed lock-up agreement in the form of this lock-up agreement for the balance of the Lock-Up Period from each donee, devisee, trustee, distributee, or transferee, as the case may be, (2) any such transfer shall not involve a disposition for value (except as otherwise permitted in the case of clauses (x), (xi) and (xii) below), (3) such transfers are not required to be reported during the Lock-Up Period with the Commission on Form 4 or Form 5 in accordance with Section 16(a) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or, in the case of clauses (i), (ii), (iii), (iv), (x), (xi) and (xii) below, any such required filing shall clearly indicate in the footnotes thereto that the filing relates to circumstances described in such a clause, and (4) the undersigned does not otherwise voluntarily effect any public filing or report regarding such transfers:

- (i) as a *bona fide* gift or gifts, including, without limitation, to a charitable organization or educational institution, or for *bona fide* estate planning purposes;
- (ii) by will, testamentary document or intestate succession to the legal representative, heir, beneficiary or a member of the immediate family of the undersigned (for purposes of this lock-up agreement, “immediate family” of the undersigned shall mean any relationship by blood, marriage, domestic partnership or adoption, not more remote than first cousin of the undersigned);
- (iii) by operation of law, such as pursuant to a qualified domestic order, divorce settlement, divorce decree or separation agreement;
- (iv) pursuant to an order of a court or regulatory agency having jurisdiction over the undersigned;
- (v) to any corporation, partnership, limited liability company or other entity of which the undersigned or the immediate family of the undersigned are the legal and beneficial owner of all of the outstanding equity securities or similar interests;
- (vi) to any nominee or custodian of a person or entity to whom a disposition or transfer would be permissible under clauses (i) through (v) above;
- (vii) to any immediate family member or any trust, partnership, limited liability company or other entity for the direct or indirect benefit of the undersigned or one or more immediate family members of the undersigned, or if the undersigned is a trust, to a trustor or beneficiary of the trust or to the estate of a beneficiary of such trust;

- (viii) if the undersigned is a corporation, partnership, limited liability company, trust or other business entity, (A) to another corporation, partnership, limited liability company, trust or other business entity that is an affiliate (as defined in Rule 405 promulgated under the Securities Act) of the undersigned, or to any investment fund or other entity controlling, controlled by, managing or managed by or under common control with the undersigned or affiliates of the undersigned (including, for the avoidance of doubt, where the undersigned is a partnership, to its general partner or a successor partnership or fund, or any other funds managed by such partnership), or (B) as part of a distribution to limited partners, limited liability company members or stockholders of the undersigned or holders of similar equity interests in the undersigned;
- (ix) to the Company upon the undersigned's death, disability or termination of employment or other service relationship with the Company; *provided that* such shares of Common Stock were issued to the undersigned pursuant to an agreement or equity award granted pursuant to an employee benefit plan, option, warrant or other right disclosed in the prospectus for the Offering;
- (x) to transfers (1) pursuant to the exercise, in each case on a "cashless" or "net exercise" basis, of any option to purchase shares of Common Stock granted by the Company pursuant to any employee benefit plans or arrangements described in or filed as an exhibit to the registration statement with respect to the Offering, where any shares of Common Stock received by the undersigned upon any such exercise will be subject to the terms of this letter agreement, or (2) for the purpose of satisfying any withholding taxes (including estimated taxes) due as a result of the exercise of any option to purchase shares of Common Stock or the vesting of any restricted stock unit awards granted by the Company pursuant to employee benefit plans or arrangements described in or filed as an exhibit to the registration statement with respect to the Offering, in each case on a "cashless" or "net exercise" basis or through a "sell to cover" transaction, where any shares of Common Stock received by the undersigned upon any such exercise or vesting will be subject to the terms of this letter agreement; *provided that*, in the case of any transfer pursuant this clause, any filing under Section 16(a) of the Exchange Act shall state that such transfer relates to a "cashless" or "net exercise" of stock options or a tax withholding of shares in connection with the exercise of stock options or the vesting of a restricted stock unit award, as applicable, and that any shares of Common Stock received by the undersigned upon any such exercise or vesting and not transferred to the Company will continue to be subject to the terms of this lock-up agreement;
- (xi) to the exercise in cash of an option to purchase shares of Common Stock; *provided that*, in the case of any such exercise, that any shares of Common Stock received by the undersigned upon any such exercise will continue to be subject to the terms of this lock-up agreement; or
- (xii) to the sale or transfer of shares of Common Stock under a trading plan pursuant to Rule 10b5-1 promulgated under the Exchange Act (a "Trading Plan") that has been entered into prior to the date hereof, which has been provided to the Representatives or their legal counsel; *provided that*, to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by or on behalf of the undersigned or the Company regarding such sale or transfer, such announcement or filing shall include a statement that such sale or transfer is in accordance with an established Trading Plan.

Furthermore, the undersigned may sell any shares of Common Stock purchased by the undersigned on the open market following the Public Offering if and only if (i) such sales are not required to be reported in any public report or filing with the Commission or otherwise, and (ii) the undersigned does not otherwise voluntarily effect any public filing or report regarding such sales.

The restrictions described in this letter agreement shall not apply to the establishment of a Trading Plan during the Lock-up Period; provided that no transfers occur under such Trading Plan during such Lockup Period and no public announcement or filing shall be required or voluntarily made by any person in connection therewith during the Lock-up Period.

[Furthermore, notwithstanding anything herein to the contrary, the foregoing restrictions shall not apply to transactions relating to Common Stock or other securities of the Company currently held, or subsequently acquired in the Public Offering or otherwise, by Map 20 Segregated Portfolio, a segregated portfolio of LMA SPC, RedCo I, L.P., Redmile Biopharma Investments I, L.P., Redmile Capital Fund, LP, Redmile Capital Offshore II Master Fund, Ltd., Redmile Capital Offshore Master Fund, Ltd., Redmile Strategic Trading Sub, Ltd., Redmile Strategic Long Only Trading Sub, Ltd., RedCo II Master Fund, L.P. or RM Special Holdings 8, LLC, or any other pooled investment vehicle advised by Redmile Group, LLC.]<sup>1</sup>

The undersigned acknowledges and agrees that the underwriters have neither provided any recommendation or investment advice nor solicited any action from the undersigned with respect to the Public Offering and the undersigned has consulted their own legal, accounting, financial, regulatory and tax advisors to the extent deemed appropriate. The undersigned further acknowledges and agrees that, although the underwriters may be required or choose to provide certain Regulation Best Interest and Form CRS disclosures to you in connection with the Public Offering, the underwriters are not making a recommendation to you to enter into this lock-up agreement, and nothing set forth in such disclosures is intended to suggest that any underwriter is making such a recommendation.

The undersigned hereby represents and warrants that the undersigned has full power, capacity and authority to enter into this lock-up agreement. The undersigned understands that the Company and the underwriters are relying upon this lock-up agreement in proceeding toward the consummation of the Public Offering. The undersigned further understands that this lock-up agreement is irrevocable and shall be binding upon the undersigned's heirs, legal representatives, successors and assigns.

The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the Lock-Up Securities except in compliance with the foregoing restrictions.

Notwithstanding anything to the contrary contained herein, this lock-up agreement will automatically terminate and the undersigned will be released from all of their or its obligations hereunder upon the earliest to occur, if any, of the following: (i) prior to the execution of the Underwriting Agreement, the Company advises the Representatives in writing that it has determined not to proceed with the Public Offering or (ii) the Underwriting Agreement is executed but is terminated (other than with respect to the provisions thereof which survive termination) prior to payment for and delivery of the shares of Common Stock to be sold thereunder.

This lock-up agreement shall be governed by and construed in accordance with the laws of the State of New York.

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<sup>1</sup> NTD: To be included in only Mike Lee's Lock-up.

This lock-up agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same lock-up agreement. Electronic signatures complying with the New York Electronic Signatures and Records Act (N.Y. State Tech. §§ 301-309), as amended from time to time, or other applicable law will be deemed original signatures for purposes of this lock-up agreement. Transmission by telecopy, electronic mail or other transmission method of an executed counterpart of this lock-up agreement will constitute due and sufficient delivery of such counterpart.

*[Signature Page Follows]*

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Very truly yours,  
[NAME OF STOCKHOLDER / OFFICER/ DIRECTOR]

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

If not signing in an individual capacity:

\_\_\_\_\_  
Name of Authorized Signatory (Print)

\_\_\_\_\_  
Title of Authorized Signatory (Print)  
*(Indicate capacity of person signing if signing as custodian,  
trustee, or on behalf of an entity.)*

**Schedule 1(bb)**

**Co-Owned Intellectual Property**

<u>Country</u>	<u>Application No.</u>	<u>Application Date</u>	<u>Registration No.</u>	<u>Registration Date</u>	<u>Case Status</u>	<u>Title</u>	<u>Owner</u>
United States of America	16/631,781	2020-01-16			Pending	COMPOSITIONS AND METHODS FOR IMMUNE CELL MODULATION IN ADOPTIVE IMMUNOTHERAPIES	Fate Therapeutics, Inc. Juno Therapeutics, Inc
United States of America	18/346,130	2023-06-30			Pending	CHIMERIC ANTIGEN RECEPTOR FOR TUMOR TARGETING	Fate Therapeutics, Inc. Ono Pharmaceuticals Co., Ltd.
PCT	PCT/US2023/065537	2023-04-07			Pending	CHIMERIC ANTIGEN RECEPTOR FOR TUMOR TARGETING	Fate Therapeutics, Inc. Ono Pharmaceuticals Co., Ltd.

SCH-1(bb)



THESE SECURITIES REPRESENTED HEREBY AND THE SECURITIES ISSUABLE UPON EXERCISE OF THESE SECURITIES HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE BUT HAVE BEEN OR WILL BE ISSUED IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND, ACCORDINGLY, MAY NOT BE TRANSFERRED UNLESS (i) SUCH SECURITIES HAVE BEEN REGISTERED FOR SALE PURSUANT TO THE SECURITIES ACT OF 1933, AS AMENDED, (ii) SUCH SECURITIES MAY BE SOLD PURSUANT TO RULE 144, (iii) THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO IT THAT SUCH TRANSFER MAY LAWFULLY BE MADE WITHOUT REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (iv) THE SECURITIES ARE TRANSFERRED WITHOUT CONSIDERATION TO AN AFFILIATE OF SUCH HOLDER OR A CUSTODIAL NOMINEE (WHICH FOR THE AVOIDANCE OF DOUBT SHALL REQUIRE NEITHER CONSENT NOR THE DELIVERY OF AN OPINION).

**FATE THERAPEUTICS, INC.**

**FORM OF PRE-FUNDED WARRANT TO PURCHASE COMMON STOCK**

Number of Shares: 3,636,364  
(subject to adjustment)

Warrant No. CSW-[•]

Original Issue Date: March 19, 2024

Fate Therapeutics, Inc., a Delaware corporation (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, RedCo II Master Fund, L.P. or its registered assigns (the “**Holder**”), is entitled, subject to the terms set forth below, to purchase from the Company up to a total of 3,636,364 shares of common stock, \$0.001 par value per share (the “**Common Stock**”), of the Company (each such share, a “**Warrant Share**” and all such shares, the “**Warrant Shares**”) at an exercise price per share equal to \$0.001 per share (as adjusted from time to time as provided in Section 9 herein, the “**Exercise Price**”) upon surrender of this Warrant to Purchase Common Stock (including any Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, the “**Warrant**”) at any time and from time to time on or after the date hereof (the “**Original Issue Date**”), subject to the following terms and conditions:

1. *Definitions.* For purposes of this Warrant, the following terms shall have the following meanings:

(a) “**Affiliate**” means any Person directly or indirectly controlled by, controlling or under common control with, a Holder, as such terms are used in and construed under Rule 405 under the Securities Act, but only for so long as such control shall continue.

(b) “**Commission**” means the United States Securities and Exchange Commission.

(c) “**Closing Sale Price**” means, for any security as of any date, the last trade price for such security on the Principal Trading Market for such security, as reported by Bloomberg L.P., or, if such Principal Trading Market begins to operate on an extended hours basis and does not designate the last trade price, then the last trade price of such security immediately prior to 4:00 P.M., New York City time, as reported by Bloomberg L.P., or if the security is not listed for trading on a national securities exchange or other trading market on the relevant date, the last quoted bid price for the security in the over-the-counter market on the relevant date as reported by OTC Markets Group Inc. (or a similar organization or agency succeeding to its functions of reporting prices). If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then the Board of Directors of the Company shall use its good faith judgment to determine the fair market value. The Board of Directors’ determination shall be binding upon all parties absent demonstrable error. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

(d) “**Principal Trading Market**” means the national securities exchange or other trading market on which the Common Stock is primarily listed on and quoted for trading, which, as of the Original Issue Date, shall be the Nasdaq Global Market.

(e) “**Securities Act**” means the Securities Act of 1933, as amended.

(f) “**Securities Purchase Agreement**” means that certain Securities Purchase Agreement by and between the Company and the Holder, dated as of March 19, 2024.

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

(h) “**Transfer Agent**” means Equiniti Trust Company, LLC, the Company’s transfer agent and registrar for the Common Stock, and any successor appointed in such capacity.

2. *Issuance of Securities; Registration of Warrants.* The Warrant, as initially issued by the Company, is offered and sold pursuant to the Securities Purchase Agreement. Accordingly, the Warrant and the Warrant Shares, are “restricted securities” under Rule 144 promulgated under the Securities Act as of the Original Issue Date. The Company shall register ownership of this Warrant, upon records to be maintained by the Company for that purpose (the “**Warrant Register**”), in the name of the record Holder (which shall include the initial Holder or, as the case may be, any assignee to which this Warrant is assigned hereunder) from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

3. *Registration of Transfers.* Subject to compliance with all applicable securities laws and the rules of the Principal Trading Market, the Company shall, or will cause its Transfer Agent to, register the transfer of all or any portion of this Warrant in the Warrant Register, upon surrender of this Warrant, and payment for all applicable transfer taxes (if any) by the Holder or any subsequent holder. Upon any such registration or transfer, a new warrant to purchase Common Stock in substantially the form of this Warrant (any such new warrant, a “**New Warrant**”) evidencing the portion of this Warrant so transferred shall be issued to the transferee, and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance by such transferee of all of the rights and obligations in respect of the New Warrant that the Holder has in respect of this Warrant. The Company shall, or will cause its Transfer Agent to, prepare, issue and deliver at the Company’s own expense any New Warrant under this [Section 3](#). Until due presentment for registration of transfer, the Company may treat the registered Holder hereof as the owner and holder for all purposes, and the Company shall not be affected by any notice to the contrary.

4. *Exercise and Duration of Warrants.*

(a) All or any part of this Warrant shall be exercisable by the registered Holder in any manner permitted by this Warrant at any time and from time to time on or after the Original Issue Date, subject to [Section 11](#) below.

(b) The Holder may exercise this Warrant by delivering to the Company (i) an exercise notice, in the form attached as [Schedule 1](#) hereto (the “**Exercise Notice**”), completed and duly signed, and (ii) payment of the Exercise Price for the number of Warrant Shares as to which this Warrant is being exercised (which may take the form of a “cashless exercise” if so indicated in the Exercise Notice pursuant to [Section 10](#) below). The date on which such exercise notice is delivered to the Company (as determined in accordance with the notice provisions hereof) is an “**Exercise Date**.” The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice shall have the same effect as cancellation of the original Warrant and issuance of a New Warrant evidencing the right to purchase the remaining number of Warrant Shares, if any. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

## 5. Delivery of Warrant Shares.

(a) Upon exercise of this Warrant, the Company shall promptly (but in no event later than three (3) Trading Days after the Exercise Date), upon the request of the Holder, cause the Transfer Agent to credit such aggregate number of shares of Common Stock to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with The Depository Trust Company ("DTC") through its Deposit Withdrawal Agent Commission system or if the Transfer Agent is not participating in the Fast Automated Securities Transfer Program (the "FAST Program") or if the certificates are required to bear a legend regarding restriction on transferability, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder is entitled pursuant to such exercise. The Holder, or any natural person or legal entity (each, a "Person") so designated by the Holder to receive Warrant Shares, shall be deemed to have become the holder of record of such Warrant Shares as of the Exercise Date, irrespective of the date such Warrant Shares are credited to the Holder's DTC account or the date of delivery of the certificates evidencing such Warrant Shares, as the case may be.

(b) If by the close of the third (3rd) Trading Day after the Exercise Date, the Company fails to deliver to the Holder a certificate representing the required number of Warrant Shares in the manner required pursuant to Section 5(a) or fails to cause the Transfer Agent to credit the Holder's DTC account for such number of Warrant Shares to which the Holder is entitled, and if after such third (3rd) Trading Day and prior to the receipt of such Warrant Shares, the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall, within three (3) Trading Days after the Holder's written request and in the Holder's sole discretion, either (i) pay in cash to the Holder an amount equal to the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased, at which point the Company's obligation to deliver such certificate (and to issue such Warrant Shares) or to cause the Holder's DTC account to be credited for such Warrant Shares shall terminate or (ii) promptly deliver to the Holder a certificate or certificates representing such Warrant Shares and pay cash to the Holder in an amount equal to the excess (if any) of Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased in the Buy-In over the product of (A) the number of shares of Common Stock purchased in the Buy-In, times (B) the Closing Sale Price of a share of Common Stock on the Exercise Date.

(c) To the extent permitted by law and subject to Section 5(b), the Company's obligations to cause the Transfer Agent to issue and deliver Warrant Shares in accordance with and subject to the terms hereof (including the limitations set forth in Section 11 below) are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other Person of any obligation to the Company or any violation or alleged violation of law by the Holder or any other Person, and irrespective of any other circumstance that might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Warrant Shares. Subject to Section 5(b), nothing herein shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

6. *Charges, Taxes and Expenses.* Issuance and delivery of certificates for shares of Common Stock, if any, upon exercise of this Warrant shall be made without charge to the Holder for any issue or transfer tax, transfer agent fee or other incidental tax or expense (excluding any applicable stamp duties) in respect of the issuance of such certificates, all of which taxes and expenses shall be paid by the Company; *provided, however*, that the Company shall not be required to pay any tax that may be payable in respect of any transfer involved in the registration of any certificates for Warrant Shares or the Warrants in a name other than that of the Holder or an Affiliate thereof. The Holder shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Warrant Shares upon exercise hereof.

7. *Replacement of Warrant.* If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction (in such case) and, in each case, a customary and reasonable indemnity and surety bond, if requested by the Company. Applicants for a New Warrant under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Company may prescribe. If a New Warrant is requested as a result of a mutilation of this Warrant, then the Holder shall deliver such mutilated Warrant to the Company as a condition precedent to the Company's obligation to issue the New Warrant.

8. *Reservation of Warrant Shares.* The Company covenants that it will, at all times while this Warrant is outstanding, reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of this Warrant as herein provided, the number of Warrant Shares that are initially issuable and deliverable upon the exercise of this entire Warrant, free from preemptive rights or any other contingent purchase rights of persons other than the Holder (taking into account the adjustments and restrictions of Section 9). The Company covenants that all Warrant Shares so issuable and deliverable shall, upon issuance and the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized, issued and fully paid and non-assessable. The Company will take all such action as may be reasonably necessary to assure that such shares of Common Stock may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of any securities exchange or automated quotation system upon which the Common Stock may be listed. The Company further covenants that it will not, without the prior written consent of the Holder, take any actions to increase the par value of the Common Stock at any time while this Warrant is outstanding.

9. *Certain Adjustments.* The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 9.

(a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding, (i) pays a stock dividend on its Common Stock or otherwise makes a distribution on any class of capital stock issued and outstanding on the Original Issue Date and in accordance with the terms of such stock on the Original Issue Date, as described in the Securities Purchase Agreement, that is payable in shares of Common Stock, (ii) subdivides its outstanding shares of Common Stock into a larger number of shares of Common Stock, (iii) combines its outstanding shares of Common Stock into a smaller number of shares of Common Stock or (iv) issues by reclassification of shares of capital stock any additional shares of Common Stock of the Company, then in each such case the Exercise Price shall be multiplied by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately before such event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, provided, however, that if such record date shall have been fixed and such dividend is not fully paid on the date fixed therefor, the Exercise Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Exercise Price shall be adjusted pursuant to this paragraph as of the time of actual payment of such dividends. Any adjustment pursuant to clause (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination.

(b) Pro Rata Distributions. If the Company, at any time while this Warrant is outstanding, distributes to all holders of Common Stock for no consideration (i) evidences of its indebtedness, (ii) any security (other than a distribution of Common Stock covered by the preceding paragraph) (iii) rights or warrants to subscribe for or purchase any security, or (iv) cash or any other asset (in each case, a "**Distribution**"), other than a reclassification as to which Section 9(c) applies, then in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the ownership limitation set forth in Section 11(a) hereof) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for the participation in such Distribution; *provided, however*, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the

ownership limitation set forth in Section 11(a) hereof, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until the earlier of (i) such time, if ever, as the delivery to such Holder of such portion would not result in the Holder exceeding the ownership limitation set forth in Section 11(a) hereof and (ii) such time as the Holder has exercised this Warrant.

(c) Fundamental Transactions. If, at any time while this Warrant is outstanding (i) the Company effects any merger or consolidation of the Company with or into another Person, in which the Company is not the surviving entity and in which the stockholders of the Company immediately prior to such merger or consolidation do not own, directly or indirectly, at least 50% of the voting power of the surviving entity immediately after such merger or consolidation, (ii) the Company effects any sale to another Person of all or substantially all of its assets in one transaction or a series of related transactions, (iii) pursuant to any tender offer or exchange offer (whether by the Company or another Person), holders of capital stock tender shares representing more than 50% of the voting power of the capital stock of the Company and the Company or such other Person, as applicable, accepts such tender for payment, (iv) the Company consummates a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than the 50% of the voting power of the capital stock of the Company (except for any such transaction in which the stockholders of the Company immediately prior to such transaction maintain, in substantially the same proportions, the voting power of such Person immediately after the transaction) or (v) the Company effects any reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 9(a) above) (in any such case, a “**Fundamental Transaction**”), then following such Fundamental Transaction the Holder shall have the right to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of Warrant Shares then issuable upon exercise in full of this Warrant without regard to any limitations on exercise contained herein (the “**Alternate Consideration**”), and this Warrant will be deemed automatically exercised in full in exchange for such Alternate Consideration pursuant to the “cashless exercise” provisions in Section 10 below upon the consummation of the Fundamental Transaction.

(d) Number of Warrant Shares. Simultaneously with any adjustment to the Exercise Price pursuant to Section 9 (including any adjustment to the Exercise Price that would have been effected but for the final sentence in this paragraph (d)), the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the increased or decreased number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment. Notwithstanding the foregoing, in no event may the Exercise Price be adjusted below the par value of the Common Stock then in effect.

(e) Calculations. All calculations under this Section 9 shall be made to the nearest one-hundredth of one cent or the nearest share, as applicable.

(f) Notice of Adjustments. Upon the occurrence of each adjustment pursuant to this Section 9, the Company at its expense will, at the written request of the Holder, promptly compute such adjustment, in good faith, in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Warrant Shares or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in detail the facts upon which such adjustment is based. Upon written request, the Company will promptly deliver a copy of each such certificate to the Holder and to the Transfer Agent.

(g) Notice of Corporate Events. If, while this Warrant is outstanding, the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including, without limitation, any granting of rights or warrants to subscribe for or purchase any capital stock of the Company or any subsidiary, (ii) authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then, except if such notice and the contents thereof shall be deemed to constitute material non-public

information, the Company shall deliver to the Holder a notice of such transaction at least ten (10) days prior to the applicable record or effective date on which a Person would need to hold Common Stock in order to participate in or vote with respect to such transaction; provided, however, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice. In addition, if while this Warrant is outstanding, the Company authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction contemplated by Section 9(c), other than a Fundamental Transaction under clause (iii) of Section 9(c), then, except if such notice and the contents thereof shall be deemed to constitute material non-public information, the Company shall deliver to the Holder a notice of such Fundamental Transaction at least ten (10) days prior to the date such Fundamental Transaction is consummated.

10. *Payment of Cashless Exercise Price.* Notwithstanding anything contained herein to the contrary, the Holder may, in its sole discretion, satisfy its obligation to pay the Exercise Price through a “cashless exercise,” in which event the Company shall issue to the Holder the number of Warrant Shares in an exchange of securities effected pursuant to Section 3(a)(9) of the Securities Act as determined as follows:

$$X = Y [(A-B)/A]$$

where:

“X” equals the number of Warrant Shares to be issued to the Holder;

“Y” equals the total number of Warrant Shares with respect to which this Warrant is then being exercised;

“A” equals the Closing Sale Price per share of Common Stock as of the Trading Day on the date immediately preceding the Exercise Date; and

“B” equals the Exercise Price per Warrant Share then in effect on the Exercise Date.

For purposes of Rule 144 promulgated under the Securities Act, it is intended, understood and acknowledged that the Warrant Shares issued in such a “cashless exercise” transaction shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the Original Issue Date (provided that the Commission continues to take the position that such treatment is proper at the time of such exercise). In the event that a registration statement registering the issuance of Warrant Shares is, for any reason, not effective at the time of exercise of this Warrant, then this Warrant may only be exercised through a cashless exercise, as set forth in this Section 10.

In no event will the exercise of this Warrant be settled in cash.

#### 11. *Limitations on Exercise.*

(a) Notwithstanding anything to the contrary contained herein, the Company shall not effect any exercise of this Warrant, and the Holder shall not be entitled to exercise this Warrant for a number of Warrant Shares in excess of that number of Warrant Shares which, upon giving effect or immediately prior to such exercise, would cause (i) the aggregate number of shares of Common Stock beneficially owned by the Holder, its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder’s for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), to exceed 9.99% (the “**Maximum Percentage**”) of the total number of issued and outstanding shares of Common Stock of the Company following such exercise, or (ii) the combined voting power of the securities of the Company beneficially owned by the Holder and its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder’s for purposes of Section 13(d) of the Exchange Act to exceed 9.99% of the combined voting power of all of the securities of the Company then outstanding following such exercise. For purposes of this Warrant, in determining the number of outstanding shares of Common Stock, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company’s most recent Form 10-Q or Form 10-K, as the case may be, filed with the Commission prior to the Exercise Date, (y) a more recent public announcement by the Company or (z) any other notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written request of the Holder, the Company shall within three

(3) Trading

Days confirm in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder since the date as of which such number of outstanding shares of Common Stock was reported. By written notice to the Company, the Holder may from time to time increase or decrease the Maximum Percentage to any other percentage not in excess of 19.99% specified in such notice; provided that any such increase or decrease will not be effective until at least the sixty-first (61st) day after such notice is delivered to the Company. For purposes of this Section 11(a), the aggregate number of shares of Common Stock or voting securities beneficially owned by the Holder and its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Exchange Act shall include the shares of Common Stock issuable upon the exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (x) exercise of the remaining unexercised and non-cancelled portion of this Warrant by the Holder and (y) exercise or conversion of the unexercised, non-converted or non-cancelled portion of any other securities of the Company that do not have voting power (including without limitation any securities of the Company which would entitle the holder thereof to acquire at any time Common Stock, including without limitation any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock), is subject to a limitation on conversion or exercise analogous to the limitation contained herein and is beneficially owned by the Holder or any of its Affiliates and other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Exchange Act.

(b) This Section 11 shall not restrict the number of shares of Common Stock which a Holder may receive or beneficially own in order to determine the amount of securities or other consideration that such Holder may receive in the event of a Fundamental Transaction as contemplated in Section 9(c) of this Warrant.

12. *No Fractional Shares.* No fractional Warrant Shares will be issued in connection with any exercise of this Warrant. In lieu of any fractional shares that would otherwise be issuable, the number of Warrant Shares to be issued shall be rounded down to the next whole number and the Company shall pay the Holder in cash the fair market value (based on the Closing Sale Price) for any such fractional shares.

13. *Notices.* Any and all notices or other communications or deliveries hereunder (including, without limitation, any Exercise Notice) shall be in writing and shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile or confirmed e-mail prior to 5:30 P.M., New York City time, on a Trading Day, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile or confirmed e-mail on a day that is not a Trading Day or later than 5:30 P.M., New York City time, on any Trading Day, (iii) the Trading Day following the date of mailing, if sent by nationally recognized overnight courier service specifying next business day delivery, or (iv) upon actual receipt by the Person to whom such notice is required to be given, if by hand delivery. The addresses and e-mail addresses for such communications shall be:

If to the Company:

Fate Therapeutics, Inc.  
Attention: Cindy Tahl  
12278 Scripps Summit Drive  
San Diego, CA 92131  
Attention: Secretary  
Email: [Cindy.tahl@fatetherapeutics.com](mailto:Cindy.tahl@fatetherapeutics.com)

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

Or, in each of the above instances, to such other address or e-mail address as the recipient party has specified by written notice given to each other party at least five (5) days prior to the effectiveness of such change.

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

15. *Miscellaneous.*

(a) No Rights as a Stockholder. The Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, amalgamation, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company.

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

(c) Successors and Assigns. Subject to compliance with applicable securities laws, this Warrant may be assigned by the Holder. This Warrant may not be assigned by the Company without the written consent of the Holder, except to a successor in the event of a Fundamental Transaction. This Warrant shall be binding on and inure to the benefit of the Company and the Holder and their respective successors and assigns. Subject to the preceding sentence, nothing in this Warrant shall be construed to give to any Person other than the Company and the Holder any legal or equitable right, remedy or cause of action under this Warrant. This Warrant may be amended only in writing signed by the Company and the Holder, or their successors and assigns.

(d) Amendment and Waiver. Except as otherwise provided herein, the provisions of this Warrant may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder.

(e) Acceptance. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

(f) Governing Law; Jurisdiction. ALL QUESTIONS CONCERNING THE CONSTRUCTION, VALIDITY, ENFORCEMENT AND INTERPRETATION OF THIS WARRANT SHALL BE GOVERNED BY AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS OF LAW THEREOF. EACH OF THE COMPANY AND THE HOLDER HEREBY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION



OF THE STATE AND FEDERAL COURTS SITTING IN THE CITY OF NEW YORK, BOROUGH OF MANHATTAN, FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR WITH ANY TRANSACTION CONTEMPLATED HEREBY OR DISCUSSED HEREIN (INCLUDING WITH RESPECT TO THE ENFORCEMENT OF THE WARRANT OR ANY OF THE DOCUMENTS DELIVERED HEREUNDER), AND HEREBY IRREVOCABLY WAIVES, AND AGREES NOT TO ASSERT IN ANY SUIT, ACTION OR PROCEEDING, ANY CLAIM THAT IT IS NOT PERSONALLY SUBJECT TO THE JURISDICTION OF ANY SUCH COURT. EACH OF THE COMPANY AND THE HOLDER HEREBY IRREVOCABLY WAIVES PERSONAL SERVICE OF PROCESS AND CONSENTS TO PROCESS BEING SERVED IN ANY SUCH SUIT, ACTION OR PROCEEDING BY MAILING A COPY THEREOF VIA REGISTERED OR CERTIFIED MAIL OR OVERNIGHT DELIVERY (WITH EVIDENCE OF DELIVERY) TO SUCH PERSON AT THE ADDRESS IN EFFECT FOR NOTICES TO IT AND AGREES THAT SUCH SERVICE SHALL CONSTITUTE GOOD AND SUFFICIENT SERVICE OF PROCESS AND NOTICE THEREOF. NOTHING CONTAINED HEREIN SHALL BE DEEMED TO LIMIT IN ANY WAY ANY RIGHT TO SERVE PROCESS IN ANY MANNER PERMITTED BY LAW. EACH OF THE COMPANY AND THE HOLDER HEREBY WAIVES ALL RIGHTS TO A TRIAL BY JURY.

(g) Headings. The headings herein are for convenience only, do not constitute a part of this Warrant and shall not be deemed to limit or affect any of the provisions hereof.

(h) Severability. In case any one or more of the provisions of this Warrant shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Warrant shall not in any way be affected or impaired thereby, and the Company and the Holder will attempt in good faith to agree upon a valid and enforceable provision which shall be a commercially reasonable substitute therefor, and upon so agreeing, shall incorporate such substitute provision in this Warrant.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

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

FATE THERAPEUTICS, INC.

By: \_\_\_\_\_  
Name: J. Scott Wolchko  
Title: President and Chief Executive Officer

*[Signature Page to Warrant]*

**SCHEDULE 1**

**FORM OF EXERCISE NOTICE**

[To be executed by the Holder to purchase Warrant Shares under the Warrant]

Ladies and Gentlemen:

(1) The undersigned is the Holder of Warrant No. CSW-\_\_ (the "Warrant") issued by Fate Therapeutics, Inc., a Delaware corporation (the "Company"). Capitalized terms used herein and not otherwise defined herein have the respective meanings set forth in the Warrant.

(2) The undersigned hereby exercises its right to purchase Warrant Shares pursuant to the Warrant.

(3) The Holder intends that payment of the Exercise Price shall be made as (check one):

- Cash Exercise
- "Cashless Exercise" under Section 10 of the Warrant

(4) If the Holder has elected a Cash Exercise, the Holder shall pay the sum of \$ \_\_\_\_\_ in immediately available funds to the Company in accordance with the terms of the Warrant.

(5) Pursuant to this Exercise Notice, the Company shall deliver to the Holder Warrant Shares determined in accordance with the terms of the Warrant. The Warrant Shares shall be delivered to the following DWAC Account Number:

\_\_\_\_\_

(6) By its delivery of this Exercise Notice, the undersigned represents and warrants to the Company that in giving effect to the exercise evidenced hereby the Holder, its Affiliates and any other Person whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Exchange Act will not beneficially own in excess of the number of shares of Common Stock (as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended) permitted to be owned under Section 11(a) of the Warrant to which this notice relates.

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

Name of Holder: \_\_\_\_\_

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

Name: \_\_\_\_\_

Title: \_\_\_\_\_

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



Goodwin Procter LLP  
Three Embarcadero Center, Suite 2800  
San Francisco, CA 94111

goodwinlaw.com  
+1 415 733 6000

March 19, 2024

Fate Therapeutics, Inc.  
12278 Scripps Summit Drive  
San Diego, CA 92131

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

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-3 (File No. 333-275402) (as amended or supplemented, the "Registration Statement") filed on November 8, 2023 with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration of the offer by Fate Therapeutics, Inc., a Delaware corporation (the "Company"), of up to \$300,000,000 of any combination of securities of the types specified therein. The Registration Statement was declared effective by the Commission on November 27, 2023. Reference is made to our opinion letter dated November 8, 2023 and included as Exhibit 5.1 to the Registration Statement. We are delivering this supplemental opinion letter in connection with the prospectus supplement (the "Prospectus Supplement") filed on March 20, 2024 by the Company with the Commission pursuant to Rule 424 under the Securities Act. The Prospectus Supplement relates to the offering by the Company of up to 14,545,454 shares of the Company's common stock, par value \$0.001 per share (the "Shares"), covered by the Registration Statement. The Shares are being sold to the several underwriters named in, and pursuant to, an underwriting agreement among the Company and such underwriters (the "Underwriting Agreement").

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

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

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

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

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Company's Current Report on Form 8-K and to the references to our firm under the caption "Legal Matters" in the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ Goodwin Procter LLP

GOODWIN PROCTER LLP

## SECURITIES PURCHASE AGREEMENT

This **SECURITIES PURCHASE AGREEMENT** (the “**Agreement**”), dated as of March 19, 2024, is entered into by and between Fate Therapeutics, Inc., a Delaware corporation (the “**Company**”), and the buyers listed on the Schedule of Buyers attached hereto as **Exhibit A**, as may be updated in accordance with **Section 10(g)** (individually, together with its permitted designees and assigns, the “**Buyer**” and collectively, the “**Buyers**”). Capitalized terms used herein are defined in-line or in **Section 8** hereof.

## RECITALS

**WHEREAS**, subject to the terms and conditions set forth in this Agreement, the Company wishes to sell to each Buyer, severally and not jointly, and each Buyer wishes to buy from the Company, pre-funded warrants to purchase shares of the Company’s Common Stock, par value \$0.001 per share (the “**Common Stock**”), at an aggregate purchase price of \$19,996,365.64, with the amount to be purchased by each Buyer as set forth opposite such Buyer’s name on the Schedule of Buyers attached hereto as **Exhibit A**. The pre-funded warrants to be purchased hereunder shall be in the form attached hereto as **Exhibit B** and are referred to herein as the “**Pre-Funded Warrants**.” The shares of Common Stock issuable upon exercise of the Pre-Funded Warrants are referred to herein as the “**Warrant Shares**” and together with the Pre-Funded Warrants, as the “**Securities**”.

**WHEREAS**, on or about March 19, 2024, the Company intends to enter into an Underwriting Agreement with BofA Securities, Inc., Jefferies LLC and Leerink Partners LLC, as representatives of the several underwriters (the “**Underwriting Agreement**”), pursuant to which the Company will offer and sell shares of its Common Stock in an underwritten public offering (the “**Public Offering**”) pursuant to the Company’s registration statement on Form S-3 (File No. 333-275402).

**NOW THEREFORE**, the Company and the Buyers hereby agree as follows:

**1. PURCHASE OF PRE-FUNDED WARRANTS.**

Subject to the terms and conditions set forth in this Agreement, the Company agrees to sell to the Buyers, and the Buyers or their designees or assignees have agreed to purchase from the Company, the Pre-Funded Warrants as follows:

(a) **Purchase**. On the date each of the conditions set forth in **Sections 6** and **7** below is satisfied, each Buyer shall purchase from the Company an aggregate number of Pre-Funded Warrants set forth opposite such Buyer’s name on the Schedule of Buyers attached hereto as **Exhibit A** at a price per Pre-Funded Warrant equal to \$5.499 (the total purchase price for the Pre-Funded Warrants purchased by a respective Buyer, the “**Purchase Price**”). On or prior to the Closing Date, each Buyer will pay its Purchase Price via wire transfer in accordance with wire instructions provided by the Company to the Buyers prior to the Closing Date. Each Buyer shall severally, and not jointly, be liable for only the purchase of Pre-Funded Warrants calculated in accordance with this **Section 1(a)** and not for the purchase of Pre-Funded Warrants so calculated for any other Buyer. On or before the Closing Date, the Company will deliver or cause to be delivered to each Buyer the Pre-Funded Warrant purchased by such Buyer, registered in such Buyer’s name. Such delivery shall be against payment of the purchase price therefor by such Buyer by wire transfer of immediately available funds to the Company in accordance with the Company’s written wire instructions. Upon issuance and payment therefor as provided herein, such Pre-Funded Warrants shall be validly issued, fully paid and non-assessable. The date of the Buyers’ purchase of the Pre-Funded Warrants is referred to as the “**Closing Date**.”

(b) **Taxes**. The Company shall pay any and all transfer, stamp or similar taxes that may be payable with respect to the issuance and delivery of any Pre-Funded Warrants to the Buyers made under this Agreement.

(c) **Delivery**. The Pre-Funded Warrants shall be delivered to the Buyers in definitive form, registered in such names and in such denominations as the Buyers shall request in writing not later than the Closing Date.

## 2. BUYERS' REPRESENTATIONS AND WARRANTIES.

Each Buyer, severally and not jointly, represents and warrants to the Company that:

- (a) Investment Purpose. The Buyer is entering into this Agreement and acquiring the Pre-Funded Warrants and the Warrant Shares for its own account for investment only and not with a view towards, or for resale in connection with, the public sale or distribution thereof; provided, however, by making the representations herein, the Buyer does not agree to hold any of the Pre-Funded Warrants or the Warrant Shares for any minimum or other specific term.
- (b) Accredited Investor Status. The Buyer is an "accredited investor" as that term is defined in Rule 501(a) of Regulation D under the Securities Act.
- (c) Information. The Buyer has been furnished with all materials relating to the business, finances and operations of the Company and materials relating to the offer and sale of the Securities that have been reasonably requested by the Buyer. The Buyer understands that its investment in the Securities involves a high degree of risk. The Buyer (i) is able to bear the economic risk of an investment in the Securities including a total loss, (ii) has such knowledge and experience in financial and business matters that it is capable of evaluating the merits and risks of the proposed investment in the Securities and (iii) has had an opportunity to ask questions of and receive answers from the officers of the Company concerning the financial condition and business of the Company and other matters related to an investment in the Securities. Neither such inquiries nor any other due diligence investigations conducted by the Buyer or its representatives shall modify, amend or affect the Buyer's right to rely on the Company's representations and warranties contained in Section 3 below. The Buyer has sought such accounting, legal and tax advice as it has considered necessary to make an informed investment decision with respect to its acquisition of the Securities.
- (d) No Governmental Review. The Buyer understands that no United States federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Securities or the fairness or suitability of the investment in the Securities nor have such authorities passed upon or endorsed the merits of the offering of the Securities.
- (e) Organization. The Buyer is organized, validly existing and in good standing or equivalent under the laws of the jurisdiction set forth opposite its name on the Schedule of Buyers attached hereto as Exhibit A and has the requisite organizational power and authority to own its properties and to carry on its business as now being conducted.
- (f) Validity; Enforcement. This Agreement has been duly and validly authorized, executed and delivered on behalf of the Buyer and is a valid and binding agreement of the Buyer enforceable against the Buyer in accordance with its terms, subject as to enforceability to (i) general principles of equity and to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies and (ii) public policy underlying any law, rule or regulation (including any federal or state securities law, rule or regulation) with regards to indemnification, contribution or exculpation. The execution and delivery of this Agreement by the Buyer and the consummation by it of the transactions contemplated hereby and thereby do not conflict with the Buyer's certificate of organization, operating agreement or similar documents, and do not require further consent or authorization by the Buyer, its partners, shareholders, managers or its members.
- (g) No "Bad Actor" Disqualification Events. Neither (i) the Buyer, (ii) any of its directors, executive officers, other officers that may serve as a director or officer of any company in which it invests, general partners or managing members, nor (iii) any beneficial owner of the Company's voting equity securities (in accordance with Rule 506(d) of the Securities Act) held by the Buyer is subject to any Disqualification Event (as defined in Section 3(b) (ii)), except for Disqualification Events covered by Rule 506(d)(2)(ii) or (iii) or (d)(3) under the Securities Act and disclosed in writing to the Company.

### 3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY.

(a) Representations and Warranties in Underwriting Agreement. The Company hereby represents and warrants to and agrees with the Buyers to all the same representations and warranties contained in Section 1 of the Underwriting Agreement *mutatis mutandis* to the same extent as if such representations and warranties were set forth herein for the benefit of the Buyers instead of the underwriters party to the Underwriting Agreement (except that references to the Underwriting Agreement therein shall be references to this Agreement and references to the “Pre-Funded Warrants” and the “Warrant Shares” thereunder shall be references to the Pre-Funded Warrants and the Warrant Shares as defined herein, respectively).

(b) Additional Representations and Warranties. The Company further represents and warrants to the Buyer as follows:

(i) neither the Company nor any person acting on its behalf has engaged or will engage in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with any offer or sale of the Securities. The Securities are not being offered in a manner involving a public offering under, or in a distribution in violation of, the Securities Act or any state securities laws. Neither the Company nor any person acting on the Company’s behalf has, directly or indirectly, at any time within the past six (6) months, made any offer or sale of any security or solicitation of any offer to buy any security under circumstances that would (i) eliminate the availability of the exemption from registration under Regulation D under the Securities Act in connection with the offer and sale by the Company of the Securities as contemplated hereby or (ii) cause the offering of the Securities pursuant to this Agreement to be integrated with prior offerings by the Company for purposes of the Securities Act or any applicable stockholder approval provisions. Neither the Company nor any person acting on the Company’s behalf has offered or sold or will offer or sell any securities, or has taken or will take any other action, which would reasonably be expected to subject the offer, issuance or sale of the Securities, as contemplated hereby, to the registration provisions of the Securities Act;

(ii) no “bad actor” disqualifying event described in Rule 506(d)(1)(i)-(viii) under the Securities Act (a “Disqualification Event”) is applicable to the Company, except for a Disqualification Event as to which Rule 506(d)(2)(ii-iv) or (d)(3) under the Securities Act is applicable;

(iii) the Company is not a U.S. business that (i) produces, designs, tests, manufactures, fabricates, or develops one or more “critical technologies”; (ii) performs the functions as set forth in column 2 of Appendix A to 31 C.F.R. Part 800 with respect to “covered investment critical infrastructure”; or (iii) to the Company’s knowledge, maintains or collects, directly or indirectly, “sensitive personal data” of U.S. citizens, in each case as such terms in quotation marks are defined in the Defense Production Act of 1950, as amended, including all implementing regulations thereof; and

(iv) assuming the accuracy of the Buyers’ representations and warranties set forth in Section 2, no registration under the Securities Act is required for the offer and sale of the Securities by the Company to the Buyers as contemplated hereby. The issuance and sale of the Securities hereunder does not contravene the rules and regulations of the Nasdaq Global Market. The Company has offered the Securities for sale only to the Buyers.

### 4. REGISTRATION RIGHTS.

**4.1 Definitions.** For the purpose of this Section 4:

(a) the term “**Resale Registration Statement**” shall mean any registration statement required to be filed by Section 4.2 below, including the Mandatory Registration Statement and any Additional Registration Statement (as such terms are defined below), and shall include any preliminary prospectus, final prospectus, exhibit or amendment included in or relating to such registration statements; and

(b) the term “**Registrable Shares**” means the (i) Warrant Shares, and (ii) any other shares of Common Stock issued as a dividend or other distribution with respect to, in exchange for, or in replacement of the Warrant Shares; provided, however, that a security shall cease to be a Registrable Share upon the earliest to occur of the following: (i) a Resale Registration Statement registering such security under the Securities Act has been declared or becomes effective and such security has been sold or otherwise transferred by the holder thereof pursuant to and in a manner contemplated by such effective Resale Registration Statement, (ii) such security is sold pursuant to Rule 144 under circumstances in which any legend borne by such security relating to restrictions on transferability thereof, under the



Securities Act or otherwise, is removed by the Company, (iii) such security is eligible to be sold pursuant to Rule 144 without condition or restriction, including without any limitation as to volume of sales, and without the Buyer complying with any method of sale requirements or notice requirements under Rule 144 or (iv) such security shall cease to be outstanding following its issuance.

**4.2 Registration Procedures and Expenses.** The Company shall:

(a) use commercially reasonable efforts to file a Resale Registration Statement (the “**Mandatory Registration Statement**”) with the SEC on or before the date thirty (30) days following the Closing Date (the “**Filing Date**”) to register all of the Registrable Shares on Form S-3 under the Securities Act (providing for shelf registration of such Registrable Shares under SEC Rule 415), and to provide each Buyer with a copy of such draft Mandatory Registration Statement for review not less than two (2) business days before filing and to reflect in the Mandatory Registration Statement filed with the SEC such comments regarding the Buyers and the plan of distribution as the Buyers may reasonably and promptly propose no later than two (2) business days after the Buyers have been so furnished with a copy of such draft Mandatory Registration Statement;

(b) use its commercially reasonable efforts to cause such Mandatory Registration Statement to be declared effective within the earlier of (i) thirty (30) days following the Filing Date (or, in the event the Staff reviews and has written comments to the Mandatory Registration Statement, within one hundred and twenty (120) days following the Closing Date) and (ii) the tenth (10<sup>th</sup>) business day after the date the Company is notified (orally or in writing, whichever is earlier) by the SEC that the Mandatory Registration Statement will not be “reviewed” or will not be subject to further comments from the Staff (the earlier of the foregoing or the applicable date set forth in Section 4.2(h), the “**Effectiveness Deadline**”), such efforts to include, without limiting the generality of the foregoing, preparing and filing with the SEC any financial statements or other information that is required to be filed prior to the effectiveness of such Mandatory Registration Statement;

(c) notwithstanding anything contained in this Agreement to the contrary, in the event that the SEC limits the amount of Registrable Shares or otherwise requires a reduction in the number of Registrable Shares that may be included and sold by the Buyers in the Mandatory Registration Statement (in each case, subject to [Section 4.3](#)), then the Company shall prepare and file (i) within ten (10) business days of the first date or time that such excluded Registrable Shares may then be included in a Resale Registration Statement if the SEC shall have notified the Company that certain Registrable Shares were not eligible for inclusion in the Resale Registration Statement or (ii) in all other cases, within twenty (20) days following the date that the Company becomes aware that such additional Resale Registration Statement is required (the “**Additional Filing Date**”), a Resale Registration Statement (any such Resale Registration Statement registering such excluded Registrable Shares, an “**Additional Registration Statement**”) to register any Registrable Shares that have been excluded (or, if applicable, the maximum number of such excluded Registrable Shares that the Company is permitted to register for resale on such Additional Registration Statement consistent with SEC guidance), if any, from being registered on the Mandatory Registration Statement;

(d) use its commercially reasonable efforts to cause any such Additional Registration Statement to be declared effective as promptly as practicable following the Additional Filing Date, such efforts to include, without limiting the generality of the foregoing, preparing and filing with the SEC any financial statements or other information that is required to be filed prior to the effectiveness of any such Additional Registration Statement;

(e) prepare and file with the SEC such amendments and supplements to such Resale Registration Statements and the prospectus used in connection therewith as may be necessary to keep such Resale Registration Statements continuously effective and free from any material misstatement or omission to state a material fact therein until termination of such obligation as provided in [Section 4.6](#) below, subject to the Company’s right to suspend pursuant to [Section 4.5](#);

(f) furnish to the Buyers such number of copies of prospectuses in conformity with the requirements of the Securities Act and such other documents as the Buyers may reasonably request, in order to facilitate the public sale or other disposition of all or any of the Registrable Shares by the Buyers;

(g) file such documents as may be required of the Company for normal securities law clearance for the resale of the Registrable Shares in such states of the United States as may be reasonably requested by the Buyers and use its commercially reasonable efforts to maintain such blue sky qualifications during the period the Company is required to maintain effectiveness of the Resale Registration Statements; provided, however, that the Company shall not be required in connection with this [Section 4.2\(g\)](#) to qualify as a foreign corporation or execute a general consent to service of process in any jurisdiction in which it is not now so qualified or has not so consented;

(h) upon notification by the SEC that the Resale Registration Statement will not be reviewed or is not subject to further review by the SEC, the Company shall within three (3) business days following the date of such notification request acceleration of such Resale Registration Statement (with the requested effectiveness date to be not more than two (2) business days later);

(i) upon notification by the SEC that the Resale Registration Statement has been declared effective by the SEC, the Company shall file the final prospectus under Rule 424 of the Securities Act (“**Rule 424**”) within the applicable time period prescribed by Rule 424;

(j) advise the Buyers promptly:

(i) of the effectiveness of the Resale Registration Statement or any post-effective amendments thereto;

(ii) of any request by the SEC for amendments to the Resale Registration Statement or amendments to the prospectus or for additional information relating thereto;

(iii) of the issuance by the SEC of any stop order suspending the effectiveness of the Resale Registration Statement under the Securities Act or of the suspension by any state securities commission of the qualification of the Registrable Shares for offering or sale in any jurisdiction, or the initiation of any proceeding for any of the preceding purposes; and

(iv) of the existence of any fact and the happening of any event that makes any statement of a material fact made in the Resale Registration Statement, the prospectus and amendment or supplement thereto, or any document incorporated by reference therein, untrue, or that requires the making of any additions to or changes in the Resale Registration Statement or the prospectus in order to make the statements therein not misleading;

(k) cause all Registrable Shares to be listed on each securities exchange, if any, on which equity securities by the Company are then listed; and

(l) bear all expenses in connection with the procedures in paragraphs (a) through (k) of this Section 4.2 and the registration of the Registrable Shares on such Resale Registration Statement and the satisfaction of the blue sky laws of such states.

#### **4.3 Rule 415; Cutback.**

(a) If at any time the staff of the SEC (“**Staff**”) takes the position that the offering of some or all of the Registrable Shares in a Resale Registration Statement is not eligible to be made on a delayed or continuous basis under the provisions of Rule 415 under the Securities Act or requires any Buyer to be named as an “underwriter,” the Company shall (in consultation with legal counsel to the lead Buyer) use its commercially reasonable efforts to persuade the SEC that the offering contemplated by the Resale Registration Statement is a valid secondary offering and not an offering “by or on behalf of the issuer” as defined in Rule 415 and that none of the Buyers is an “underwriter;” provided, that if the SEC or another regulatory agency requests that a Buyer be identified as a statutory underwriter in the Resale Registration Statement, Buyer will have the opportunity to withdraw from the Resale Registration Statement upon its prompt written request to the Company. In the event that, despite the Company’s commercially reasonable efforts and compliance with the terms of this Section 4.3, the Staff refuses to alter its position, the Company shall (i) remove from the Resale Registration Statement such portion of the Registrable Shares (the “**Cut Back Shares**”) and/or (ii) agree to such restrictions and limitations on the registration and resale of the Registrable Shares as the Staff may require to assure the Company’s compliance with the requirements of Rule 415 (collectively, the “**SEC Restrictions**”); provided, however, that the Company shall not agree to name any Buyer as an “underwriter” in such Registration Statement without the prior written consent of such Buyer. Any cutback imposed on the Buyers pursuant to this Section 4.3 shall be allocated among the Buyers on a pro rata basis, unless the SEC Restrictions otherwise require or provide. No liquidated damages shall accrue as to any Cut Back Shares until such date as the Company is able to effect the registration of such Cut Back Shares in accordance with any SEC Restrictions (such date, the “**Restriction Termination Date**” of such Cut Back Shares). From and after the Restriction Termination Date applicable to any Cut Back Shares, all of the provisions of this Section 4 shall again be applicable to such Cut Back Shares; provided, however, that (x) the Filing Deadline for the Resale Registration Statement including such Cut Back Shares shall be ten (10) business days after such Restriction Termination Date, and (y) the Effectiveness Deadline with respect to such Cut Back Shares shall be the ninetieth (90<sup>th</sup>) day immediately after the Restriction Termination Date or the one hundred and twentieth (120<sup>th</sup>) day if the Staff reviews such Resale Registration Statement (but in any event no later than three (3) business days from the Staff indicating it has no further comments on such Resale Registration Statement).

#### 4.4 Indemnification.

(a) The Company agrees to indemnify and hold harmless the Buyers, and the partners, members, officers and directors of the Buyers and each person, if any, who controls the Buyers within the meaning of the Securities Act or the Exchange Act, from and against any losses, claims, damages or liabilities to which they may become subject (under the Securities Act or otherwise) insofar as such losses, claims, obligations, damages or liabilities (or actions or proceedings in respect thereof) arise out of, or are based upon, any breach of this Agreement or any other transaction document by the Company or any untrue statement or alleged untrue statement of a material fact contained in the Resale Registration Statement or any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading or arise out of any failure by the Company to fulfill any undertaking included in the Resale Registration Statement and the Company will, as incurred, reimburse the Buyers, and their partners, members, officers, directors, agents or controlling persons for any legal or other expenses reasonably incurred in investigating, defending or preparing to defend any such action, proceeding or claim; provided, however, that the Company shall not be liable in any such case to the extent that such loss, claim, obligation, damage or liability (collectively, “Loss”) arises out of, or is based upon an untrue statement or omission or alleged untrue statement or omission made in such Resale Registration Statement in reliance upon and in conformity with written information furnished to the Company by or on behalf of the Buyers, or their partners, members, officers, directors or controlling persons specifically for use in preparation of the Resale Registration Statement; provided further, however, that the Company shall not be liable to the Buyers (or any partner, member, officer, director or controlling person of the Buyers) to the extent that any such Loss is caused by an untrue statement or omission or alleged untrue statement or omission made in any preliminary prospectus if either (i) (A) any Buyer failed to send or deliver a copy of the final prospectus with or prior to, or any Buyer failed to confirm that a final prospectus was deemed to be delivered prior to (in accordance with Rule 172 of the Securities Act), the delivery of written confirmation of the sale by a Buyer to the person asserting the claim from which such Loss resulted and (B) the final prospectus corrected such untrue statement or omission, (ii) (X) such untrue statement or omission is corrected in an amendment or supplement to the prospectus and (Y) having previously been furnished by or on behalf of the Company with copies of the prospectus as so amended or supplemented or notified by the Company that such amended or supplemented prospectus has been filed with the SEC, in accordance with Rule 172 of the Securities Act, any Buyer thereafter fails to deliver such prospectus as so amended or supplemented, with or prior to or a Buyer fails to confirm that the prospectus as so amended or supplemented was deemed to be delivered prior to (in accordance with Rule 172 of the Securities Act), the delivery of written confirmation of the sale by a Buyer to the person asserting the claim from which such Loss resulted or (iii) a Buyer sold Registrable Shares in violation of such Buyers’ covenant contained in Section 3.2 of this Agreement.

(b) The Buyers agree, severally and not jointly, to indemnify and hold harmless the Company (and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, each officer of the Company who signs the Resale Registration Statement and each director of the Company), from and against any losses, claims, damages or liabilities to which the Company (or any such officer, director or controlling person) may become subject (under the Securities Act or otherwise), insofar as such losses, claims, damages or liabilities (or actions or proceedings in respect thereof) arise out of, or are based upon, any untrue statement or alleged untrue statement of a material fact contained in the Resale Registration Statement (or any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading in each case, on the effective date thereof), if, and only to the extent, such untrue statement or omission or alleged untrue statement or omission was made in reliance upon and in conformity with written information furnished by or on behalf of the Buyers specifically for use in preparation of the Resale Registration Statement, and the Buyers, severally and not jointly, will reimburse the Company (and each of its officers, directors or controlling persons) for any legal or other expenses reasonably incurred in investigating, defending or preparing to defend any such action, proceeding or claim; provided, however, that in no event shall any indemnity under this Section 4.4(b) be greater in amount than the dollar amount of the proceeds received by the Buyers upon the sale of such Registrable Shares included in the Resale Registration Statement giving rise to such indemnification obligations.

(c) Promptly after receipt by any indemnified person of a notice of a claim or the beginning of any action in respect of which indemnity is to be sought against an indemnifying person pursuant to this Section 4.4, such indemnified person shall notify the indemnifying person in writing of such claim or of the commencement of such action, and, subject to the provisions hereinafter stated, in case any such action shall be brought against an indemnified person and such indemnifying person shall have been notified thereof, such indemnifying person shall be entitled to participate therein, and, to the extent that it shall wish, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified person. After notice from the indemnifying person to such indemnified person of its election to assume the defense thereof, such indemnifying person shall not be liable to such indemnified person for any legal expenses subsequently incurred by such indemnified person in connection with the defense thereof (including investigating, defending or preparing to defend any such action, proceeding or claim); provided, however, that if there exists or shall exist a conflict of interest that would make it inappropriate in the reasonable judgment of the indemnified person for the same counsel to represent both the indemnified person and such indemnifying person or any affiliate or associate thereof, the indemnified person shall be entitled to retain its own counsel at the expense of such indemnifying person; provided, further, that no indemnifying person shall be responsible for the fees and expense of more than one separate counsel for all indemnified parties. The indemnifying party shall not settle an action without the consent of the indemnified party, which consent shall not be unreasonably withheld.

(d) If after proper notice of a claim or the commencement of any action against the indemnified party, the indemnifying party does not choose to participate, then the indemnified party shall assume the defense thereof and upon written notice by the indemnified party requesting advance payment of a stated amount for its reasonable defense costs and expenses, the indemnifying party shall advance payment for such reasonable defense costs and expenses (the “**Advance Indemnification Payment**”) to the indemnified party. In the event that the indemnified party’s actual defense costs and expenses exceed the amount of the Advance Indemnification Payment, then upon written request by the indemnified party, the indemnifying party shall reimburse the indemnified party for such difference; in the event that the Advance Indemnification Payment exceeds the indemnified party’s actual costs and expenses, the indemnified party shall promptly remit payment of such difference to the indemnifying party.

(e) If the indemnification provided for in this Section 4.4 is held by a court of competent jurisdiction to be unavailable to an indemnified party with respect to any losses, claims, damages or liabilities referred to herein, the indemnifying party, in lieu of indemnifying such indemnified party thereunder, shall to the extent permitted by applicable law contribute to the amount paid or payable by such indemnified party as a result of such loss, claim, damage or liability in such proportion as is appropriate to reflect the relative fault of the indemnifying party on the one hand and of the indemnified party on the other, as well as any other relevant equitable considerations; provided, that in no event shall any contribution by an indemnifying party hereunder be greater in amount than the dollar amount of the proceeds received by such indemnifying party upon the sale of such Registrable Shares.

**4.5 Prospectus Suspension.** Each Buyer acknowledges that there may be times when the Company must suspend the use of the prospectus forming a part of the Resale Registration Statement until such time as an amendment to the Resale Registration Statement has been filed by the Company and declared effective by the SEC, or until such time as the Company has filed an appropriate report with the SEC pursuant to the Exchange Act. Each Buyer hereby covenants that it will not sell any Registrable Shares pursuant to said prospectus during the period commencing at the time at which the Company gives the Buyers notice of the suspension of the use of said prospectus and ending at the time the Company gives the Buyers notice that the Buyers may thereafter effect sales pursuant to said prospectus; provided, that such suspension periods shall in no event exceed thirty (30) days in any twelve (12) month period and that, in the good faith judgment of the Company’s board of directors, the Company would, in the absence of such delay or suspension hereunder, be required under state or federal securities laws to disclose any corporate development, a potentially significant transaction or event involving the Company, or any negotiations, discussions, or proposals directly relating thereto, in either case the disclosure of which would reasonably be expected to have a material adverse effect upon the Company or its stockholders.

**4.6 Termination of Obligations.** The obligations of the Company pursuant to Section 4.2 hereof shall cease and terminate, with respect to any Registrable Shares, upon the earlier to occur of (a) such time such Registrable Shares have been resold, or (b) such time as such Registrable Shares no longer remain Registrable Shares pursuant to Section 4.1(b) hereof.

#### 4.7 Reporting Requirements.

(a) With a view to making available the benefits of certain rules and regulations of the SEC that may at any time permit the sale of the Warrant Shares to the public without registration or pursuant to a registration statement on Form S-3, the Company agrees to:

(i) make and keep public information available, as those terms are understood and defined in Rule 144;

(ii) file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act; and

(iii) so long as a Buyer owns Registrable Shares, to furnish to such Buyer upon request (A) a written statement by the Company as to whether it is in compliance with the reporting requirements of Rule 144, the Securities Act and the Exchange Act, or whether it is qualified as a registrant whose securities may be resold pursuant to SEC Form S-3, (B) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company and (C) such other information as may be reasonably requested to permit the Buyer to sell such securities pursuant to Rule 144.

**4.8 Blue Sky.** The Company shall obtain and maintain all necessary blue sky law permits and qualifications, or secured exemptions therefrom, required by any state for the offer and sale of Registrable Shares.

#### 5. TRANSFER RESTRICTIONS.

(a) Compliance with Laws. Notwithstanding any other provision of this Section 5, each Buyer covenants that the Securities may be disposed of only pursuant to an effective registration statement under, and in compliance with the requirements of, the Securities Act, or pursuant to an available exemption from, or in a transaction not subject to, the registration requirements of the Securities Act, and in compliance with any applicable state and federal securities laws. In connection with any transfer of the Securities other than (i) pursuant to an effective registration statement, (ii) to the Company or (iii) pursuant to Rule 144 (*provided* that the applicable Buyer provides the Company with reasonable assurances (in the form of seller and, if applicable, broker representation letters) that the securities may be sold pursuant to such rule), the Company may require such Buyer to provide to the Company an opinion of counsel selected by such Buyer and reasonably acceptable to the Company, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration of such transferred Securities under the Securities Act.

(b) Legends. Any certificates or book entry notations evidencing the Securities shall bear any legend as required by the “blue sky” laws of any state and a restrictive legend in substantially the following form, until such time as they are not required under Section 5(c):

THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR APPLICABLE STATE SECURITIES LAWS AND ARE SUBJECT TO CERTAIN TRANSFER RESTRICTIONS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OR (B) AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS OR BLUE SKY LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY AND ITS TRANSFER AGENT OR (II) UNLESS SOLD PURSUANT TO RULE 144 UNDER THE SECURITIES ACT. THIS SECURITY IS SUBJECT TO THE TRANSFER RESTRICTION SET FORTH HEREIN AND IN THE SECURITIES PURCHASE AGREEMENT, DATED MARCH 19, 2024.

(c) Removal of Legends. The legend set forth in Section 5(b) above shall be removed and the Company shall issue a certificate (or book entry notation, as applicable) without such legend or any other legend to the holder of the applicable Securities upon which it is stamped or issue to such holder by electronic delivery at the applicable balance account at the Depository Trust Company (“DTC”), if (i) the Company receives appropriate notice from a Buyer stating that the applicable Securities have been sold pursuant to an effective Resale Registration Statement, (ii) such Securities are sold or transferred pursuant to Rule 144, or (iii) such Securities are eligible for sale under Rule 144, without the requirement for the Company to be in compliance with the current public information required under Rule 144 as to such securities and without volume or manner-of-sale restrictions. Certificates (or book entry notations) for the Securities subject to legend removal hereunder may be transmitted by the Company’s transfer agent to such Buyer by crediting the DTC account of such Buyer’s broker or other DTC participant as directed by such Buyer.

## **6. CONDITIONS TO THE COMPANY'S OBLIGATION TO SELL PRE-FUNDED WARRANTS UNDER THIS AGREEMENT.**

The obligation of the Company hereunder to sell the Pre-Funded Warrants is subject to the satisfaction of each of the following conditions on or before the Closing Date:

- (a) The Buyers shall have executed this Agreement and delivered the same to the Company;
- (b) The representations and warranties of the Buyers in this Agreement shall be true and correct as of the Closing Date as though made at that time (except for representations and warranties that speak as of a specific date, which shall be true and correct in all material respects as of such specific date), and the Buyers shall have performed, satisfied and complied in all material respects with the covenants and agreements required by this Agreement to be performed, satisfied or complied with by the Buyers at or prior to the Closing Date; and
- (c) The Company shall have issued and sold the shares in the Public Offering as contemplated by the Underwriting Agreement.

## **7. CONDITIONS TO THE BUYERS' OBLIGATIONS TO PURCHASE PRE-FUNDED WARRANTS.**

The obligation of each Buyer to buy Pre-Funded Warrants under this Agreement is subject to the satisfaction of each of the following conditions on or before the Closing Date:

- (a) The Company shall have executed this Agreement and delivered the same to the Buyer;
- (b) The Company shall have issued and sold the shares in the Public Offering as contemplated by the Underwriting Agreement;
- (c) The Company shall have delivered to the Buyers opinions of counsel to Company by the same counsel as set forth in Sections 5(b) and 5(c) of the Underwriting Agreement, in each case in form and substance reasonably satisfactory to the Buyers obligated to purchase at least a majority of the Warrant Shares; and
- (d) The Company shall have delivered to the Buyers an officer's certificate covering the subject matter contemplated by Section 5(e) of the Underwriting Agreement in form and substance reasonably satisfactory to the Buyers obligated to purchase at least a majority of the Warrant Shares.

## **8. CERTAIN DEFINED TERMS.**

For purposes of this Agreement, the following terms shall have the following meanings:

- (a) "**Affiliate**" means, with respect to a specified Person, a Person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the Person specified.
- (b) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended.
- (c) "**Person**" means an individual or entity including any limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization and a government or any department or agency thereof.
- (d) "**SEC**" means the United States Securities and Exchange Commission.
- (e) "**Securities Act**" means the Securities Act of 1933, as amended.

## 9. CERTAIN COVENANTS.

(a) Reserved.

(b) Common Stock Reservation. The Company shall, at all times while any Pre-Funded Warrants are outstanding, reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved shares of Common Stock, the number of shares of Common Stock sufficient to enable the full exercise of the then outstanding Pre-Funded Warrants.

(c) Disclosure of Transactions and Other Material Information. Within four (4) business days of the date of this Agreement, the Company shall file a Current Report on Form 8-K describing the terms and conditions of the transactions contemplated by this Agreement in the form required by the Exchange Act and attaching the Agreement as an exhibit to such filing.

(d) Publicity. The Company shall afford the Buyers and their counsel with the opportunity to review and comment upon the form and substance of, and shall give reasonable consideration to all such comments from the Buyers or their counsel on, the portion(s) of any press release, SEC filing or any other public disclosure by or on behalf of the Company relating to the Buyers or their purchases hereunder, except if such disclosure is required by law, in which case the Company shall promptly provide the Buyers with notice of such disclosure and reasonably cooperate with the Buyers regarding such disclosure. Notwithstanding anything to the contrary contained herein, the Company shall not be required to provide the Buyers with advance notice of any press release, SEC filing or any other public disclosure by or on behalf of the Company relating to the Buyers, their purchases hereunder or any aspect of the Pre-Funded Warrants to the extent the disclosure is materially consistent with disclosure previously reviewed by the Buyers.

(e) Lock-Up Agreement. In addition to obtaining the prior written consent of the Representatives, during the Lock-Up Period (as defined in the form of Lock-up Agreement attached as Exhibit B to the Underwriting Agreement), the Company will not take any actions specified in Section 3(i) of the Underwriting Agreement or otherwise amend, waive or modify Section 3(i) of the Underwriting Agreement without the prior written consent of the Buyers obligated to purchase at least a majority of the Warrant Shares issued or issuable upon the exercise of the Pre-Funded Warrants.

## 10. MISCELLANEOUS.

(a) Governing Law; Jurisdiction; Jury Trial. The corporate laws of the State of Delaware shall govern all issues concerning the relative rights of the Company and its stockholders. All other questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of Delaware, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Delaware or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of Delaware. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of Wilmington, for the adjudication of any dispute hereunder or in connection herewith, or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. **EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

(b) Counterparts. This Agreement may be executed in two or more identical counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party; provided that a facsimile or pdf (or other electronic reproduction) signature shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original, not a facsimile or pdf (or other electronic reproduction) signature.

(c) Headings. The headings of this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement.

(d) Severability. If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction.

(e) Entire Agreement. This Agreement supersedes all other prior oral or written agreements between the Buyers, the Company, their Affiliates and Persons acting on their behalf with respect to the matters discussed herein, and this Agreement and the instruments referenced herein contain the entire understanding of the parties with respect to the matters covered herein and therein and, except as specifically set forth herein or therein, neither the Company nor any of the Buyers makes any representation, warranty, covenant or undertaking with respect to such matters. Each of the Company and each of the Buyers acknowledge and agree that it has not relied on, in any manner whatsoever, any representations or statements, written or oral, other than as expressly set forth in this Agreement.

(f) Notices. Any notices, consents or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by electronic message (provided the recipient responds to the message and confirmation of both electronic messages are kept on file by the sending party); or (iii) one (1) business day after timely deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses for such communications shall be:

If to the Company:

Fate Therapeutics, Inc.  
11278 Scripps Summit Drive  
San Diego, California 92131  
Attention: Secretary  
Email: Cindy.tahl@fatetherapeutics.com

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

Goodwin Procter LLP  
Three Embarcadero Center, 28th Floor  
San Francisco, California 94111  
Attention: Maggie Wong  
Email: MWong@goodwinlaw.com

If to any of the Buyers, to the address set forth opposite such Buyer's name on Exhibit A hereto:

With a copy to (which shall not constitute delivery to the Buyers):

Paul Hastings LLP  
1117 S. California Avenue  
Palo Alto, CA 94304-1106  
Telephone: (650) 320-1838  
Attention: Samantha Eldredge  
Email: Samanthaeldredge@paulhastings.com

or at such other address and/or to the attention of such other person as the recipient party has specified by written notice given to each other party at least one (1) business day prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent or other communication, (B) electronically generated by the sender's electronic mail containing the time, date and recipient email address or (C) provided by a nationally recognized overnight delivery service, shall be rebuttable evidence of receipt in accordance with clause (i), (ii) or (iii) above, respectively.



(g) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns. The Company shall not assign this Agreement or any rights or obligations hereunder without the prior written consent of: (a) the Buyers or their designees or assignees that hold at least a majority of the Warrant Shares issued or issuable upon the exercise of the Pre-Funded Warrants, and (b) Redmile Group, LLC, but only to the extent that the Buyers or their designees or assignees that hold at least a majority of the Warrant Shares issued or issuable upon the exercise of the Pre-Funded Warrants are not funds, accounts or entities managed by Redmile Group, LLC or any of its Affiliates, including by merger or consolidation; provided, however, that any transaction, whether by merger, reorganization, restructuring, consolidation, financing or otherwise, whereby the Company remains the surviving entity immediately after such transaction shall not be deemed a succession or assignment. Any Buyer may assign, delegate or otherwise transfer all or any portion of its rights or obligations under this Agreement to one or more funds, accounts or entities managed by Redmile Group, LLC or any of its Affiliates without the prior consent of the Company; provided, however, that that if any assignment by a Buyer pursuant to the foregoing shall occur, the transferee, designee or assignee shall automatically become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement and deliver to the Company a certificate containing representations and warranties substantially similar to the representations and warranties in Section 2 hereof, and such shall be deemed a “Buyer” and a party hereunder and the Schedule of Buyers attached hereto as Exhibit A shall be updated to reflect the information with respect to such transferee, designee or assignee.

(h) No Third-Party Beneficiaries. Except as expressly set forth in Section 2(g), this Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other person.

(i) Further Assurances. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

(j) Survival. The representations, warranties, agreements and covenants contained herein shall survive the closing of the transactions contemplated hereby and the delivery of the Pre-Funded Warrants.

(k) Termination. In the event that the Closing Date shall not have occurred within twenty (20) business days of the date of this Agreement, due to the failure to satisfy any of the conditions set forth in Sections 6 and 7 above, either party shall have the option to terminate this Agreement at the close of business on such date or thereafter without liability of either party to any other party; provided, however, that the right to terminate this Agreement under this Section 10(k) shall not be available to either party if such failure to satisfy any of the conditions set forth in Sections 5 and 6 is the result of a breach of this Agreement by such party or the failure of any representation or warranty of such party included in this Agreement to be true and correct in all material respects. Any termination of this Agreement pursuant to this Section 10(k) shall be effected by written notice from the Company to the Buyers, or the Buyers or Redmile Group, LLC to the Company, as the case may be, setting forth the basis for the termination hereof. This Section 9 shall survive any termination of this Agreement.

(l) No Financial Advisor, Placement Agent, Broker or Finder. The Company represents and warrants to the Buyers that it has not engaged any financial advisor, placement agent, broker or finder in connection with the transactions contemplated hereby. Each of the Buyers represents and warrants to the Company that it has not engaged any financial advisor, placement agent, broker or finder in connection with the transactions contemplated hereby. Each party shall be responsible for the payment of any fees or commissions, if any, of any financial advisor, placement agent, broker or finder engaged by such party relating to or arising out of the transactions contemplated hereby. Each party shall pay, and hold the other party harmless against, any liability, loss or expense (including, without limitation, attorneys’ fees and out of pocket expenses) arising in connection with any such claim.

(m) No Strict Construction. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party.

(n) Amendment and Waiver; Failure or Indulgence Not Waiver. No provision of this Agreement may be amended other than by a written instrument signed by the Company and the Buyers obligated to purchase at least a majority of the Warrant Shares issued or issuable upon the exercise of the Pre-Funded Warrants. No provision of this Agreement may be waived other than in a written instrument signed by the party against whom enforcement of such waiver is sought. No failure or delay in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege.

\* \* \* \* \*

IN WITNESS WHEREOF, the Buyers and the Company have caused this Securities Purchase Agreement to be duly executed as of the date first written above.

**THE COMPANY:**

**FATE THERAPEUTICS, INC.**

By: /s/ J. Scott Wolchko

Name: J. Scott Wolchko

Title: President and Chief Executive Officer

*[Signature Page to Securities Purchase Agreement]*

IN WITNESS WHEREOF, the Buyers and the Company have caused this Securities Purchase Agreement to be duly executed as of the date first written above.

**BUYER:**

**RedCo II Master Fund, L.P.**

By: RedCo II (GP), LLC, its general partner

By: /s/ Joshua Garcia

Name: Joshua Garcia

Title: Authorized Signatory

*[Signature Page to Securities Purchase Agreement]*

**EXHIBIT A**

**SCHEDULE OF BUYERS**

<u>Name</u>	<u>Address for Notices</u>	<u>Purchase Price</u>	<u>Number of Pre-Funded Warrants</u>
RedCo II Master Fund, L.P.	c/o Redmile Group, LLC One Letterman Drive, Suite D3-300 San Francisco, CA 94129	\$19,996,365.64	3,636,364
<b>TOTAL</b>		<b>\$19,996,365.64</b>	<b>3,636,364</b>

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**EXHIBIT B**

**FORM OF WARRANT**



### **Fate Therapeutics Announces Pricing of \$100 Million Underwritten Offering and Concurrent Private Placement**

**San Diego, CA – March 19, 2024** – (GLOBAL NEWSWIRE) – Fate Therapeutics, Inc. (the “Company” or “Fate Therapeutics”) (NASDAQ: FATE), a clinical-stage biopharmaceutical company dedicated to bringing a first-in-class pipeline of induced pluripotent stem cell (iPSC)-derived cellular immunotherapies to patients with cancer and autoimmune disorders, today announced the pricing of an underwritten offering of 14,545,454 shares of its common stock at an offering price of \$5.50 per share. The offering includes participation from new and existing institutional investors, including Adage Capital Partners LP., Boxer Capital, Deep Track Capital, OrbiMed, Suvretta Capital and a life-sciences focused investor.

In addition, the Company announced the pricing of a concurrent private placement of pre-funded warrants to purchase 3,636,364 shares of its common stock at a purchase price of \$5.499 per pre-funded warrant, which represents the offering price per share of common stock less the \$0.001 exercise price per share of each pre-funded warrant, to certain institutional and other accredited investors affiliated with or managed by Redmile Group, LLC.

The gross proceeds from the underwritten offering and private placement are expected to be approximately \$100.0 million before deducting underwriting discounts and commissions and other offering expenses. BofA Securities, Jefferies, and Leerink Partners are acting as the joint bookrunning managers for the underwritten offering.

All of the shares and pre-funded warrants are to be sold by the Company. The financing is expected to close on or about March 21, 2024, subject to customary closing conditions.

The Company intends to use the net proceeds from the underwritten offering and concurrent private placement for funding clinical trials and nonclinical studies of the Company’s product candidates, manufacturing expenses associated with the development of the Company’s product candidates, the conduct of preclinical research and development, and for other working capital and general corporate purposes.

A shelf registration statement on Form S-3 (File No. 333-275402) relating to the underwritten offering of the securities described above was filed with the Securities and Exchange Commission (the “SEC”) on November 8, 2023 and became effective on November 27, 2023. A final prospectus supplement relating to and describing the terms of the underwritten offering will be filed with the SEC and will be available on the SEC’s web site at [www.sec.gov](http://www.sec.gov). When available, copies of the final prospectus supplement may also be obtained from BofA Securities, Inc. NC1-022-02-25, 201 North Tryon Street, Charlotte, NC 28255-0001,

Attn: Prospectus Department or by email at [dg.prospectus\\_requests@bofa.com](mailto:dg.prospectus_requests@bofa.com); Jefferies LLC, Attention: Equity Syndicate Prospectus Department, 520 Madison Avenue, New York, NY 10022, by telephone at (877) 821-7388 or by email at [prospectus\\_department@jefferies.com](mailto:prospectus_department@jefferies.com); or Leerink Partners LLC, Attention: Syndicate Department, 53 State Street, 40th Floor, Boston, MA 02109, by telephone at (800) 808-7525, ext. 6105, or by email at [syndicate@leerink.com](mailto:syndicate@leerink.com).

The pre-funded warrants to be sold in the concurrent private placement have not been registered under the Securities Act or under any state securities laws and, unless so registered may not be offered or sold in the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and applicable state securities laws. The securities sold in the private placement will be issued in reliance upon the exemption from registration pursuant to Section 4(a)(2) under the Securities Act in a transaction not involving a public offering of such securities.

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

#### **About Fate Therapeutics, Inc.**

Fate Therapeutics is a clinical-stage biopharmaceutical company dedicated to bringing a first-in-class pipeline of induced pluripotent stem cell (iPSC)-derived cellular immunotherapies to patients with cancer and autoimmune disorders. Using its proprietary iPSC product platform, the Company has established a leadership position in creating multiplexed-engineered iPSC lines and in the manufacture and clinical development of off-the-shelf, iPSC-derived cell products. The Company's pipeline includes iPSC-derived natural killer (NK) cell and T-cell product candidates, which are selectively designed, incorporate novel synthetic controls of cell function, and are intended to deliver multiple therapeutic mechanisms to patients. Fate Therapeutics is headquartered in San Diego, CA.

#### **Forward-Looking Statements**

This release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding Fate Therapeutics' expectations with respect to the underwritten offering and concurrent private placement, the anticipated net proceeds from the underwritten offering and the concurrent private placement, and its intended use of proceeds from the underwritten offering and the concurrent private placement. These forward-looking statements speak only as of the date of this press release and are subject to a number of risks, uncertainties and assumptions, including, without limitation, the risks and uncertainties associated with market conditions and the satisfaction of customary closing conditions related to the underwritten offering and the concurrent private placement, as well as risks and uncertainties inherent in Fate Therapeutics' business, including those described in the Company's periodic filings with the SEC. The events and circumstances reflected in the Company's forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Additional information on risks facing Fate Therapeutics can be found under the heading



“Risk Factors” in Fate Therapeutics’ periodic reports, including its annual report on Form 10-K for the year ended December 31, 2023 and in the prospectus supplement related to the underwritten offering filed with the SEC on or about the date hereof, each available on the SEC’s website at [www.sec.gov](http://www.sec.gov). Except as required by applicable law, the Company does not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements.

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