

**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): June 26, 2024

Taysha Gene Therapies, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-39536
(Commission
File Number)

84-3199512
(IRS Employer
Identification No.)

3000 Pegasus Park Drive, Suite 1430
Dallas, Texas
(Address of Principal Executive Offices)

75247
(Zip Code)

(214) 612-0000
(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, \$0.00001 par value	TSHA	The Nasdaq Stock Market LLC

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

Emerging growth company

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

Item 1.01 Entry into a Material Definitive Agreement.

On June 26, 2024, Taysha Gene Therapies, Inc. (the “*Company*”) entered into an underwriting agreement (the “*Underwriting Agreement*”) with Jefferies LLC and Goldman Sachs & Co. LLC, as representatives of the several underwriters set forth therein (collectively, the “*Underwriters*”), to issue and sell 14,361,113 shares of common stock of the Company, par value \$0.00001 per share (“*Common Stock*”), and, in lieu of common stock to certain investors, pre-funded warrants to purchase 18,972,221 shares of its Common Stock in an underwritten public offering (the “*Offering*”) pursuant to an effective shelf registration statement on Form S-3 (File No. 333-260069) and a related prospectus and prospectus supplement, in each case filed with the Securities and Exchange Commission (the “*SEC*”). The offering price to the public is \$2.25 per share of Common Stock and \$2.249 per pre-funded warrant, which is the price to the public of each share of Common Stock sold in the Offering, minus the \$0.001 exercise price per pre-funded warrant. The Underwriters have agreed to purchase the shares and the pre-funded warrants from the Company pursuant to the Underwriting Agreement at a price of \$2.115 per share and \$2.114 per pre-funded warrant, respectively. In addition, the Company granted the Underwriters an option to purchase, for a period of 30 days, up to an additional 5,000,000 shares of Common Stock. The Company estimates that the net proceeds from the Offering will be approximately \$70.0 million, or approximately \$80.6 million if the Underwriters exercise in full their option to purchase additional shares of Common Stock, in each case after deducting underwriting discounts and commissions and estimated offering expenses. The closing of the Offering is expected to occur on June 27, 2024, subject to customary closing conditions.

Each pre-funded warrant will have an initial exercise price per share of \$0.001, subject to certain adjustments. The pre-funded warrants may be exercised at any time until exercised in full, except that a holder will not be entitled to exercise any portion of any pre-funded warrant, which, upon giving effect to such exercise would cause (i) the aggregate number of shares of the Company’s Common Stock beneficially owned by the holder (together with its affiliates) to exceed 4.99% or 9.99%, as the case may be, of the number of shares of the Company’s Common Stock outstanding immediately prior to or after giving effect to the exercise, or (ii) the combined voting power of the Company’s securities beneficially owned by the holder (together with its affiliates) to exceed 4.99% or 9.99%, as the case may be, of the combined voting power of all of the Company’s securities then outstanding immediately prior to or after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants, subject to such holder’s rights under the pre-funded warrant to increase or decrease such percentage to another percentage not in excess of 19.99% upon at least 61 days’ prior notice from such holder to the Company.

The Underwriting Agreement contains customary representations, warranties, covenants and agreements by the Company, 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. The representations, warranties and covenants contained in the Underwriting Agreement were made only for purposes of such agreement and as of specific dates, were solely for the benefit of the parties to such agreement and may be subject to limitations agreed upon by the contracting parties.

Copies of the Underwriting Agreement and form of pre-funded warrant are filed as Exhibit 1.1 and 4.1 to this Current Report on Form 8-K, respectively, and are incorporated herein by reference. The foregoing descriptions of the Underwriting Agreement and the form of pre-funded warrant are qualified in their entirety by reference to such exhibits. A copy of the opinion of Cooley LLP as to the legality of the issuance and sale of the securities in the Offering and related consent is filed as Exhibit 5.1 to this Current Report on Form 8-K.

Item 8.01 Other Events.

Pricing of Public Offering

On June 26, 2024, the Company issued a press release announcing that it had priced the Offering. A copy of the press release is attached hereto as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

Cash Runway

The Company believes that the net proceeds from the Offering, together with its existing cash and cash equivalents will be sufficient to enable the Company to fund its operating expenses and capital expenditure requirements into the fourth quarter of 2026.

Forward-Looking Statements

This Current Report on Form 8-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “anticipates,” “believes,” “expects,” “intends,” “projects,” “plans,” and “future” or similar expressions are intended to identify forward-looking statements. Forward-looking statements include statements concerning the Company’s anticipated public offering, including the expected net proceeds and anticipated closing date and uncertainties related to the completion of the public offering on the anticipated terms, if at all. Forward-looking statements are based on management’s current expectations and are subject to various risks and uncertainties that could cause actual results to differ materially and adversely from those expressed or implied by such forward-looking statements. Accordingly, these forward-looking statements do not constitute guarantees of future performance, and you are cautioned not to place undue reliance on these forward-looking statements. Risks regarding the Company’s business are described in detail in its SEC filings, including in the Company’s Annual Report on Form 10-K for the full-year ended December 31, 2023, both of which is available on the SEC’s website at www.sec.gov. Additional information will be made available in other filings that the Company makes from time to time with the SEC. These forward-looking statements speak only as of the date hereof, and the Company disclaims any obligation to update these statements except as may be required by law.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit Number	Exhibit Description
1.1	Underwriting Agreement by and between Taysha Gene Therapies, Inc. and Jefferies LLC and Goldman Sachs & Co. LLC, dated June 26, 2024.
4.1	Form of Pre-Funded Warrant
5.1	Opinion of Cooley LLP.
23.1	Consent of Cooley LLP (included in Exhibit 5.1).
99.1	Press Release, dated June 26, 2024.
104	Cover Page Interactive Data File (the cover page XBRL tags are embedded within the inline XBRL document).

SIGNATURES

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

Taysha Gene Therapies, Inc.

By: /s/ Kamran Alam

Kamran Alam

Chief Financial Officer

Date: June 26, 2024

Taysha Gene Therapies, Inc.

Common Stock

Underwriting Agreement

June 26, 2024

Jefferies LLC
Goldman Sachs & Co. LLC
As representatives of the several Underwriters
named in Schedule I hereto

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

c/o Goldman Sachs & Co. LLC
200 West Street
New York, New York 10282-2198

Ladies and Gentlemen:

Taysha Gene Therapies, Inc., a Delaware corporation (the “Company”), proposes, subject to the terms and conditions stated in this agreement (this “Agreement”), to issue and sell to the Underwriters named in Schedule I hereto (the “Underwriters”), for whom you are acting as the representatives (the “Representatives”), (i) an aggregate of 14,361,113 shares (the “Firm Shares”) and, at the election of the Underwriters, up to 5,000,000 additional shares (the “Optional Shares”) of common stock, par value \$0.00001 per share (“Stock”), of the Company (the Firm Shares and the Optional Shares that the Underwriters elect to purchase pursuant to Section 2 hereof being collectively called the “Shares”), and (ii) warrants of the Company to purchase 18,972,221 shares of Stock at an exercise price equal to \$0.001 per share (the “Pre-Funded Warrants” and, together with the Firm Shares, the “Firm Securities”). As used herein, “Warrant Shares” means the shares of Stock issuable upon exercise of the Pre-Funded Warrants. The Shares and the Pre-Funded Warrants are referred to as the “Offered Securities.”

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

(a) A registration statement on Form S-3 (File No. 333-260069) (the “Initial Registration Statement”) in respect of the Offered Securities has been filed with the Securities and Exchange Commission (the “Commission”); the Initial Registration Statement and any post-effective amendment thereto, each in the form heretofore delivered to the Representatives, have been declared effective by the Commission in such form; other than a registration statement, if any, increasing the size of the offering (a “Rule 462(b) Registration Statement”), filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended (the “Act”), which became effective upon

filing, no other document with respect to the Initial Registration Statement or document incorporated by reference therein has been filed, or transmitted for filing, with the Commission (other than prospectuses filed pursuant to Rule 424(b) of the rules and regulations of the Commission under the Act, each in the form heretofore delivered to the Representatives); and no stop order suspending the effectiveness of the Initial Registration Statement, any post-effective amendment thereto or any part thereof or the Rule 462(b) Registration Statement, if any, has been issued and no proceeding for that purpose or pursuant to Section 8A of the Act has been initiated or, to the Company's knowledge, threatened by the Commission (the base prospectus filed as part of the Initial Registration Statement, in the form in which it has most recently been filed with the Commission on or prior to the date of this Agreement relating to the Offered Securities, is hereinafter called the "Basic Prospectus"); any preliminary prospectus (including any preliminary prospectus supplement) relating to the Offered Securities filed with the Commission pursuant to Rule 424(b) under the Act is hereinafter called a "Preliminary Prospectus"; the various parts of the Initial Registration Statement and the Rule 462(b) Registration Statement, if any, including all exhibits thereto and including any prospectus supplement relating to the Offered Securities that is filed with the Commission and deemed by virtue of Rule 430B under the Act to be part of the Initial Registration Statement, each as amended at the time such part of the Initial Registration Statement became effective or such part of the Rule 462(b) Registration Statement, if any, became or hereafter becomes effective, are hereinafter collectively called the "Registration Statement"; the Basic Prospectus, as amended and supplemented immediately prior to the Applicable Time (as defined in Section 1(c) hereof), is hereinafter called the "Pricing Prospectus"; the form of the final prospectus relating to the Offered Securities filed with Commission pursuant to Rule 424(b) under the Act in accordance with Section 5(a) hereof is hereinafter called the "Prospectus"; any reference herein to the Basic Prospectus, the Pricing Prospectus, any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include the documents incorporated by reference therein pursuant to Item 12 of Form S-3, as of the date of such prospectus; any reference to any amendment or supplement to the Basic Prospectus, any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include any post-effective amendment to the Registration Statement, any prospectus supplement relating to the Offered Securities filed with the Commission pursuant to Rule 424(b) under the Act and any documents filed under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and incorporated therein, in each case after the date of the Basic Prospectus, such Preliminary Prospectus or the Prospectus, as the case may be; any reference to any amendment to the Registration Statement shall be deemed to refer to and include any annual report of the Company filed pursuant to Section 13(a) or 15(d) of the Exchange Act after the effective date of the Registration Statement that is incorporated by reference in the Registration Statement; any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Act is hereinafter called a "Testing-the-Waters Communication"; and any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Act is hereinafter called a "Written Testing-the-Waters Communication"; and any "issuer free writing prospectus" as defined in Rule 433 under the Act relating to the Offered Securities is hereinafter called an "Issuer Free Writing Prospectus";

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

(c) For the purposes of this Agreement, the “Applicable Time” is 8:15 a.m. (Eastern time) on the date of this Agreement. The Pricing Prospectus, as supplemented by the information listed on Schedule II(c) hereto, taken together (collectively, the “Pricing Disclosure Package”), as of the Applicable Time, did not, and as of each Time of Delivery (as defined in Section 4(a) of this Agreement) (as supplemented by any post-effective amendment thereto) will not, include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; and each Issuer Free Writing Prospectus and each Testing-the-Waters Communication does not conflict with the information contained in the Registration Statement, the Pricing Prospectus or the Prospectus and each Issuer Free Writing Prospectus and each Testing-the-Waters Communication, as supplemented by and taken together with the Pricing Disclosure Package, as of the Applicable Time, did not, and as of each Time of Delivery (as supplemented by any post-effective amendment thereto) will not, include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that this representation and warranty shall not apply to any statements or omissions made in reliance upon and in conformity with the Underwriter Information;

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

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

(f) The Company has not, since the date of the latest audited financial statements included in the Pricing Prospectus and the Prospectus, (i) sustained any material loss or material interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree or (ii)

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

(g) The Company has good and marketable title in fee simple to all real property, if any, and good and marketable title to all personal property owned by it, in each case free and clear of all liens, encumbrances and defects except such as are described in the Pricing Prospectus and the Prospectus or such as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company; and any real property and buildings held under lease by the Company are held by it under valid, subsisting and enforceable leases with such exceptions as are not material and do not materially interfere with the use made and proposed to be made of such property and buildings by the Company;

(h) The Company has been (i) duly organized and is validly existing and in good standing under the laws of its jurisdiction of organization, with power and authority (corporate and other) to own and/or lease its properties and conduct its business as described in the Pricing Prospectus and the Prospectus, and (ii) duly qualified as a foreign corporation for the transaction of business and is in good standing under the laws of each other jurisdiction in which it owns or leases properties or conducts any business so as to require such qualification, except, in the case of this clause (ii), where the failure to be so qualified or in good standing would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, and the Company has no "significant subsidiaries" (as defined in Rule 1-02(w) of Regulation S-X);

(i) The Company has an authorized capitalization as set forth in the Pricing Prospectus and the Prospectus and all of the issued shares of capital stock of the Company have been duly and validly authorized and issued and are fully paid and non-assessable, have been issued in compliance with all federal and state securities laws and conform in all material respects to the description of the Stock contained in the Pricing Disclosure Package and the Prospectus. The descriptions of the Company's stock option, stock bonus and other stock plans or arrangements, and the options or other rights granted thereunder, set forth in the Registration Statement, the Pricing Prospectus and the Prospectus accurately and fairly presents the information required to be shown with respect to such plans, arrangements, options and rights;

(j) The Shares to be issued and sold by the Company to the Underwriters hereunder have been duly and validly authorized and, when issued and delivered against payment therefor as provided herein, will be duly and validly issued and fully paid and non-assessable and will conform in all material respects to the description of the Stock contained in the Pricing Disclosure Package and the Prospectus, and the issuance of the Shares is not subject to any preemptive or similar rights, except as have been validly waived or complied with in connection with the offering of the Shares;

(k) The issue and sale of the Offered Securities (including the use of proceeds from the sale of the Offered Securities as described in the Registration Statement, the Pricing Prospectus and the Prospectus under the caption “Use of Proceeds”) and the compliance by the Company with this Agreement and the consummation of the transactions contemplated in this Agreement and the Pricing Prospectus and the Prospectus will not conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, (i) any indenture, mortgage, deed of trust, loan agreement, lease or other agreement or instrument to which the Company is a party or by which the Company is bound or to which any of the property or assets of the Company is subject, (ii) the certificate of incorporation or by-laws (or other applicable organizational document) of the Company, or (iii) any statute or any judgment, order, rule or regulation of any court or governmental agency or body having jurisdiction over the Company or any of its properties, except, in the case of clauses (i) and (iii) for such defaults, breaches, or violations that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; and no consent, approval, authorization, order, registration or qualification of or with any such court or governmental agency or body is required for the issue and sale of the Offered Securities or the consummation by the Company of the transactions contemplated by this Agreement, except such as have been obtained under the Act, the approval by the Financial Industry Regulatory Authority (“FINRA”) of the underwriting terms and arrangements, the approval for listing the Shares and the Warrant Shares on The Nasdaq Global Market (“Nasdaq”) and for such consents, approvals, authorizations, orders, registrations or qualifications as may be required under state securities or Blue Sky laws in connection with the purchase and distribution of the Offered Securities by the Underwriters;

(l) The Company is not (i) in violation of its certificate of incorporation or by-laws (or other applicable organizational document), (ii) in violation of any statute or any judgment, order, rule or regulation of any court or governmental agency or body having jurisdiction over the Company or any of its properties, or (iii) in default in the performance or observance of any obligation, agreement, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement, lease or other agreement or instrument to which it is a party or by which it or any of its properties may be bound, except, in the case of the foregoing clauses (ii) and (iii), for such violations or defaults as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect;

(m) The statements set forth in the Pricing Prospectus and the Prospectus under the captions “Description of Capital Stock”, insofar as they purport to constitute a summary of the terms of the Stock, are accurate, complete and fair in all material respects, and under the caption “Material U.S. Federal Income Tax Consequences”, insofar as such statements purport to summarize matters of U.S. federal income tax laws, are accurate, complete and fair in all material respects;

(n) Other than as set forth in the Pricing Prospectus, there are no legal, governmental or regulatory investigations, actions, demands, claims, suits, arbitrations, inquiries or proceedings (“Actions”) pending to which the Company or any of its subsidiaries or, to the Company’s knowledge, any officer or director of the Company is a party or of which any property or assets of the Company or any of its subsidiaries or, to the Company’s knowledge, any officer or director of the Company is the subject which, if determined adversely to the Company or any of its subsidiaries (or such officer or director), would individually or in the aggregate reasonably be expected to have a Material Adverse Effect; and, to the Company’s knowledge, no such proceedings are threatened or contemplated by governmental authorities or others; there are no current or pending Actions that are required under the Act to be described in the Registration

Statement or the Pricing Prospectus that are not so described therein; and there are no statutes, regulations or contracts or other documents that are required under the Act to be filed as exhibits to the Registration Statement or described in the Registration Statement, the Pricing Prospectus that are not so filed as exhibits to the Registration Statement or described in the Registration Statement and the Pricing Prospectus;

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

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

(q) Deloitte & Touche LLP, who have certified certain financial statements of the Company, are (i) independent public accountants as required by (A) the Exchange Act and the rules and regulations of the Commission thereunder and (B) the Public Company Accounting Oversight Board (“PCAOB”), (ii) in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X under the Securities Act and (iii) a registered public accounting firm as defined by the PCAOB whose registration has not been suspended or revoked and who has not requested such registration to be withdrawn;

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

(s) Since the date of the latest audited financial statements included in the Pricing Prospectus and the Prospectus, there have been no significant deficiencies or material weakness in the Company’s internal control over financial reporting (whether or not remediated) and no change in the Company’s internal control over financial reporting that has materially and adversely affected, or is reasonably likely to materially and adversely affect, the Company’s internal control over financial reporting. The Company is not aware of any change in its internal control over financial reporting that has occurred during its most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company’s internal control over financial reporting;

(t) The Company maintains disclosure controls and procedures (as such term is defined in Rules 13a-15 and 15d-15 under the Exchange Act) that have been designed to ensure that material information relating to the Company is made known to the Company's principal executive officer and principal financial officer by others within the Company; and such disclosure controls and procedures are effective in all material respects; and the Company has carried out evaluations of the effectiveness of its disclosure controls and procedures as required by Rule 13a-15 of the Exchange Act through March 31, 2024;

(u) This Agreement has been duly authorized, executed and delivered by the Company;

(v) Neither the Company nor any director, officer or employee nor, to the knowledge of the Company, any agent, affiliate or other person, while acting on behalf of the Company (i) has made, offered, promised or authorized any unlawful contribution, gift, entertainment or other unlawful expense or taken any act in furtherance thereof; (ii) has made, offered, promised or authorized any direct or indirect unlawful payment; (iii) has violated or is in violation of any applicable provision of the Foreign Corrupt Practices Act of 1977, as amended, or the rules and regulations thereunder, the Bribery Act 2010 of the United Kingdom or any other applicable anti-bribery, anti-corruption or related law, statute or regulation (collectively, "Anti-Corruption Laws"); or (iv) will use, directly or indirectly, the proceeds of the offering in furtherance of an offer, payment, promise to pay or authorization of the payment or the giving of money, or anything else of value, to any person in violation of any applicable Anti-Corruption Laws; and the Company has conducted its business in compliance with applicable Anti-Corruption Laws and has instituted and maintained and will continue to institute and maintain policies and procedures reasonably designed to promote and achieve compliance with such laws and with the representations and warranties contained herein;

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

(x) Neither the Company nor any director, officer or employee nor, to the knowledge of the Company, any agent, affiliate or representative of the Company is an individual or entity ("Person") that is, or is 50% or more owned or otherwise controlled by one or more Persons that are, currently the subject or the target of any sanctions administered or enforced by the U.S. government, including, without limitation, the Office of Foreign Assets Control of the U.S. Department of the Treasury ("OFAC"), or the U.S. Department of State and including, without limitation, the designation as a "specially designated national" or "blocked person," the European Union, His Majesty's Treasury, the United Nations Security Council, or other relevant sanctions authority (collectively, "Sanctions"); nor is the Company located, organized or resident in a country or territory that is the subject or target of comprehensive Sanctions (currently, the so-called Donetsk People's Republic, the so-called Luhansk People's Republic and the Crimea regions of Ukraine, Cuba, Iran, North Korea or Syria) (each, a "Sanctioned Jurisdiction"), and the Company will not directly or indirectly use the proceeds of the offering of the Offered Securities hereunder,

or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity (i) to fund or facilitate any activities of or business with any person that, at the time of such funding, is the subject or the target of Sanctions or with a Sanctioned Jurisdiction or (ii) in any other manner that will result in a violation by any person (including any person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions; and the Company has not knowingly engaged in and is not now knowingly engaged in, and will not engage in, any dealings or transactions with any individual or entity that at the time of the dealing or transaction is or was the subject of Sanctions or with a Sanctioned Jurisdiction; the Company is not engaged in, or has not, at any time since April 24, 2019, engaged in, any dealings or transactions with or involving any individual or entity that was or is, as applicable, at the time of such dealing or transaction, the subject or target of Sanctions or with any Sanctioned Jurisdiction; and the Company has instituted, and maintains, policies and procedures designed to promote and achieve continued compliance with Sanctions;

(y) The financial statements included in the Registration Statement, the Pricing Prospectus and the Prospectus, together with the related schedules and notes, present fairly in all material respects the financial position of the Company at the dates indicated and the statement of operations, stockholders' equity and cash flows of the Company for the periods specified; said financial statements have been prepared in conformity with U.S. generally accepted accounting principles ("GAAP") applied on a consistent basis throughout the periods involved. The supporting schedules, if any, present fairly in all material respects in accordance with GAAP the information required to be stated therein. Except as included therein, no historical or pro forma financial statements or supporting schedules are required to be included in the Registration Statement, the Pricing Prospectus or the Prospectus under the Act or the rules and regulations promulgated thereunder. To the Company's knowledge, no person who has been suspended or barred from being associated with a registered public accounting firm, or who has failed to comply with any sanction pursuant to Rule 5300 promulgated by the PCAOB, has participated in or otherwise aided the preparation of, or audited, the financial statements, supporting schedules or other financial data filed with the Commission as a part of the Registration Statement, the Pricing Prospectus and the Prospectus;

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

(aa) No material labor disturbance by or dispute with current or former employees or officers of the Company exists or, to the Company's knowledge, is contemplated or threatened, and the Company is not aware of any existing or imminent labor disturbance by, or dispute with, the employees of any of the Company's principal suppliers, manufacturers or contractors. The Company is not a party to any collective bargaining agreement;

(bb) The Company has insurance covering its respective properties, operations, personnel and businesses, including business interruption insurance, which insurance is in amounts and insures against such losses and risks as are reasonable and is ordinary and customary for comparable companies in the same or similar businesses; and Company has not (i) received notice from any insurer or agent of such insurer that capital improvements or other expenditures are required or necessary to be made in order to continue such insurance or (ii) any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage at reasonable cost from similar insurers as may be necessary to continue its business;

(cc) The Company's board of directors meets the independence requirements of, and has established an audit committee, a compensation committee and a nominating and corporate governance committee, in each case, that meets the independence requirements of, the rules and regulations of the Commission and Nasdaq, including the phase-in periods provided by the rules and regulations of the Commission and Nasdaq;

(dd) The Company and its directors, officers and employees, and to the Company's knowledge, its respective agents, affiliates and representatives, are, and at all times have been, in material compliance with all Health Care Laws (defined herein), including, but not limited to, the rules and regulations of the Food and Drug Administration ("FDA"), the U.S. Department of Health and Human Services Office of Inspector General, the Centers for Medicare & Medicaid Services, the Office for Civil Rights, the Department of Justice and any other governmental agency or body having jurisdiction over the Company or any of its properties, and has not engaged in any activities which are, as applicable, cause for false claims liability, civil penalties, or mandatory or permissive exclusion from Medicare, Medicaid, or any other local, state or federal healthcare program. For purposes of this Agreement, "Health Care Laws" shall mean the federal Anti-kickback Statute (42 U.S.C. § 1320a-7b(b)), the Physician Payments Sunshine Act (42 U.S.C. § 1320a-7h), the civil False Claims Act (31 U.S.C. §§ 3729 et seq.), the criminal False Claims Act (42 U.S.C. § 1320a-7b(a)), all criminal laws relating to health care fraud and abuse, including but not limited to 18 U.S.C. Sections 286, 287, 1347 and 1349, and the health care fraud criminal provisions under the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. §§ 1320d et seq.) ("HIPAA"), the exclusion laws (42 U.S.C. § 1320a-7), the civil monetary penalties law (42 U.S.C. § 1320a-7a), the Stark Law (42 U.S.C. § 1395nn), the applicable provisions of HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. §§ 17921 et seq.), the Federal Food, Drug, and Cosmetic Act (21 U.S.C. §§ 301 et seq.), Medicare (Title XVIII of the Social Security Act), Medicaid (Title XIX of the Social Security Act), the Public Health Service Act (42 U.S.C. §§ 201 et seq.), or any analogous rules and regulations of any other national, federal, state or local governmental or regulatory body or authority. The Company has filed, maintained or submitted all reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Health Care Laws, and all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and accurate on the date filed in all material respects (or were corrected or supplemented by a subsequent submission). The Company is neither a party to nor has any ongoing reporting obligations pursuant to any corporate integrity agreement, deferred prosecution agreement, monitoring agreement, consent decree, settlement order, plan of correction or similar agreement imposed by any governmental authority. The Company has not received any notification, correspondence or any other written communication, including, without limitation, any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or written notice from the FDA or any similar regulatory authority, or any notification of any pending or threatened claim, suit, proceeding, hearing, enforcement, investigation, arbitration or other action, from any arbitrator or regulatory or governmental authority or third party alleging potential or actual non-compliance by, or liability of, the Company under any Health Care Laws;

(ee) The Company has possessed and currently possesses, and is in material compliance with the terms of, all applications, certificates, approvals, clearances, registrations, exemptions, franchises, licenses, permits, consents and other authorizations necessary to conduct its business (collectively, "Licenses"), issued by governmental authorities, including, without limitation, all Licenses required by the FDA, or any component thereof, and/or by any other U.S., state, local or foreign government or drug regulatory agency (collectively, the "Regulatory Agencies"). All Licenses are in full force and effect and the Company is not in material violation of any term or conditions of any License. The Company has materially fulfilled and

performed all of its obligations with respect to the Licenses and, to the Company's knowledge, no event has occurred which allows, or after notice or lapse of time would allow, revocation or termination thereof or result in any other impairment of the rights of the holder of any License. The Company has not received any notice of proceedings relating to the revocation or modification of any Licenses and, no Regulatory Agency has taken any action to limit, suspend or revoke any License possessed by the Company;

(ff) The preclinical studies and clinical trials conducted by or on behalf of the Company were and, if still pending, are being, conducted in all material respects in accordance with the protocols submitted to the FDA or any foreign governmental body exercising comparable authority, procedures and controls pursuant to, where applicable, accepted professional and scientific standards, and all applicable laws and regulations; the descriptions of the preclinical studies and clinical trials conducted by or, to the Company's knowledge, on behalf of the Company, and the results thereof, contained in the Registration Statement, the Pricing Prospectus and the Prospectus are accurate and complete in all material respects and fairly present the data derived from such preclinical studies and clinical trials; the Company is not aware of any other preclinical studies or clinical trials, the results of which reasonably call into question the results described in the Registration Statement, the Pricing Prospectus and the Prospectus; and the Company has not received any notices or correspondence from the FDA, any foreign, state or local governmental body exercising comparable authority or any Institutional Review Board requiring the termination, suspension, material modification or clinical hold of any preclinical studies or clinical trials conducted by or on behalf of the Company;

(gg) Neither the Company nor, to the knowledge of the Company, any of its officers, employees, directors, agents or clinical investigators, has been excluded, suspended, disqualified 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 would reasonably be expected to result in debarment, disqualification, suspension, or exclusion, or convicted of any crime or engaged in any conduct that would reasonably be expected to result in debarment under 21 U.S.C. § 335a or comparable foreign law;

(hh) Except in each case as disclosed in the Pricing Prospectus and the Prospectus:

(A) the Company owns or has valid licenses or other rights, or can acquire on reasonable terms rights, to practice and use all patents, patent applications, copyrights, trademarks, trademark registrations, service marks, service mark registrations, trade names, service names, know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), and all other intellectual property rights necessary for, or used in the conduct or the proposed conduct of, the business of the Company in the manner described in the Pricing Prospectus and the Prospectus (collectively, the "Company Intellectual Property"), except where the failure to own, possess, license, have the right to use, or the ability to acquire any of the foregoing would not reasonably be expected to result, singly or in the aggregate, in a Material Adverse Effect;

(B) to the knowledge of the Company, the conduct of its business (including the development and commercialization of the product candidates) described in the Pricing Prospectus and the Prospectus has not and will not infringe or misappropriate any intellectual property rights of third parties;

(C) to the knowledge of the Company, there are no rights of third parties to any of the intellectual property owned by the Company, and such intellectual property is owned by the Company free and clear of all material liens, security interests, or encumbrances;

(D) to the knowledge of the Company, the patents, trademarks and copyrights held or licensed by the Company included within the Company Intellectual Property, in each case, that are material to the conduct of the business of the Company as currently conducted, are not invalid, not unenforceable, and subsisting;

(E) except as would not reasonably be expected, singly or in the aggregate, to have a Material Adverse Effect, to the Company's knowledge, there is no infringement by third parties of any of the Company Intellectual Property;

(F) (i) the Company is not obligated to pay a material royalty, grant a license, or provide other material consideration to any third party in connection with the Company Intellectual Property, (ii) no action, suit, claim or other proceeding is pending or, to the knowledge of the Company, is threatened, alleging that the Company is infringing, misappropriating, diluting or otherwise violating any rights of others with respect to any of the Company's product candidates, processes or intellectual property, and the Company is unaware of any facts that could form a reasonable basis for any such action, suit, proceeding or claim, (iii) no action, suit, claim or other proceeding is pending or, to the knowledge of the Company, is threatened, challenging the validity, enforceability, scope, registration, ownership or use of any of the Company's Intellectual Property, and the Company is unaware of any facts which could form a reasonable basis for any such action, suit, proceeding or claim, (iv) except as would not reasonably be expected, singly or in the aggregate, to have a Material Adverse Effect, no action, suit, claim or other proceeding is pending or, to the knowledge of the Company, is threatened, challenging the Company's rights in or to any Company Intellectual Property, and the Company is unaware of any facts which could form a reasonable basis for any such action, suit, proceeding or claim, (v) the Company has not received written notice of any claim of infringement, misappropriation or conflict with any asserted rights of others with respect to any of the Company's products, proposed products, processes or Company Intellectual Property, (vi) to the knowledge of the Company, the development, manufacture, sale, and any currently proposed use of any of the products, proposed products or processes of the Company referred to in the Pricing Prospectus and the Prospectus, in the current or proposed conduct of the business of the Company, do not currently, and will not upon commercialization, to the knowledge of the Company, infringe any valid patent claim or other valid intellectual property right of any third party, (vii) to the knowledge of the Company, no third party has any ownership right in or to any Company Intellectual Property in any field of use that is exclusively licensed to the Company, other than any licensor to the Company of such Company Intellectual Property, (viii) to the knowledge of the Company, no employee, consultant or independent contractor of the Company engaged in the development of Company Intellectual Property that is material to the business of the Company is in or has ever been in violation in any material respect of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer or independent contractor where the basis of such violation relates to such employee's employment or independent contractor's engagement with the Company or actions undertaken while employed or engaged with the Company, (ix) the Company has taken reasonable measures to protect its confidential information and trade secrets and to maintain and safeguard the Company's Intellectual Property, including the execution of appropriate nondisclosure and confidentiality agreements, and (x) the Company has complied in all material respects with the terms of each agreement pursuant to which the Company's Intellectual Property has been licensed to the Company, and, to the Company's knowledge, all such agreements are in full force and effect;

(ii) All patents and patent applications owned by or licensed to the Company or under which the Company has rights have, to the knowledge of the Company, been duly and properly filed and maintained; to the knowledge of the Company, there are no material defects in any of

the patents or patent applications disclosed in the Registration Statement and the Prospectus as being owned by the Company; to the knowledge of the Company, the parties prosecuting such applications have complied with their duty of candor and disclosure to the United States Patent and Trademark Office (the “USPTO”) in connection with such applications; and the Company is not aware of any facts required to be disclosed to the USPTO that were not disclosed to the USPTO and which would preclude the grant of a patent in connection with any such application or would reasonably be expected to form the basis of a finding of invalidity with respect to any patents that have issued with respect to such applications;

(jj) (i) The Company has complied and is presently in compliance, each in all material respects, with all internal and externally published privacy policies, contractual obligations, industry standards by which the Company is legally or contractually bound, applicable laws, statutes, judgments, orders, rules and regulations of any court or arbitrator or other governmental or regulatory authority and any other legal obligations, in each case, to the extent applicable and governing the collection, use, transfer, import, export, storage, protection, disposal and disclosure by the Company of personal, personally identifiable, or regulated data (“Data Security Obligations”, and such data, “Data”); (ii) the Company has not received any written notification of, or written complaint regarding, and is unaware of any other facts that, individually or in the aggregate, would reasonably indicate that the Company is in material violation of any Data Security Obligation; and (iii) to the knowledge of the Company, there is no action, suit or proceeding by or before any court or governmental agency, authority or body pending or threatened alleging non-compliance with any Data Security Obligation. The Company has published a privacy policy on its website that (i) complies in all material respects with applicable laws, (ii) provides materially accurate, complete and sufficient notice of the Company’s then-current privacy practices and processing governing the subject matter, and (iii) does not contain any material misrepresentations or omissions. To the knowledge of the Company, the execution, delivery and performance of this Agreement or any other agreement referred to in this Agreement will not result in a breach or violation of any Data Security Obligations;

(kk) Except as would not reasonably be expected to have a Material Adverse Effect, the Company’s information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, and databases (collectively, “IT Systems”) are adequate for, and operate and perform in all respects as required in connection with the operation of the business of the Company as currently conducted, free and clear of all bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants. The Company has implemented commercially reasonable technical and organizational measures designed to protect the IT Systems and Data used in connection with the operation of the Company’s business. Without limiting the foregoing, the Company has used reasonable efforts to establish and maintain and implement reasonable information technology, information security, cyber security and data protection controls, including, as applicable, oversight, access controls, encryption, technological and physical safeguards that are designed to protect against and prevent breach, destruction, loss, unauthorized distribution, use, access, disablement, misappropriation or modification, or other compromise or misuse of or relating to any information technology system or Data used in connection with the operation of the Company’s business (“Breach”). Except as would not reasonably be expected to have a Material Adverse Effect, to the Company’s knowledge, there has been no such Breach, and the Company has not been notified of, and has no knowledge of any event or condition that would reasonably be expected to result in, any such Breach. The Company is presently in compliance in all material respects with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, legally binding internal policies and contractual obligations governing the privacy and security of IT Systems and Data and designed to protect such IT Systems and Data from unauthorized use, access, misappropriation or modification;

(ll) Any statistical, industry-related and market-related data included in the Pricing Prospectus and the Prospectus are based on or derived from sources that the Company believes, after reasonable inquiry, to be reliable and accurate and, to the extent required, the Company has obtained the written consent to the use of such data from such sources, if required;

(mm) All income tax returns of the Company required by law to be filed have been filed (or the Company has properly requested extensions thereof) and all taxes shown as due on such returns or that otherwise have been assessed, which are due and payable, have been paid, except as may be being contested in good faith and by appropriate proceedings, and except insofar as any failure to file a tax return or to pay a tax would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. The Company has made adequate charges, accruals and reserves in the applicable financial statements referred to in Section 1(y) above in respect of all federal, state and foreign income and franchise taxes for all periods as to which the tax liability of the Company or any of its subsidiaries has not been finally determined;

(nn) The Company has not taken and will not take, directly or indirectly, any action that is designed to or that has constituted or might reasonably be expected to cause or result in stabilization or manipulation of the price of the Offered Securities;

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

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

(qq) There are no contracts, arrangements or documents which are required to be described in the Registration Statement or to be filed as exhibits thereto which have not been so described and filed as required;

(rr) From the time of filing of the Initial Registration Statement through the date hereof, the Company has been and is an "emerging growth company" as defined in Section 2(a)(19) of the Act (an "Emerging Growth Company");

(ss) The Company and each director and officer of the Company, in their capacities as such, are in compliance, to the extent required, with all provisions of the Sarbanes-Oxley Act, and all rules and regulations promulgated thereunder applicable to, and the Company at such time, and is taking steps designed to ensure that it will be in compliance, at all times, with the other provisions of the Sarbanes-Oxley Act when they become applicable to the Company;

(tt) The interactive data in eXtensible Business Reporting Language included in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto;

(uu) The Company is an "experienced issuer," as defined in FINRA Conduct Rule 5110;

(vv) No forward-looking statement (within the meaning of Section 27A of the Act and Section 21E of the Exchange Act) included or incorporated by reference in any of the Registration Statement, the Pricing Prospectus or the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith;

(qq) The Stock (including the Shares and Warrant Shares) is registered pursuant to Section 12(b) or 12(g) of the Exchange Act and are listed on Nasdaq, and the Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Stock under the Exchange Act or delisting the Stock from the Nasdaq nor has the Company received any notification that the Commission or the Nasdaq is contemplating terminating such registration or listing. To the Company's knowledge, it is in compliance with all applicable listing requirements of Nasdaq;

(ss) The Company does not have any outstanding extension of credit, in the form of a personal loan, to or for any director or executive officer (or equivalent thereof) of the Company except for such extensions of credit as are expressly permitted by Section 13(k) of the Exchange Act; and

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

2. Subject to the terms and conditions herein set forth, (a) the Company agrees to issue and sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company, at a purchase price per share of \$2.115 and a purchase price per Pre-Funded Warrant of \$2.114, the number of Firm Shares and Pre-Funded Warrants set forth opposite the name of such Underwriter in Schedule I hereto and (b) in the event and to the extent that the Underwriters shall exercise the election to purchase Optional Shares as provided below, the Company agrees to issue and sell to each of the Underwriters, and each of the Underwriters agrees, severally and not jointly, to purchase from the Company, at the purchase price per share set forth in clause (a) of this Section 2 (provided that the purchase price per Optional Share shall be reduced by an amount per share equal to any dividends or distributions declared by the Company and payable on the Firm Shares but not payable on the Optional Shares), that portion of the number of Optional Shares as to which such election shall have been exercised (to be adjusted by the Representatives so as to eliminate fractional shares) determined by multiplying such number of Optional Shares by a fraction, the numerator of which is the maximum number of Optional Shares which such Underwriter is entitled to purchase as set forth opposite the name of such Underwriter in Schedule I hereto and the denominator of which is the maximum number of Optional Shares that all of the Underwriters are entitled to purchase hereunder.

The Company hereby grants to the Underwriters the right to purchase at their election up to 5,000,000 Optional Shares, at the purchase price per share set forth in the paragraph above, provided that the purchase price per Optional Share shall be reduced by an amount per share equal to any dividends or distributions declared by the Company and payable on the Firm Shares but not payable on the Optional Shares. Any such election to purchase Optional Shares may be exercised only by written notice from the Representatives to the Company, given within a period of 30 calendar days after the date of this Agreement, setting forth the aggregate number of Optional Shares to be purchased and the date on which such Optional Shares are to be delivered, as determined by the Representatives but in no event earlier than the First Time of Delivery (as defined in Section 4 hereof) or, unless the Representatives and the Company otherwise agree in writing, earlier than one or later than ten business days after the date of such notice.

3. Upon the authorization by the Representatives of the release of the Firm Securities, the several Underwriters propose to offer the Firm Securities for sale upon the terms and conditions set forth in the Pricing Disclosure Package and the Prospectus.

4. (a) The Shares to be purchased by each Underwriter hereunder, in definitive or book-entry form, and in such authorized denominations and registered in such names as the Representatives may request upon at least twenty-four hours' prior notice to the Company shall be delivered by or on behalf of the Company to the Representatives, through the facilities of the Depository Trust Company ("DTC"), for the account of such Underwriter, against payment by or on behalf of such Underwriter of the purchase price therefor by wire transfer of Federal (same-day) funds to the account specified by the Company to the Representatives at least twenty-four hours in advance. The Company will cause the certificates, if any, representing the Offered Securities to be made available for checking and packaging at least twenty-four hours prior to the Time of Delivery (as defined below) with respect thereto at the office of DTC or its designated custodian (the "Designated Office"). The time and date of such delivery and payment shall be, with respect to the Firm Securities, 9:30 a.m., New York City time, on June 27, 2024 or such other time and date as the Representatives and the Company may agree upon in writing, and, with respect to the Optional Shares, 9:30 a.m., New York City time, on the date specified by the Representatives in the written notice given by the Representatives of the Underwriters' election to purchase such Optional Shares, or such other time and date as the Representatives and the Company may agree upon in writing. Such time and date for delivery of the Firm Securities is herein called the "First Time of Delivery", such time and date for delivery of the Optional Shares, if not the First Time of Delivery, is herein called the "Second Time of Delivery", and each such time and date for delivery is herein called a "Time of Delivery". The Company shall deliver, or cause to be delivered, the Pre-Funded Warrants at the First Time of Delivery, against the irrevocable release of a wire transfer of immediately available funds for the amount of the purchase price therefor.

(b) The documents to be delivered at each Time of Delivery by or on behalf of the parties hereto pursuant to Section 8 hereof, including the cross receipt for the Offered Securities and any additional documents requested by the Underwriters pursuant to Section 8(l) hereof, will be delivered at the offices of Goodwin Procter LLP, 620 Eighth Avenue, New York, New York, 10018 (the "Closing Location"), and the Offered Securities will be delivered at the Designated Office, all at such Time of Delivery. A meeting will be held at the Closing Location at 5:00 p.m., New York City time, on the New York Business Day next preceding such Time of Delivery, at which meeting the final drafts of the documents to be delivered pursuant to the preceding sentence will be available for review by the parties hereto. For the purposes of this Section 4, "New York Business Day" shall mean each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in New York City are generally authorized or obligated by law or executive order to close.

(c) Notwithstanding the foregoing, the Company and the Representatives shall instruct purchasers of the Pre-Funded Warrants to make payment for the Pre-Funded Warrants on the First Time of Delivery to the Company by wire transfer in immediately available funds to the account specified by the Company at a purchase price of \$2.249 per Pre-Funded Warrant, in lieu of payment by the Underwriters for such Pre-Funded Warrants, and the Company shall deliver the Pre-Funded Warrants to such purchasers on the First Time of Delivery in definitive form against such payment, in lieu of the Company's obligation to deliver such Pre-Funded Warrants to the Underwriters; provided that, the Underwriters shall withhold \$0.135 per Pre-Funded Warrant with

respect to such Pre-Funded Warrants as an offset effected by the Company of its claim for payment by the Underwriters to the Company for the Firm Securities and Optional Shares (only to the extent the Underwriters' option under Section 2 hereof is exercised concurrently to close on the First Time of Delivery) against the Company's obligation to pay the amount so withheld with respect to such Pre-Funded Warrants to the Underwriters. In the event that any purchaser of the Pre-Funded Warrants fails to make payment to the Company for all or part of the Pre-Funded Warrants on the First Time of Delivery, the Representatives shall either (i) make payment to the Company for such Pre-Funded Warrants at the combined purchase price specified in Section 2 or (ii) elect, by written notice to the Company, to receive Stock at the combined purchase price specified in Section 2 in lieu of all or a portion of such Pre-Funded Warrants contemplated to be sold under this Agreement.

5. The Company agrees with each of the Underwriters:

(a) To prepare the Prospectus in a form approved by the Representatives and to file such Prospectus pursuant to Rule 424(b) under the Act prior to the earlier of the First Time of Delivery and the Commission's close of business on the second business day following the execution and delivery of this Agreement or such earlier time as may be required under the Act; to make no further amendment or any supplement to the Registration Statement, the Basic Prospectus, or the Prospectus prior to the last Time of Delivery which shall be disapproved by the Representatives promptly after reasonable notice thereof; to advise the Representatives, promptly after it receives notice thereof, of the time when any amendment to the Registration Statement has been filed or becomes effective or any amendment or supplement to the Prospectus has been filed and to furnish the Representatives with copies thereof; to file promptly all materials required to be filed by the Company with the Commission pursuant to Rule 433(d) under the Act within the time required by such Rule; to file promptly all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the date of the Prospectus and for so long as the delivery of a prospectus (or in lieu thereof, the notice referred to in Rule 173(a) under the Act) is required in connection with the offering or sale of the Offered Securities; to advise the Representatives, promptly after it receives notice thereof, of the issuance by the Commission of any stop order or of any order preventing or suspending the use of any Preliminary Prospectus or other prospectus in respect of the Offered Securities, of the suspension of the qualification of the Offered Securities for offering or sale in any jurisdiction, of the initiation or threatening of any proceeding for any such purpose, or of any request by the Commission for the amending or supplementing of the Registration Statement or the Prospectus or for additional information; and, in the event of the issuance of any stop order or of any order preventing or suspending the use of any Preliminary Prospectus or other prospectus relating to the Offered Securities or suspending any such qualification, to promptly use its best efforts to obtain the withdrawal of such order;

(b) Promptly from time to time to take such action as the Representatives may reasonably request to qualify the Offered Securities for offering and sale under the securities laws of such jurisdictions as the Representatives may request and to use reasonable commercial efforts to comply with such laws so as to permit the continuance of sales and dealings therein in such jurisdictions for as long as may be necessary to complete the distribution of the Offered Securities, provided that in connection therewith the Company shall not be required to qualify as a foreign corporation or to file a general consent to service of process in any jurisdiction or subject itself to taxation in any jurisdiction in which it is not otherwise subject to taxation as of the date hereof;

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

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

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

(f) During the period beginning from the date hereof and continuing to and including the date that is 60 days after the date of the Prospectus (the “Lock Up Period”), not to (i) offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise transfer or dispose of, directly or indirectly, or file with or confidentially submit to the Commission a registration statement under the Act relating to, any securities of the Company that are substantially similar to the Offered Securities, including but not limited to any options or warrants to purchase shares of Stock or any securities that are convertible into or exchangeable for, or that represent the right to receive, Stock or any such substantially similar securities, (ii) enter into any

swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Stock or any such other securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Stock or such other securities, in cash or otherwise (other than the Offered Securities to be sold hereunder or pursuant to employee stock option plans, as described in the Pricing Prospectus and Prospectus, existing on, or upon the conversion or exchange of convertible or exchangeable securities outstanding as of, the date of this Agreement), or (iii) publicly disclose the intention to do any of the foregoing described in either (i) or (ii) above, in each case, without the Representatives' prior written consent; provided, however, that the restrictions in the foregoing sentence shall not apply to (a) the Offered Securities to be sold hereunder; (b) any shares of Stock issued upon the exercise of outstanding warrants or upon conversion of convertible preferred stock outstanding on the date of this Agreement; (c) shares of Stock or any securities (including without limitation options, restricted stock or restricted stock units) convertible into, or exercisable for, shares of Stock pursuant to any employee stock option plan, incentive plan, stock plan, dividend reinvestment plan or otherwise in equity compensation arrangements in place as of the Applicable Time and as described in the Pricing Disclosure Package; (d) the grant of awards pursuant to employee equity-based compensation plans, incentive plans, stock plans, or other arrangements in place as of the Applicable Time and described in the Pricing Disclosure Package; (e) the filing of a registration statement on Form S-8 in connection with the registration of shares of Stock issuable under any employee equity-based compensation plan, incentive plan, stock plan, dividend reinvestment plan adopted and approved by the Company's board of directors prior to the Applicable Time and described in the Pricing Disclosure Package; (f) the issuance of up to 5% of the outstanding shares of Stock in connection with the acquisition of the assets of, or a majority or controlling portion of the equity of, or a joint venture with another entity in connection with its acquisition by the Company of such entity; (g) facilitating the establishment of a trading plan on behalf of any director or officer of the Company pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Stock, provided that (i) such plan does not provide for the transfer of shares of Stock during the Lock Up Period and (ii) no public report or filing shall be made during the Lock Up Period unless required by the Exchange Act and such report or filing shall include a statement to the effect that no transfer of Stock may be made under such plan during the Lock Up Period; and (h) the issuance by the Company of shares of Stock in connection with sales pursuant to the Sales Agreement by and between the Company and Goldman Sachs & Co. LLC, SVB Securities LLC (f/k/a SVB Leerink LLC) and Wells Fargo Securities, LLC, dated as of October 5, 2021, as amended by Amendment No. 1 to Sales Agreement, dated March 30, 2022, provided that no sales shall be made for a period of 30 days from the date of the Prospectus; provided that each newly appointed director or executive officer that is a recipient of any shares of Stock issued or sold pursuant to clause (c) or (d) or each recipient of any Stock issued or sold pursuant to clause (f) above executes and delivers to the Representatives, prior to such issuance or sale (as the case may be), an agreement having substantially the same terms as the lock-up letters described in Section 8(j) of this Agreement.

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

(h) During a period of three years from the effective date of the Registration Statement, so long as the Company is subject to the reporting requirements of either Section 13 or Section 15(d) of the Exchange Act, to furnish to the Representatives copies of all reports or other communications (financial or other) furnished to stockholders, and to deliver to the Representatives (i) as soon as they are available, copies of any reports and financial statements furnished to or filed with the Commission or any national securities exchange on which any class of securities of the Company is listed; and (ii) such additional information concerning the business and financial condition of the Company as the Representatives may from time to time reasonably request (such financial statements to be on a consolidated basis to the extent the accounts of the Company and any subsidiaries are consolidated in reports furnished to its stockholders generally or to the Commission); provided that no reports, documents or other information need to be furnished pursuant to this Section 5(h) to the extent that they are available on EDGAR;

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

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

(k) On or before the date of this Agreement, the Company shall have delivered to the Underwriters a certificate satisfying the beneficial ownership due diligence requirements of the Financial Crimes Enforcement Network from the Company in form and substance reasonably satisfactory to the Underwriters, along with such additional supporting documentation as the Underwriters have requested or may reasonably request in connection with the verification of the foregoing certificate;

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

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

(n) To promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (i) completion of the distribution of the Offered Securities within the meaning of the Act and (ii) the last Time of Delivery;

(o) The Company shall, at all times while the Company is subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act and any Pre-Funded Warrants are outstanding, use its best efforts to maintain a registration statement covering the issuance and sale of the Warrant Shares; and

(p) 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 Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of such Pre-Funded Warrants, the number of Warrant Shares that are initially issuable and deliverable upon the exercise of the then-outstanding Pre-Funded Warrants.

6. (a) The Company represents and agrees that, without the prior consent of the Representatives, it has not made and will not make any offer relating to the Offered Securities that would constitute a “free writing prospectus” as defined in Rule 405 under the Act; each Underwriter represents and agrees that, without the prior consent of the Company and the Representatives, it has not made and will not make any offer relating to the Offered Securities that would constitute a free writing prospectus required to be filed with the Commission; any such free writing prospectus the use of which has been consented to by the Company and the Representatives is listed on Schedule II(a) or Schedule II(c) hereto;

(b) The Company has complied and will comply with the requirements of Rule 433 under the Act applicable to any Issuer Free Writing Prospectus, including timely filing with the Commission or retention where required and legending; and the Company represents that it has satisfied and agrees that it will satisfy the conditions under Rule 433 under the Act to avoid a requirement to file with the Commission any electronic roadshow;

(c) The Company agrees that if at any time following issuance of an Issuer Free Writing Prospectus or Written Testing-the-Waters Communication any event occurred or occurs as a result of which such Issuer Free Writing Prospectus or Written Testing-the-Waters Communication would conflict with the information in the Registration Statement, the Pricing Prospectus or the Prospectus or would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances then prevailing, not misleading, the Company will give prompt notice thereof to the Representatives and, if requested by the Representatives, will prepare and furnish without charge to each Underwriter an Issuer Free Writing Prospectus, Written Testing-the-Waters Communication or other document which will correct such conflict, statement or omission; provided, however, that this covenant shall not apply to any statements or omissions in an Issuer Free Writing Prospectus or Written Testing-the-Waters Communication prepared or authorized by the Company made in reliance upon and in conformity with the Underwriter Information;

(d) The Company represents and agrees that (i) it has not engaged in, or authorized any other person to engage in, any Testing-the-Waters Communications, other than Testing-the-Waters Communications with the prior consent of the Representatives with entities that the Company reasonably believes are qualified institutional buyers as defined in Rule 144A under the Act or institutions that are accredited investors as defined in Rule 501(a)(1), (a)(2), (a)(3), (a)(7) or (a)(8) under the Act; and (ii) it has not distributed, or authorized any other person to distribute, any Written Testing-the-Waters Communications, other than those distributed with the prior consent of the Representatives that are listed on Schedule III(d) hereto; and the Company reconfirms that the Underwriters have been authorized to act on its behalf in engaging in Testing-the-Waters Communications; and

(e) Each Underwriter represents and agrees that any Written Testing-the-Waters Communications undertaken by it were with entities that such Underwriter reasonably believes are qualified institutional buyers as defined in Rule 144A under the Act or institutions that are accredited investors as defined in Rule 501(a)(1), (a)(2), (a)(3), (a)(7) or (a)(8) under the Act.

7. The Company covenants and agrees with the several Underwriters that the Company will pay or cause to be paid the following: (i) the fees, disbursements and expenses of the Company’s counsel and accountants in connection with the registration of the Offered Securities under the Act and all other expenses in connection with the preparation, printing, reproduction and filing of the Registration Statement, the Basic Prospectus, any Preliminary Prospectus, any Written Testing-the-Waters Communication, any Issuer Free Writing Prospectus and the Prospectus and amendments and supplements thereto and the mailing and delivering of copies thereof to the Underwriters and dealers; (ii) the cost of printing or producing any agreement among

Underwriters, this Agreement, any Blue Sky Memorandum, closing documents (including any compilations thereof) and any other documents in connection with the offering, purchase, sale and delivery of the Offered Securities; (iii) all expenses in connection with the qualification of the Offered Securities for offering and sale under state securities laws as provided in Section 5(b) hereof, including the documented fees and disbursements of counsel for the Underwriters in connection with such qualification and in connection with the Blue Sky survey(s); (iv) the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in connection with the marketing of the offering of the Offered Securities, including, without limitation, expenses associated with the preparation or dissemination of any electronic roadshow, expenses associated with the production of roadshow slides and graphics, fees and expenses of any consultants engaged in connection with the roadshow presentations (with the prior approval of the Company), travel and lodging expenses of the representatives and officers of the Company and any such consultants, and the cost of any aircraft chartered in connection with the roadshow; (v) all fees and expenses in connection with listing the Shares and Warrant Shares on Nasdaq; (vi) the filing fees incident to, and the documented fees and disbursements of counsel for the Underwriters in connection with, any required reviews by FINRA of the terms of the sale of the Offered Securities (such fees and expenses of counsel pursuant to clauses (iii) and (vi) in an aggregate amount not to exceed \$20,000); (vii) the cost of preparing stock certificates; (viii) the cost and charges of any transfer agent or registrar; and (ix) all other costs and expenses incident to the performance of its obligations hereunder which are not otherwise specifically provided for in this Section. It is understood, however, that, except as provided in this Section, and Sections 9 and 12 hereof, the Underwriters will pay all of their own costs and expenses, including the fees of their counsel, transfer taxes on resale of any of the Offered Securities by them, and any advertising expenses connected with any offers they may make; provided, however, that the Underwriters and the Company shall each pay 50% of the cost of chartering any aircraft to be used by both the Company and the Underwriters in connection with the roadshow.

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

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

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

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

(d) Cooley LLP, intellectual property counsel for the Company, shall have furnished to the Representatives their written opinion and negative assurance letter each dated such Time of Delivery, in form and substance satisfactory to the Representatives;

(e) On the date of the Prospectus at a time substantially concurrent with the execution of this Agreement, on the effective date of any post-effective amendment to the Registration Statement filed subsequent to the date of this Agreement and also at each Time of Delivery, Deloitte & Touche LLP shall have furnished to the Representatives a letter or letters, dated the respective dates of delivery thereof, in form and substance satisfactory to the Representatives;

(f) (i) The Company shall not have sustained since the date of the latest audited financial statements included or incorporated by reference in the Pricing Prospectus and the Prospectus any loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth or contemplated in the Pricing Prospectus and the Prospectus, and (ii) since the respective dates as of which information is given in the Pricing Prospectus and the Prospectus there shall not have been any change in the capital stock (other than as a result of the exercise of stock options or the award of stock options or restricted stock in the ordinary course of business pursuant to the Company's equity plans that are described in the Pricing Prospectus) or long-term debt of the Company or any change or effect, or any development involving a prospective change or effect, in or affecting (x) the business, properties, general affairs, management, financial position, stockholders' equity, prospects or results of operations of the Company, except as set forth or contemplated in the Pricing Prospectus and the Prospectus, or (y) the ability of the Company to perform its obligations under this Agreement, including the issuance and sale of the Offered Securities, or to consummate the transactions contemplated in the Pricing Prospectus and the Prospectus, the effect of which, in any such case described in clause (i) or (ii), is in the Representatives' judgment so material and adverse as to make it impracticable or inadvisable to proceed with the public offering or the delivery of the Offered Securities being delivered at such Time of Delivery on the terms and in the manner contemplated in the Pricing Prospectus and the Prospectus;

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

(h) On or after the Applicable Time there shall not have occurred any of the following: (i) a suspension or material limitation in trading in securities generally on Nasdaq or the New York Stock Exchange; (ii) a suspension or material limitation in trading in the Company's securities on Nasdaq; (iii) a general moratorium on commercial banking activities declared by either Federal or New York State authorities or a material disruption in commercial banking or securities settlement or clearance services in the United States; (iv) the outbreak or escalation of hostilities involving the United States or the declaration by the United States of a national emergency or war or (v) the occurrence of any other calamity or crisis or any change in financial, political or economic conditions in the United States or elsewhere, if the effect of any such event specified in clause

(iv) or (v) in the Representatives' judgment makes it impracticable or inadvisable to proceed with the public offering or the delivery of the Offered Securities being delivered at such Time of Delivery on the terms and in the manner contemplated in the Pricing Prospectus and the Prospectus;

(i) The Shares and Warrant Shares to be sold at such Time of Delivery shall have been duly listed for quotation on Nasdaq;

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

(k) The Company shall have complied with the provisions of Section 5(d) hereof with respect to the furnishing of prospectuses on the New York Business Day next succeeding the date of this Agreement; and

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

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

(b) Each Underwriter, severally and not jointly, will indemnify and hold harmless the Company against any losses, claims, damages or liabilities to which the Company may become subject, under the Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, any Preliminary Prospectus, the Basic Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus, or any roadshow or any Testing-the-Waters Communication, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue

statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, any Preliminary Prospectus, the Basic Prospectus, the Pricing Prospectus or the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus, or any roadshow or any Testing-the-Waters Communication, in reliance upon and in conformity with the Underwriter Information; and will reimburse the Company for any legal or other expenses reasonably incurred by the Company in connection with investigating or defending any such action or claim as such expenses are incurred. As used in this Agreement with respect to an Underwriter and an applicable document, "Underwriter Information" shall mean the written information furnished to the Company by such Underwriter through the Representatives expressly for use therein; it being understood and agreed upon that the only such information furnished by any Underwriter consists of the following information in the Prospectus furnished on behalf of each Underwriter: the concession and reallowance figures appearing in the fifth paragraph under the caption "Underwriting", and the information contained in the eighth and ninth paragraphs under the caption "Underwriting".

(c) Promptly after receipt by an indemnified party under subsection (a) or (b) of this Section 9 of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify the indemnifying party in writing of the commencement thereof; provided that the failure to notify the indemnifying party shall not relieve it from any liability that it may have under the preceding paragraphs of this Section 9 except to the extent that it has been materially prejudiced (through the forfeiture of substantive rights or defenses) by such failure; and provided further that the failure to notify the indemnifying party shall not relieve it from any liability that it may have to an indemnified party otherwise than under the preceding paragraphs of this Section 9. In case any such action shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party (who shall not, except with the consent of the indemnified party, be counsel to the indemnifying party), and, after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such subsection for any documented legal expenses of other counsel or any other expenses, in each case subsequently incurred by such indemnified party, in connection with the defense thereof other than reasonable costs of investigation. No indemnifying party shall, without the written consent of the indemnified party, effect the settlement or compromise of, or consent to the entry of any judgment with respect to, any pending or threatened action or claim in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified party is an actual or potential party to such action or claim) unless such settlement, compromise or judgment (i) includes an unconditional release of the indemnified party, in form and substance reasonably satisfactory to such indemnified party, from all liability arising out of such action or claim and (ii) does not include any statement as to or an admission of fault, culpability or a failure to act, by or on behalf of any indemnified party.

(d) If the indemnification provided for in this Section 9 is unavailable to or insufficient to hold harmless an indemnified party under subsection (a) or (b) above in respect of any losses, claims, damages or liabilities (or actions in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (or actions in respect thereof) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other from the offering of the Offered Securities. If, however, the allocation provided by the immediately preceding sentence is not permitted by applicable law, then each indemnifying party shall contribute to such amount paid or payable by such indemnified

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

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

10. (a) If any Underwriter shall default in its obligation to purchase the Offered Securities which it has agreed to purchase hereunder at a Time of Delivery, the Representatives may in their discretion arrange for the Representatives or another party or other parties to purchase such Offered Securities on the terms contained herein. If within thirty-six hours after such default by any Underwriter the Representatives does not arrange for the purchase of such Offered Securities, then the Company shall be entitled to a further period of thirty-six hours within which to procure another party or other parties satisfactory to the Representatives to purchase such Offered Securities on such terms. In the event that, within the respective prescribed periods, the Representatives notify the Company that the Representatives have so arranged for the purchase of such Offered Securities, or the Company notifies the Representatives that it has so arranged for the purchase of such Offered Securities, the Representatives or the Company shall have the right to postpone such Time of Delivery for a period of not more than seven days, in order to effect whatever changes may thereby be made necessary in the Registration Statement

or the Prospectus, or in any other documents or arrangements, and the Company agrees to file promptly any amendments or supplements to the Registration Statement or the Prospectus which in the Representatives' opinion may thereby be made necessary. The term "Underwriter" as used in this Agreement shall include any person substituted under this Section with like effect as if such person had originally been a party to this Agreement with respect to such Offered Securities.

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

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

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

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

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

All statements, requests, notices and agreements hereunder shall be in writing, and (A) if to the Underwriters shall be delivered or sent by mail, telex or facsimile transmission to Goldman Sachs & Co. LLC, 200 West Street, New York, New York 10282-2198, Attention: Registration Department; and (B) if to the Company shall be delivered or sent by mail, telex or facsimile transmission to the address of the Company set forth in the Registration Statement, Attention: Chief Executive Officer; provided, however, that any notice to an Underwriter pursuant to Section 9(c) hereof shall be delivered or sent by mail, telex or facsimile transmission to such Underwriter at its address set forth in its Underwriters' Questionnaire, or telex constituting such Questionnaire, which address will be supplied to the Company by the Representatives upon request. Any such statements, requests, notices or agreements shall take effect upon receipt thereof.

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

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

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

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

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

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

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

20. This Agreement may be executed by any one or more of the parties hereto in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same instrument. This Agreement may be executed by any one or more of the parties hereto in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including any electronic signature covered by the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

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

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

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

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

(c) As used in this Section:

"BHC Act Affiliate" has the meaning assigned to the term "affiliate" in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k).

“Covered Entity” means any of the following:

- (i) a “covered entity” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b);
- (ii) a “covered bank” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or
- (iii) a “covered FSI” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).

“Default Right” has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable.

“U.S. Special Resolution Regime” means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

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

Very truly yours,

Taysha Gene Therapies, Inc.

By: /s/ Sean P. Nolan

Name: Sean P. Nolan

Title: Chief Executive Officer

[Signature Page to Underwriting Agreement]

Accepted as of the date hereof:

Jefferies LLC

By: /s/ Matthew Kim
Name: Matthew Kim
Title: Managing Director

Goldman Sachs & Co. LLC

By: /s/ Lyla Bibi Maduri
Name: Lyla Bibi Maduri
Title: Managing Director

[Signature Page to Underwriting Agreement]

SCHEDULE I

<u>Underwriter</u>	<u>Number of Firm Shares to be Purchased</u>	<u>Number of Pre-Funded Warrants</u>	<u>Maximum Number of Optional Shares Which May be Purchased</u>
Jefferies LLC	5,744,445	7,588,889	2,000,000
Goldman Sachs & Co. LLC	5,744,446	7,588,888	2,000,000
Cantor Fitzgerald & Co.	2,872,222	3,794,444	1,000,000
Total	<u>14,361,113</u>	<u>18,972,221</u>	<u>5,000,000</u>

SCHEDULE II

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

Electronic Roadshow dated June 23, 2024.

(b) Additional Documents Incorporated by Reference:

None.

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

The public offering price per share for the Shares is \$2.25.

The initial public offering price per Pre-Funded Warrants is \$2.249.

The number of Shares purchased by the Underwriters is 14,361,113.

The number of Shares potentially issuable by the Company pursuant to the option to purchase additional shares is 5,000,000.

The number of Pre-Funded Warrants is 18,972,221.

(d) Written Testing-the-Waters Communications:

None.

Form of Lock-Up Agreement

[●], 2024

Jefferies LLC
Goldman Sachs & Co. LLC

As Representatives of the several Underwriters
named in Schedule I to the Underwriting Agreement

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

c/o Goldman Sachs & Co. LLC
200 West Street
New York, NY 10282-2198

Re: Taysha Gene Therapies, Inc. - Lock-Up Agreement

Ladies and Gentlemen:

The undersigned understands that you, as representatives (the “*Representatives*”), propose to enter into an underwriting agreement (the “*Underwriting Agreement*”) on behalf of the several Underwriters named in Schedule I to such agreement (collectively, the “*Underwriters*”), with Taysha Gene Therapies, Inc., a Delaware corporation (the “*Company*”), providing for a public offering (the “*Public Offering*”) of shares (the “*Shares*”) of the common stock, par value \$0.00001 per share, of the Company (the “*Common Stock*”) pursuant to a Registration Statement on Form S-3 (the “*Registration Statement*”) filed with the Securities and Exchange Commission (the “*SEC*”).

In consideration of the agreement by the Underwriters to offer and sell the Shares, and of other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the undersigned agrees that, during the period beginning from the date of this Lock-Up Agreement and continuing to and including the date 60 days after the date of the final prospectus relating to the Public Offering (the “*Prospectus*”) (such period, the “*Lock-Up Period*”), the undersigned shall not, and shall not cause or direct any of its affiliates to, (i) offer, sell, contract to sell, pledge, grant any option, right or warrant to purchase, purchase any option or contract to sell, lend or otherwise transfer or dispose of any shares of Common Stock, or any options or warrants to purchase any shares of Common Stock, or any securities convertible into, exchangeable for or that represent the right to receive shares of Common Stock (such shares of Common Stock, options, rights, warrants or other securities, collectively, “*Lock-Up Securities*”), including without limitation any such Lock-Up Securities now owned or hereafter acquired by the undersigned, (ii) engage in any hedging or other transaction or arrangement (including, without limitation, any short sale or the purchase or sale of, or entry into, any put or call option, or combination thereof, forward, swap or any other derivative transaction or instrument, however described or defined) which is designed to or which reasonably could be expected to lead to or result in a sale, loan, pledge or other disposition (whether by the undersigned or someone other than the undersigned), or transfer of any of the economic consequences of ownership, in whole or in part, directly or indirectly, of any Lock-Up Securities, whether any such transaction or arrangement (or instrument provided for thereunder) would be

settled by delivery of Common Stock or other securities, in cash or otherwise (any such sale, loan, pledge or other disposition, or transfer of economic consequences, a "**Transfer**"), (iii) make any demand for or exercise any right with respect to the registration of any Lock-Up Securities or (iv) otherwise publicly announce any intention to engage in or cause any action, activity, transaction or arrangement described in clause (i), (ii) or (iii) above. The undersigned represents and warrants that the undersigned is not, and has not caused or directed any of its affiliates to be or become, currently a party to any agreement or arrangement that provides for, is designed to or reasonably could be expected to lead to or result in any Transfer during the Lock-Up Period.

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

Notwithstanding the foregoing, the undersigned may transfer or otherwise dispose of the undersigned's Lock-Up Securities:

- i. as a *bona fide* gift or gifts or as a charitable contribution; provided that the donee or donees thereof agree to be bound in writing by the restrictions set forth herein and that any such transfer shall not involve a disposition for value; and provided further, that (A) any filing required under the Exchange Act shall indicate in the footnotes thereto that the filing relates to the applicable circumstances described in this clause and (B) no other public announcement shall be required or shall be made voluntarily in connection with such transfer;
- ii. to any trust for the direct or indirect benefit of the undersigned or of any member of the immediate family (as defined below) of the undersigned, or if the undersigned is a trust, to a trustor, trustee (or co-trustee) or beneficiary of the trust or to the estate of the beneficiary of such trust; provided that the transferee agrees to be bound in writing by the restrictions set forth herein; and provided further, that any such transfer shall not involve a disposition for value;
- iii. in connection with the sale of any Lock-Up Securities acquired (a) in the Public Offering or (b) in open market transactions after the date set forth on the final prospectus used to sell the Shares; provided that (A) any filing required under the Exchange Act shall indicate in the footnotes thereto that the filing relates to the applicable circumstances described in this clause and (B) no other public announcement shall be required or shall be made voluntarily in connection with such transfer;
- iv. if the undersigned is a corporation, partnership, limited liability company, trust or other business entity, (a) to any corporation, partnership limited liability company or other business entity, all of the beneficial ownership interests of which, in each such case, are held by the undersigned, (b) to another corporation, partnership, limited liability company, trust or other business entity that is an affiliate (as defined in Rule 405 promulgated under the Securities Act of 1933, as amended (the "**Securities Act**")) of the undersigned or the immediate family 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 or immediate family of the undersigned (including, for the avoidance of doubt, if the undersigned is a partnership, to its general partner or a successor partnership or fund, or any other funds managed by such partnership), or (c) as part of a distribution, transfer or

- disposition without consideration by the undersigned to its stockholders, partners, members, beneficiaries or other equity holders; provided that the transferee agrees to be bound in writing by the restrictions set forth herein; and provided further, that any such transfer shall not involve a disposition for value;
- v. (a) by surrender or forfeiture of shares of Common Stock or other securities of the Company to the Company to satisfy tax withholding obligations upon exercise or vesting or the exercise price upon a cashless net exercise, in each case, of stock options, restricted stock, other equity awards, warrants or other rights to acquire Common Stock that have been described in the Registration Statement relating to the Public Offering, or (b) in connection with sales of shares of Common Stock upon the vesting of restricted stock units, so long as such sale is effected pursuant to the Company's sell to cover policy solely in an amount sufficient to cover withholding taxes due in connection with such restricted stock units; provided that (A) any filing under Section 16 of the Exchange Act shall indicate in the footnotes thereto that the filing relates to the applicable circumstances described in this clause and (B) no other public announcement shall be required or shall be made voluntarily in connection with such transfer;
 - vi. by will or intestacy, provided that any filing made under the Exchange Act shall include a footnote noting the circumstances described in this clause; and provided further, that any such transfer shall not involve a disposition for value;
 - vii. to any immediate family member of the undersigned, provided that such immediate family member agrees in writing to be bound by the restrictions set forth herein; and provided further, that any such transfer shall not involve a disposition for value;
 - viii. to the Company pursuant to an agreement under which the Company has the option to repurchase such shares upon termination of the undersigned's employment or other service relationship with the Company pursuant to contractual agreements with the Company as in effect as of the date set forth on the final prospectus used to sell the Shares; provided that any filing made under the Exchange Act shall include a footnote noting the circumstances described in this clause;
 - ix. by operation of law or pursuant to a court order or settlement agreement related to the distribution of assets in connection with the dissolution of a marriage, domestic partnership or civil union, provided that such transferee or distributee agrees in writing to be bound by the restrictions set forth herein; and provided further, that (A) any filing under Section 16 of the Exchange Act shall indicate in the footnotes thereto that the filing relates to the applicable circumstances described in this clause and that no securities were sold by the undersigned, (B) no other public announcement shall be required or shall be made voluntarily in connection with such transfer, and (C) that the donee, devisee, transferee or distributee has agreed to be bound by a lock-up agreement in the form of this Lock-Up Agreement;
 - x. pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction made to all holders of Common Stock involving a Change of Control (as defined below) of the Company after the closing of the Public Offering and approved by the Company's board of directors; provided that in the event that the tender offer, merger, consolidation or other such transaction is not completed, the Lock-Up Securities shall remain subject to the restrictions contained in this Lock-Up Agreement;

- xi. pursuant to a trading plan pursuant to Rule 10b5-1 (a “**10b5-1 Plan**”) under the Exchange Act that is existing on the date hereof which has been provided or otherwise disclosed to the Representatives or their legal counsel, provided that (A) any filing under Section 16 of the Exchange Act shall indicate in the footnotes thereto that the filing relates to the applicable circumstances described in this clause and (B) no other public announcement shall be required or shall be made voluntarily in connection with such transfer; and
- xii. with the prior written consent of the Representatives on behalf of the Underwriters.

provided, that, in the case of clauses (ii), (iv), and (vii) above, no filing by any party (including, without limitation, any donor, donee, devisee, transferor, transferee, distributor or distributee) under the Exchange Act, or other public filing, report or announcement reporting a reduction in beneficial ownership of the Lock-Up Securities shall be required or shall be voluntarily made during the Lock-Up Period in connection with such transfer or distribution (other than a required filing on Form 5 or a required filing under Section 13 of the Exchange Act).

Furthermore, notwithstanding the restrictions imposed by this Lock-Up Agreement, the undersigned may exercise an option or other equity award to purchase Shares of Common Stock (pursuant to an employee benefit plan, option or other right disclosed in the final prospectus for the Public Offering) on a cash basis; provided that any such shares issued upon such exercise shall be subject to the restrictions set forth herein; and provided further, that any filing under Section 16 of the Exchange Act shall indicate in the footnotes thereto that the filing relates to the applicable circumstances described in this paragraph, and no other public announcement shall be required or shall be made voluntarily in connection with such exercise.

For purposes of this Lock-Up Agreement, “immediate family” shall mean any relationship by blood, current or former marriage, domestic partnership, civil union or adoption, not more remote than first cousin.

For purposes of this Lock-Up Agreement, “Change of Control” means the consummation of any bona fide third party tender offer, merger, consolidation or other similar transaction, the result of which is that any “person” (as defined in Rule 13d-3 of the Exchange Act), or group of persons, other than the Company or its subsidiaries, becomes the beneficial owner (as defined in Rule 13d-3 and 13d-5 of the Exchange Act) of greater than 50% of the total voting power of the voting share capital of the Company.

Additionally, the undersigned may establish a 10b5-1 Plan under the Exchange Act for the transfer of the Lock-Up Securities, if then permitted by the Company, provided that (1) none of the securities subject to such 10b5-1 Plan may be transferred, sold or otherwise disposed of until after the expiration of the Lock-Up Period, (2) any required public announcement or filing under the Exchange Act made by the undersigned, the Company or any other person regarding the establishment of such 10b5-1 Plan during the Lock-Up Period shall include a statement that the undersigned is not permitted to transfer, sell or otherwise dispose of securities under such trading plan during the Lock-Up Period in contravention of this Lock-Up Agreement and (3) and no other public filing, report or announcement shall be voluntarily made regarding the establishment of such 10b5-1 Plan during the Lock-Up Period.

The undersigned now has, and, except as contemplated above, for the duration of this Lock-Up Agreement will have, good and marketable title to the undersigned’s Lock-Up Securities, free and clear of all liens, encumbrances, and claims whatsoever. In addition, the undersigned agrees that, without the prior written consent of the Representatives on behalf of the Underwriters, it will not, during the Lock-Up Period, make any demand for or exercise any right with respect to, the

registration of its Shares or any security convertible into or exercisable or exchangeable for Shares. The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the Undersigned's Shares except in compliance with the foregoing restrictions.

The undersigned acknowledges and agrees that the Underwriters have not provided any recommendation or investment advice nor have the Underwriters solicited any action from the undersigned with respect to the Public Offering of the Shares 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 have provided or hereafter provide to the undersigned in connection with the Public Offering a Form CRS and/or certain other disclosures as contemplated by Regulation Best Interest, the Underwriters have not made and are not making a recommendation to the undersigned to enter into this Lock-Up Agreement or to transfer, sell or dispose of, or to refrain from transferring, selling or disposing of, any shares of Common Stock, and nothing set forth in such disclosures or herein is intended to suggest that any Underwriter is making such a recommendation.

This Lock-Up Agreement shall automatically terminate and the undersigned shall be released from all of his, her or its obligations hereunder upon the earlier of (i) the date on which the Registration Statement filed with the SEC with respect to the Public Offering is withdrawn, (ii) the date on which for any reason the Underwriting Agreement is terminated (other than the provisions thereof that survive termination) prior to payment for and delivery of the Shares to be sold thereunder (other than pursuant to the Underwriters' option thereunder to purchase additional Shares), (iii) the date on which the Company notifies the Representatives, in writing and prior to the execution of the Underwriting Agreement, that it does not intend to proceed with the Public Offering and (iv) July 31, 2024, in the event that the Underwriting Agreement has not been executed by such date (provided, however, that the Company may, by written notice to the undersigned prior to such date, extend such date by a period of up to an additional 90 days).

The undersigned understands that the Company and the Underwriters are relying upon this Lock-Up Agreement in proceeding toward 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 hereby represents and warrants that the undersigned has full power and authority to enter into this Lock-Up Agreement. This Lock-Up Agreement shall be governed by, and construed in accordance with, the laws of the State of New York, without regard to principles of conflict of laws that would result in the application of any law other than the laws of the State of New York. This Lock-Up Agreement may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com or www.echosign.com) or other transmission method, and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

[Remainder of page intentionally blank]

Very truly yours,

IF AN INDIVIDUAL:

By: _____
(duly authorized signature)

Name: _____
(please print full name)

IF AN ENTITY:

(please print complete name of entity)

By: _____
(duly authorized signature)

Name: _____
(please print full name)

Title: _____
(please print full title)

**PRE-FUNDED WARRANT TO PURCHASE COMMON STOCK
TAYSHA GENE THERAPIES, INC.**

Warrant Shares: [●]

Issue Date: [●], 2024

THIS PRE-FUNDED WARRANT TO PURCHASE COMMON STOCK (the “*Warrant*”) certifies that, for value received, [●] or its assigns (the “*Holder*”) is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the date hereof (the “*Initial Exercise Date*”) until this Warrant is exercised in full (the “*Termination Date*”), to subscribe for and purchase from TAYSHA GENE THERAPIES, INC., a Delaware corporation (the “*Company*”), up to [●] shares of common stock, par value \$0.00001 per share (the “*Common Stock*”) (as subject to adjustment hereunder, the “*Warrant Shares*”). The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Underwriting Agreement (the “*Underwriting Agreement*”), dated [●], 2024, among the Company and the underwriters signatory thereto, and the following terms have the meanings indicated in this Section 1:

“*Affiliate*” means, with respect to any Person (as defined below), any other Person controlling, controlled by or under direct or indirect common control with such Person (for the purposes of this definition “control,” when used with respect to any specified Person, shall mean the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of such Person, whether through ownership of voting securities, by contract or otherwise; and the terms “*controlling*” and “*controlled*” shall have meanings correlative to the foregoing).

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

“**Business Day**” means a day Monday through Friday on which banks are generally open for business in New York City.

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

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

“**Nasdaq**” means The Nasdaq Stock Market LLC.

“**Person**” means any person, individual, corporation, limited liability company, partnership, trust or other nongovernmental entity or any governmental agency, court, authority or other body (whether foreign, federal, state, local or otherwise).

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

“**Subsidiary**” means any subsidiary of the Company and shall, where applicable, also include any direct or indirect subsidiary of the Company formed or acquired after the date hereof.

“**Trading Day**” means a day on which the principal Trading Market is open for trading.

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

“**Transfer Agent**” means American Stock Transfer & Trust Company or any successor transfer agent of the Company.

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

Section 2. Exercise.

(a) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company of a duly executed facsimile copy or PDF copy submitted by e-mail (or e-mail attachment) of the Notice of Exercise in the form annexed hereto (the “*Notice of Exercise*”). Within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined in Section 2(d)(i) herein) following the date of exercise as aforesaid, the Holder shall deliver the aggregate Exercise Price for the Warrant Shares specified in the applicable Notice of Exercise by wire transfer or cashier’s check drawn on a United States bank unless the cashless exercise procedure specified in Section 2(c) below is specified in the applicable Notice of Exercise. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date on which the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one (1) Trading Day of receipt of such notice. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

(b) Exercise Price. The aggregate exercise price of this Warrant, except for a nominal exercise price of \$0.001 per Warrant Share, was pre-funded to the Company on or prior to the Initial Exercise Date and, consequently, no additional consideration (other than the nominal exercise price of \$0.001 per Warrant Share) shall be required to be paid by the Holder to any Person to effect any exercise of this Warrant. The Holder shall not be entitled to the return or refund of all, or any portion, of such pre-paid aggregate exercise price under any circumstance or for any reason whatsoever. The remaining unpaid exercise price per share of Common Stock under this Warrant shall be \$0.001, subject to adjustment hereunder (the “*Exercise Price*”).

(c) Cashless Exercise. This Warrant may also be exercised, in whole or in part, at such time by means of a “*cashless exercise*” in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing [(A-B) (X)] by (A), where:

(A) = as applicable: (i) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is (1) both executed and delivered pursuant to Section 2(a) hereof on a day that is not a Trading Day or (2) both

executed and delivered pursuant to Section 2(a) hereof on a Trading Day prior to the opening of “regular trading hours” (as defined in Rule 600(b) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) at the option of the Holder, either (y) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise or (z) the Bid Price of the Common Stock on the principal Trading Market as reported by Bloomberg L.P. (“**Bloomberg**”) as of the time of the Holder’s execution of the applicable Notice of Exercise if such Notice of Exercise is executed during “regular trading hours” on a Trading Day and is delivered within two (2) hours thereafter (including until two (2) hours after the close of “regular trading hours” on a Trading Day) pursuant to Section 2(a) hereof or (iii) the VWAP on the date of the applicable Notice of Exercise if the date of such Notice of Exercise is a Trading Day and such Notice of Exercise is both executed and delivered pursuant to Section 2(a) hereof after the close of “regular trading hours” on such Trading Day;

(B) = the Exercise Price of this Warrant, as adjusted hereunder; and

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

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

(d) Mechanics of Exercise.

(i) Delivery of Warrant Shares Upon Exercise. The Company shall cause the Warrant Shares purchased hereunder to be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder’s or its designee’s balance account with The Depository Trust Company through its Deposit or Withdrawal at Custodian system (“**DWAC**”) if the Company is then a participant in such system and otherwise by physical delivery of a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the address specified by the Holder in the Notice of Exercise by the date that is the later of (i) the earlier of (a) two (2) Trading Days after the delivery to the Company of the Notice of Exercise and (b) the number of Trading Days comprising the Standard Settlement Period after the delivery to the Company of the Notice of Exercise, and (ii) one (1) Trading Day after delivery of the aggregate Exercise Price to the Company (provided the foregoing clause (ii) shall not apply in the event of a cashless exercise) (such date, the “**Warrant Share Delivery Date**”). Upon delivery of the Notice of Exercise, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the Warrant Shares, provided that payment of the aggregate Exercise Price (other than in the case of a cashless exercise) is received within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period following delivery of the Notice of Exercise. If the Company fails for any reason to

deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Warrant Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Warrant Shares subject to such exercise (based on the VWAP of the Common Stock on the date of the applicable Notice of Exercise), \$10 per Trading Day (increasing to \$20 per Trading Day on the fifth Trading Day after such liquidated damages begin to accrue) for each Trading Day after such Warrant Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable. As used herein, “**Standard Settlement Period**” means the standard settlement period, expressed in a number of Trading Days, on the Company’s principal Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Exercise.

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

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

(iv) Compensation for Buy-In on Failure to Timely Deliver Warrant Shares Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares in accordance with the provisions of Section 2(d)(i) above pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder’s brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a “**Buy-In**”), then the Company shall pay in cash to the Holder the amount, if any, by which (x) the Holder’s total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the product of (1) the lesser of the (a) the number of shares of Common Stock so purchased and (b) the aggregate number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions). For example, if a Holder purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of Common Stock with an aggregate sale price giving rise to such purchase obligation of \$10,000, the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice after the occurrence of a Buy-In, indicating the amounts payable to the Holder in respect of the Buy-In together with applicable confirmations and other evidence reasonably requested by the Company. Nothing herein shall limit a Holder’s right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company’s failure to timely deliver the Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

(v) No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price or round up to the next whole share.

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

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

(e) Holder's Exercise Limitations. Notwithstanding anything to the contrary herein, the Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that immediately prior to or after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with (i) the Holder's Affiliates, (ii) any other Persons acting as a group together with the Holder or any of the Holder's Affiliates and (iii) any other Persons whose beneficial ownership of Common Stock would or could be aggregated with the Holder's for the purposes of Section 13(d) of the Exchange Act (such Persons, "**Attribution Parties**")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in

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

Section 3. Certain Adjustments.

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

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

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

(d) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company (or any Subsidiary), directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related

transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding shares of Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off, merger or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires securities representing more than 50% of the aggregate voting power, including the power to vote on the election of directors of the Company, of the issued and outstanding equity securities of the Company (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a “**Fundamental Transaction**”), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder (without regard to any limitation in Section 2(e) on the exercise of this Warrant), the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the “**Alternate Consideration**”) receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 2(e) on the exercise of this Warrant). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate securities in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the “**Successor Entity**”) to assume in writing all of the obligations of the Company under this Warrant prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of

protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant with the same effect as if such Successor Entity had been named as the Company herein.

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

(f) Notice to Holder.

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

(ii) Notice to Allow Exercise by Holder. If (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company (or any of its Subsidiaries) is a party, any sale or transfer of all or substantially all of its assets, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be delivered by facsimile or email to the Holder at its last facsimile number or email address as it shall appear upon the Warrant Register of the Company, at least 10 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided in this

Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the SEC pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 4. Transfer of Warrant.

(a) Transferability. Subject to compliance with any applicable securities laws and the conditions set forth in Section 4(d) hereof, this Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, the Holder shall surrender this Warrant to the Company within three (3) Trading Days of the date on which the Holder delivers an assignment form to the Company assigning this Warrant in full. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

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

(c) Warrant Register. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "**Warrant Register**"), in the name of the record Holder hereof 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.

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

Section 5. Miscellaneous.

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

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

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

(d) Authorized Shares.

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

Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of

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

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

(e) Governing Law.

(i) This Warrant shall be governed by, and construed in accordance with, the law of the State of New York without giving effect to any choice or conflict of law provision or rule (whether of the State of New York or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of New York.

(ii) Each of the Company and the Holder irrevocably and unconditionally submits, for itself and its property, to the nonexclusive jurisdiction of the courts of the State of New York sitting in the Borough of Manhattan, New York and of the United States District Court of the Southern District of New York, and any appellate court from any thereof, in any action or proceeding arising out of or relating to this Warrant and the transactions contemplated herein, or for recognition or enforcement of any judgment, and each of the Company and the Holder irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may be heard and determined in such New York state court or, to the fullest extent permitted by applicable law, in such federal court. Each of the Company and the Holder hereto agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

(iii) Each of the Company and the Holder irrevocably and unconditionally waives, to the fullest extent permitted by applicable law, any objection that it may now or hereafter have to the laying of venue of any action or proceeding arising out of or relating to this Warrant and the transactions contemplated herein in any court referred to in Section 6(e)(ii) hereof. Each of the Company and the Holder hereby irrevocably waives, to the fullest extent permitted by applicable law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court.

(iv) EACH OF THE COMPANY AND THE HOLDER HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS WARRANT OR THE TRANSACTIONS CONTEMPLATED HEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH OF THE COMPANY AND THE HOLDER (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PERSON HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT EACH OF THE COMPANY AND THE HOLDER HAS BEEN INDUCED TO ENTER INTO THIS WARRANT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

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

(g) Notices. All notices required or permitted hereunder shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by email or facsimile if sent during normal business hours of the recipient, and if sent at a time other than during normal business hours of the recipient, then on the next Business Day (provided, with respect to notices sent by email so long as such sent email is kept on file by the sending party and the sending party does not receive an automatically generated message from the recipient's email server that such email could not be delivered to such recipient), (c) five days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one Business Day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. The addresses for such communications are:

If to the Company: Taysha Gene Therapies, Inc.
3000 Pegasus Park Drive, Suite 1430
Dallas, Texas 75247
Attention: Chief Financial Officer
Email: KAlam@tayshagtx.com

With a copy to:

Cooley LLP
1299 Pennsylvania Avenue, NW
Suite 700
Washington, DC 20004
Attention: Madison Jones
Email: madison.jones@cooley.com

If to the Holder: To the address, email address or facsimile number set forth in the Warrant Register, or as otherwise provided by the Holder to the Company in accordance with this Section 5(g).

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

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

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

(k) Amendment. This Warrant may be modified or amended, or the provisions hereof waived with the written consent of the Company and the Holder.

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

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

(Signature Page Follows)

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

TAYSHA GENE THERAPIES, INC.

By: _____
Name: Sean Nolan
Title: Chief Executive Officer

NOTICE OF EXERCISE

TO: TAYSHA GENE THERAPIES, INC.

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

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

in lawful money of the United States; or

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

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

(4) By its delivery of this Notice of Exercise, the undersigned represents and warrants to the Company that in giving effect to the exercise evidenced hereby the Holder will not beneficially own in excess of the number of shares of Common Stock (as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended) permitted to be owned under Section 2(e) of the Warrant to which this notice relates.

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

[SIGNATURE OF HOLDER]

Name of Investing Entity: _____

Signature of Authorized Signatory of Investing Entity: _____

Name of Authorized Signatory: _____

Title of Authorized Signatory: _____

Date: _____

ASSIGNMENT FORM

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

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

Name:

(Please Print)

Address:

Phone Number:

(Please Print)

Email Address:

Dated: _____, _____

Holder's Signature:

Holder's Address:



Madison A. Jones
+1 202 728 7087
madison.jones@cooley.com

June 26, 2024

Taysha Gene Therapies, Inc.
3000 Pegasus Park Drive, Suite 1430
Dallas, Texas 75247

Ladies and Gentlemen:

We have acted as counsel to Taysha Gene Therapies, Inc., a Delaware corporation (the “*Company*”), with respect to certain matters in connection with the offering by the Company of (i) up to 19,361,113 shares (the “*Shares*”) of the Company’s common stock, par value \$0.00001 per share (“*Common Stock*”), including up to 5,000,000 Shares that may be sold pursuant to the exercise of an option to purchase additional Shares, and (ii) pre-funded warrants (the “*Warrants*”) to purchase up to 18,972,221 shares of Common Stock (the “*Warrant Shares*”), pursuant to a Registration Statement on Form S-3 (No. 333-260069) (the “*Registration Statement*”), filed with the Securities and Exchange Commission (the “*Commission*”) under the Securities Act of 1933, as amended (the “*Securities Act*”), the prospectus included in the Registration Statement (the “*Base Prospectus*”), and the prospectus supplement relating to the Shares, the Warrants and the Warrant Shares dated June 26, 2024, filed with the Commission pursuant to Rule 424(b) under the Act (together with the Base Prospectus, the “*Prospectus*”).

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and the Prospectus, (b) the form of the Warrants to be filed as an exhibit to a Current Report on Form 8-K, (c) the Company’s certificate of incorporation and bylaws, each as currently in effect, and (d) originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies, the accuracy, completeness and authenticity of certificates of public officials and the due authorization, execution and delivery of all documents by all persons other than the Company where authorization, execution and delivery are prerequisites to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

With regard to our opinion as to the Warrants and the Warrant Shares, we express no opinion to the extent that future issuances of securities of the Company, antidilution adjustments to outstanding securities of the Company or other matters cause the Warrants to be exercisable for more shares of Common Stock than the number available for issuance by the Company or that the consideration paid upon exercise of the Warrants is below the par value of the Common Stock.

Our opinion herein is expressed solely with respect to the General Corporation Law of the State of Delaware and, as to the Warrants constituting binding obligations of the Company, the laws of the State of New York. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

Cooley LLP 1299 Pennsylvania Avenue NW Suite 700 Washington, DC 20004-2400
t: +1 202 842 7800 f: +1 202 842 7899 cooley.com

June 26, 2024

Page Two

With regard to our opinion concerning the Warrants constituting binding obligations of the Company:

- (i) Our opinion is subject to, and may be limited by, (a) applicable bankruptcy, reorganization, insolvency, moratorium, fraudulent conveyance, debtor and creditor, and similar laws which relate to or affect creditors' rights generally, and (b) general principles of equity (including, without limitation, concepts of materiality, reasonableness, good faith and fair dealing) regardless of whether considered in a proceeding in equity or at law;
- (ii) Our opinion is subject to the qualification that (a) the enforceability of provisions for indemnification or limitations on liability may be limited by applicable law and by public policy considerations, and (b) the availability of specific performance, an injunction or other equitable remedies is subject to the discretion of the court before which the request is brought;
- (iii) We express no opinion with respect to any provision of the Warrants that: (a) relates to the subject matter jurisdiction of any federal court of the United States of America or any federal appellate court to adjudicate any controversy related to the Warrants; (b) specifies provisions may be waived in writing, to the extent that an oral agreement or implied agreement by trade practice or course of conduct has been created that modifies such provision; (c) contains a waiver of an inconvenient forum; (d) provides for liquidated damages, default interest, late charges, monetary penalties, prepayment or make-whole payments or other economic remedies; (e) relates to advance waivers of claims, defenses, rights granted by law, or notice, opportunity for hearing, evidentiary requirements, statutes of limitations, trial by jury, service of process or procedural rights; (f) restricts non-written modifications and waivers; (g) provides for the payment of legal and other professional fees where such payment is contrary to law or public policy; (h) relates to exclusivity, election or accumulation of rights or remedies; or (i) provides that provisions of the Warrants are severable to the extent an essential part of the agreed exchange is determined to be invalid and unenforceable; and
- (iv) We express no opinion as to whether a state court outside of the State of New York or a federal court of the United States would give effect to the choice of New York law or jurisdiction provided for in the Warrants.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that (i) the Shares, when sold and issued in accordance with the Registration Statement and the Prospectus, will be validly issued, fully paid and nonassessable, (ii) the Warrants, when duly executed and delivered by the Company against payment therefor as described in the Registration Statement and the Prospectus, will be binding obligations of the Company and (iii) the Warrant Shares, when issued and paid for in accordance with the terms of the Warrants, will be validly issued, fully paid and nonassessable.

This opinion is limited to the matters expressly set forth in this letter, and no opinion has been or should be implied or may be inferred, beyond the matters expressly stated. This opinion speaks only as to law and facts in effect or existing as of the date hereof and we undertake no obligation or responsibility to update or supplement this letter to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

Cooley LLP 1299 Pennsylvania Avenue NW Suite 700 Washington, DC 20004-2400
t: +1 202 842 7800 f: +1 202 842 7899 cooley.com



June 26, 2024

Page Three

We consent to the reference to our firm under the caption “Legal Matters” in the Prospectus and to the filing of this opinion as an exhibit to a Current Report on Form 8-K to be filed with the Commission for incorporation by reference into the Registration Statement. In giving such consents, we do not thereby 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 of the Commission thereunder.

Sincerely,

Cooley LLP

By: /s/ Madison A. Jones

Madison A. Jones

Cooley LLP 1299 Pennsylvania Avenue NW Suite 700 Washington, DC 20004-2400
t: +1 202 842 7800 f: +1 202 842 7899 cooley.com



Taysha Gene Therapies Announces Pricing of Public Offering of Common Stock and Pre-Funded Warrants

Dallas – June 26, 2024 - Taysha Gene Therapies, Inc. (Nasdaq: TSHA), a clinical-stage biotechnology company focused on advancing adeno-associated virus (AAV)-based gene therapies for severe monogenic diseases of the central nervous system (CNS), today announced the pricing of an underwritten public offering of 14,361,113 shares of its common stock at a price to the public of \$2.25 per share and, in lieu of common stock to certain investors, pre-funded warrants to purchase 18,972,221 shares of its common stock at an offering price of \$2.249 per pre-funded warrant, in each case before underwriting discounts and commissions. All of the securities are being offered by Taysha. In addition, Taysha has granted the underwriters a 30-day option to purchase up to an additional 15% of the shares of its common stock offered in the public offering at the public offering price, less the underwriting discount. The gross proceeds from the offering to Taysha are expected to be approximately \$75 million, before deducting underwriting discounts and commissions and other offering expenses, excluding any exercise of the underwriter's option to purchase additional shares. The offering is expected to close on or about June 27, 2024, subject to customary closing conditions.

Jefferies and Goldman Sachs & Co. LLC are acting as joint book-running managers for the offering, and Cantor is also serving as a book-running manager for the offering.

A shelf registration statement relating to the securities offered in the public offering described above was filed with the Securities and Exchange Commission (the "SEC") on October 5, 2021, and declared effective by the SEC on October 14, 2021. The offering is being made only by means of a written prospectus and prospectus supplement that form a part of the registration statement. A preliminary prospectus supplement and accompanying prospectus relating to the offering has been filed with the SEC and is available on the SEC's website at www.sec.gov. A final prospectus supplement and accompanying prospectus will be filed with the SEC. When available, copies of the final prospectus supplement and the accompanying prospectus may also be obtained by contacting Jefferies LLC, Attention: Equity Syndicate Prospectus Department, 520 Madison Avenue, New York, NY 10022, or by telephone at (877) 821-7388, or by e-mail at Prospectus_Department@Jefferies.com; or Goldman Sachs & Co. LLC, Attention: Prospectus Department, 200 West Street, New York, NY 10282, by telephone at (866) 471-2526, or by email at Prospectus-ny@ny.email.gs.com.

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

About Taysha Gene Therapies

Taysha Gene Therapies (Nasdaq: TSHA) is a clinical-stage biotechnology company focused on advancing AAV-based gene therapies for severe monogenic diseases of the central nervous system. Its lead clinical program TSHA-102 is in development for Rett syndrome, a rare neurodevelopmental disorder with no approved disease-modifying therapies that address the genetic root cause of the disease. With a singular focus on developing transformative medicines, Taysha aims to address severe unmet medical needs and dramatically improve the lives of patients and their caregivers. The Company's management team has proven experience in gene therapy development and commercialization. Taysha leverages this experience, its manufacturing process and a clinically and commercially proven AAV9 capsid in an effort to rapidly translate treatments from bench to bedside.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “anticipates,” “believes,” “expects,” “intends,” “projects,” “plans,” and “future” or similar expressions are intended to identify forward-looking statements. Forward-looking statements include statements concerning the potential of TSHA-102 and Taysha’s other product candidates, to positively impact quality of life and alter the course of disease in the patients Taysha seeks to treat, its research, development and regulatory plans for its product candidates, and its public offering, including expected gross proceeds and anticipated closing date, the uncertainties related to market conditions and the completion of the public offering on the anticipated terms or at all. Forward-looking statements are based on management’s current expectations and are subject to various risks and uncertainties that could cause actual results to differ materially and adversely from those expressed or implied by such forward-looking statements. Accordingly, these forward-looking statements do not constitute guarantees of future performance, and you are cautioned not to place undue reliance on these forward-looking statements. Risks regarding Taysha’s business are described in detail in its SEC filings, including in Taysha’s Annual Report on Form 10-K for the full-year ended December 31, 2023, which is available on the SEC’s website at www.sec.gov. Additional information will be made available in other filings that Taysha makes from time to time with the SEC. These forward-looking statements speak only as of the date hereof, and Taysha disclaims any obligation to update these statements except as may be required by law.

Company Contact:

Hayleigh Collins
Director, Head of Corporate Communications and Investor Relations
Taysha Gene Therapies, Inc.
hcollins@tayshagtx.com

Media Contact:

Carolyn Hawley
Inizio Evoke
Carolyn.hawley@inizioevoke.com