

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): May 12, 2025

SANGAMO THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation)

000-30171
(Commission File Number)

68-0359556
(IRS Employer Identification No.)

501 Canal Blvd., Richmond, California 94084
(Address of principal executive offices) (Zip Code)

(510) 970-6000
(Registrant's telephone number, including area code)

Not Applicable
(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, \$0.01 par value per share	SGMO	Nasdaq Capital Market

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

Emerging growth company

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

Item 8.01 Other Events.

On May 12, 2025, Sangamo Therapeutics, Inc. (“Sangamo” or the “Company”) entered into an underwriting agreement (the “Underwriting Agreement”) with Cantor Fitzgerald & Co., as representative of the several underwriters named therein (collectively, the “Underwriters”), relating to the issuance and sale (the “Offering”) of 12,235,000 shares of the Company’s common stock, par value \$0.01 per share (the “Common Stock”), and pre-funded warrants to purchase 34,398,393 shares of Common Stock (the “Pre-Funded Warrants”), together with accompanying warrants to purchase 46,633,393 shares of Common Stock (the “Purchase Warrants” and together with the Pre-Funded Warrants, the “Warrants”). The combined offering price of each share of Common Stock and accompanying Purchase Warrant is \$0.50. The combined offering price of each Pre-Funded Warrant and accompanying Purchase Warrant is \$0.49. The Common Stock and Pre-Funded Warrants are being sold in combination with an accompanying Purchase Warrant to purchase one share of Common Stock issued for each share of Common Stock or Pre-Funded Warrant sold. All of the securities in the Offering are being sold by the Company. The gross proceeds to the Company from the Offering, before deducting underwriting discounts and estimated offering expenses, is expected to be approximately \$23.0 million. The Offering is expected to close on May 14, 2025, subject to satisfaction of customary closing conditions.

Each Pre-Funded Warrant will have an initial exercise price per share of \$0.01, subject to certain adjustments. The Pre-Funded Warrants will be exercisable immediately and may be exercised at any time until all of the Pre-Funded Warrants are exercised in full. A holder (together with its affiliates and other attribution parties) may not exercise any portion of a Pre-Funded Warrant to the extent that immediately prior to or after giving effect to such exercise the holder would own more than 4.99% of the Company’s outstanding Common Stock immediately after exercise, which percentage may be changed at the holder’s election to a lower or higher percentage not in excess of 19.99% (if exceeding such percentage would result in a change of control under Nasdaq Listing Rule 5635(b) or any successor rule) upon 61 days’ notice to the Company subject to the terms of the Pre-Funded Warrants.

Each Purchase Warrant will have an initial exercise price per share of \$0.75, subject to certain adjustments. The Purchase Warrants will be exercisable six months after the date of issuance and may be exercised thereafter at any time until expiration six years after the date of issuance. A holder (together with its affiliates and other attribution parties) may not exercise any portion of a Purchase Warrant to the extent that immediately prior to or after giving effect to such exercise the holder would own more than 4.99% of the Company’s outstanding Common Stock immediately after exercise, which percentage may be changed at the holder’s election to a lower or higher percentage not in excess of 19.99% (if exceeding such percentage would result in a change of control under Nasdaq Listing Rule 5635(b) or any successor rule) upon 61 days’ notice to the Company subject to the terms of the Purchase Warrants. Subject to the satisfaction of customary equity conditions as described in the Purchase Warrants, including the 4.99% exercise limitation, at Sangamo’s option after six months from the date of issuance, Sangamo may force the exercise of the Purchase Warrants at any time the weighted-average price of the Common Stock exceeds \$2.75 (as adjusted for stock splits, stock dividends, recapitalizations and similar events) for a period of ten consecutive trading days.

The Offering is being made pursuant to Sangamo’s effective registration statement on Form S-3 (Registration Statement No. 333-283179) previously filed with the Securities and Exchange Commission (the “SEC”) and a prospectus supplement thereunder.

The Underwriting Agreement contains customary representations, warranties and agreements by the Company, customary conditions to closing, indemnification obligations of the Company and the Underwriters, including for liabilities arising under the Securities Act of 1933, as amended, other obligations of the parties and termination provisions. The representations, warranties and covenants contained in the Underwriting Agreement were made only for the purposes of such agreement and as of specific dates, and were solely for the benefit of the parties to such agreement.

The foregoing descriptions of the terms of the Underwriting Agreement and Warrants are each qualified in their entirety by reference to the Underwriting Agreement, form of Pre-Funded Warrant and form of Purchase Warrant, respectively, which are attached as Exhibit 1.1, Exhibit 4.1 and Exhibit 4.2 hereto, respectively, and incorporated by reference herein.

A copy of the legal opinion of Cooley LLP relating to the validity of the issuance and sale of the securities in the Offering is attached as Exhibit 5.1 hereto.

Forward-Looking Statements

This report contains forward-looking statements, including, without limitation, statements relating to Sangamo's expectations regarding the completion of the Offering. These forward-looking statements are based upon Sangamo's current expectations. Actual results could differ materially from these forward-looking statements as a result of certain factors, including, without limitation, risks and uncertainties related to the satisfaction of customary closing conditions related to the Offering and other risks detailed in Sangamo's filings with the SEC, including Sangamo's Annual Report on Form 10-K for the year ended December 31, 2024, Quarterly Report on Form 10-Q for the quarter ended March 31, 2025 and in the prospectus supplement relating to the offering. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this report. Sangamo undertakes no duty to update such information except as required under applicable law.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit Number	Description
1.1	Underwriting Agreement, dated May 12, 2025, by and between Sangamo Therapeutics, Inc. and Cantor Fitzgerald & Co., as representative of the underwriters named therein.
4.1	Form of Pre-Funded Warrant to Purchase Common Stock.
4.2	Form of Purchase Warrant to Purchase Common Stock.
5.1	Opinion of Cooley LLP.
23.1	Consent of Cooley LLP (included in Exhibit 5.1).
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.

SANGAMO THERAPEUTICS, INC.

By: /s/ SCOTT B. WILLOUGHBY

Name: Scott B. Willoughby

Title: Chief Legal Officer and Corporate Secretary

Dated: May 13, 2025

SANGAMO THERAPEUTICS, INC.

12,235,000 Shares of Common Stock par value \$0.01 per share

Pre-Funded Warrants to Purchase up to 34,398,393 Shares of Common Stock

Warrants to Purchase up to 46,633,393 Shares of Common Stock

Underwriting Agreement

May 12, 2025

CANTOR FITZGERALD & CO.

As Representative of the
several Underwriters listed
in Schedule 1 hereto

c/o Cantor Fitzgerald & Co.
110 East 59th Street, 6th Floor
New York, New York 10022

Ladies and Gentlemen:

Sangamo Therapeutics, Inc., a Delaware corporation (the “**Company**”), proposes to issue and sell to the several underwriters listed in Schedule 1 hereto (the “**Underwriters**”), for whom you are acting as representative (the “**Representative**”), an aggregate of (i) 12,235,000 shares of common stock, par value \$0.01 per share (the “**Common Stock**”), of the Company (the “**Shares**”), (ii) pre-funded warrants to purchase up to an aggregate of 34,398,393 shares of Common Stock at an exercise price of \$0.01 per share (the “**Pre-Funded Warrants**”) and (iii) warrants to purchase up to an aggregate of 46,633,393 shares of Common Stock (the “**Warrants**”) and, together with the Shares and the Pre-Funded Warrants, the “**Underwritten Securities**”). The Common Stock issuable upon the exercise of the Pre-Funded Warrants is referred to herein as the “**Pre-Funded Warrant Shares**.” The Common Stock issuable upon the exercise of the Warrants is referred to herein as the “**Warrant Shares**.” The Underwritten Securities, the Pre-Funded Warrant Shares and the Warrant Shares are herein referred to as the “**Securities**.” The shares of Common Stock of the Company to be outstanding after giving effect to the sale of the Shares are referred to herein as the “**Stock**.” To the extent there are no additional Underwriters listed on Schedule 1 other than you, the term Representative as used herein shall mean you, as Underwriter, and the terms Representative and Underwriters shall mean either the singular or plural as the context requires.

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

1. **Registration Statement.** The Company has prepared and filed with the Securities and Exchange Commission (the “**Commission**”) under the Securities Act of 1933, as amended, and the rules and regulations of the Commission thereunder (collectively, the “**Securities Act**”), a registration statement (File No. 333-283179), including a prospectus, relating to the Securities. Such registration statement, as amended at the time it became effective, including the information, if any, deemed pursuant to Rule 430B or 430C under the Securities Act to be part of the registration statement at the time of its effectiveness (“**Rule 430 Information**”), is referred to herein as the “**Registration Statement**”; and the related prospectus covering the Securities in the form first used to confirm sales of the Securities (or in the form first made available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act) is hereinafter referred to as the “**Base Prospectus**.”, any prospectus filed with the Commission pursuant to Rule 424(a) under the Securities Act, if applicable, the prospectus included in the Registration Statement at the time of its effectiveness that omits Rule 430 Information, and the term “**Prospectus**” means the Base Prospectus, as supplemented by the prospectus supplement in the form first used (or made available upon request of purchasers pursuant to Rule 173 under the Securities Act) in connection with confirmation of sales of the Securities. If the Company has filed an abbreviated registration statement pursuant to Rule 462(b) under the Securities Act (the “**Rule 462 Registration Statement**”), then any reference herein to the term “**Registration Statement**” shall be deemed to include such Rule 462 Registration Statement. Any reference in this underwriting agreement (this “**Agreement**”) to the Registration Statement, the Base Prospectus or the Prospectus shall be deemed to refer to and include the documents incorporated by reference therein pursuant to Item 12 of Form S-3 under the Securities Act, as of the effective date of the Registration Statement, the date of the Base Prospectus or the date of the Prospectus, as the case may be, and any reference to “**amend**”, “**amendment**” or “**supplement**” with respect to the Registration Statement, the Base Prospectus or the Prospectus shall be deemed to refer to and include any post-effective amendment to the Registration Statement, that has become or been declared effective, any prospectus supplement relating to the Securities filed with the Commission pursuant to Rule 424(b) under the Securities Act and any documents filed after such date under the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission thereunder (collectively, the “**Exchange Act**”) that are deemed to be incorporated by reference therein. Capitalized terms used but not defined herein shall have the meanings given to such terms in the Registration Statement and the Prospectus.

At or prior to the Applicable Time (as defined below), the Company had prepared the following information (collectively with the pricing information set forth on Annex A, the “**Pricing Disclosure Package**”): the Registration Statement (including the documents incorporated by reference in the Registration Statement) and each “**free-writing prospectus**” (as defined pursuant to Rule 405 under the Securities Act) listed on Annex A hereto.

“**Applicable Time**” means 5:30 p.m., New York City time, on May 12, 2025.

2. **Purchase of the Securities by the Underwriters.**

(a) The Company agrees to issue and sell the Underwritten Securities to the several Underwriters as provided in this Agreement, and each Underwriter, on the basis of the representations, warranties and agreements set forth herein and subject to the conditions set forth herein, agrees, severally and not jointly, to purchase from the Company the respective number of Shares set forth opposite such Underwriter’s name in Schedule 1 hereto at a purchase price per Share and accompanying Warrant of \$0.47, and the purchase price for each Pre-Funded Warrant and accompanying Warrant shall be \$0.4606.

(b) The Company understands that the Underwriters intend to make an offering of the Securities as soon after the effectiveness of this Agreement as in the judgment of the Representative is advisable, and initially to offer the Securities on the terms set forth in the Prospectus. The Company acknowledges and agrees that the Underwriters may offer and sell Securities to or through any affiliate of an Underwriter.

(c) Payment for the Securities shall be made by wire transfer in immediately available funds to the account specified by the Company to the Representative in the case of the Underwritten Securities, at the offices of White & Case LLP, 1221 Avenue of the Americas, New York, New York at 9:00 A.M., New York City time, on May 14, 2025, or at such other time or place on the same or such other date, not later than the fifth business day thereafter, as the Representative and the Company may agree upon in writing. The time and date of such payment for the Underwritten Securities is referred to herein as the “Closing Date.”

Payment for the Securities to be purchased on the Closing Date shall be made against delivery to the Representative for the respective accounts of the several Underwriters of the Securities to be purchased on such date with any transfer taxes payable in connection with the sale of such Securities duly paid by the Company. Delivery of the Shares shall be made through the facilities of The Depository Trust Company (“DTC”) and delivery of the Pre-Funded Warrants and the Warrants shall be made by physical delivery to be received by the Representative prior to the Closing Date, unless the Representative shall otherwise instruct.

The certificates for the Securities, if any, will be made available for inspection and packaging by the Representative at the office of DTC or its designated custodian not later than 1:00 P.M., New York City time, on the business day prior to the Closing Date. The Pre-Funded Warrants shall be delivered to the Representative in definitive form, registered in such names and in such denominations as the Representative shall request in writing not later than the Closing Date. The Pre-Funded Warrants will be made available for inspection by the Representative on the business day prior to the Closing Date.

(d) The Company acknowledges and agrees that the Underwriters are acting solely in the capacity of an arm’s length contractual counterparty to the Company with respect to the offering of Securities contemplated hereby (including in connection with determining the terms of the offering) and not as a financial advisor or a fiduciary to, or an agent of, the Company or any other person. Additionally, neither the Representative nor any other Underwriter is advising the Company or any other person as to any legal, tax, investment, accounting or regulatory matters in any jurisdiction. The Company shall consult with its own advisors concerning such matters and shall be responsible for making its own independent investigation and appraisal of the transactions contemplated hereby, and the Underwriters shall have no responsibility or liability to the Company with respect thereto. Any review by the Underwriters of the Company, the transactions contemplated hereby or other matters relating to such transactions will be performed solely for the benefit of the Underwriters and shall not be on behalf of the Company.

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

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

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

(c) *Registration Statement and Prospectus.* The Registration Statement in respect of the Securities has been filed with the Commission; the Registration Statement was declared effective by the Commission. No order suspending the effectiveness of the Registration Statement has been issued by the Commission, and no proceeding for that purpose or pursuant to Section 8A of the Securities Act against the Company or related to the offering of the Securities has been initiated or threatened by the Commission; as of the applicable effective date of the Registration Statement and any post-effective amendment thereto, the Registration Statement and any such post-effective amendment complied and will comply in all material respects with the Securities Act, and did not and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein not misleading; and as of the date of the Prospectus and any amendment or supplement thereto and as of the Closing Date, the Prospectus will comply in all material respects with the Securities Act and will not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company makes no representation and warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representative expressly for use in the Registration Statement and the Prospectus and any amendment or supplement thereto, it being understood and agreed that the only such information furnished by any Underwriter consists of the information described as such in Section 7(b) hereof.

(d) *Incorporated Documents.* The documents incorporated by reference in the Registration Statement, the Prospectus and the Pricing Disclosure Package, when they were filed with the Commission conformed in all material respects to the requirements of the Exchange Act, and none of such documents contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; and any further documents so filed and incorporated by reference in the Registration Statement, the Prospectus or the Pricing Disclosure Package, when such documents are filed with the Commission, will conform in all material respects to the requirements of the Exchange Act and will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(e) *Financial Statements.* The financial statements (including the related notes thereto) of the Company and its consolidated subsidiaries included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus comply in all material respects with the applicable requirements of the Securities Act and the Exchange Act, as applicable, and present fairly in all material respects the financial position of the Company and its consolidated subsidiaries as of the dates indicated and the results of their operations and the changes in their cash flows for the periods specified; such financial statements have been prepared in conformity with generally accepted accounting principles in the United States applied on a consistent basis throughout the periods covered thereby, and any supporting schedules included or incorporated by reference in the Registration Statement present fairly in all material respects the information required to be stated therein; and the other financial information included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus has been derived from the accounting records of the Company and its consolidated subsidiaries and presents fairly the information shown thereby. No other financial statements or supporting schedules are required to be included in the Registration Statement, the Prospectus or the Pricing Disclosure Package.

(f) *No Material Adverse Change.* Since the date of the most recent financial statements of the Company included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus, (i) there has not been any change in the capital stock (other than the issuance of shares of Common Stock upon exercise of stock options and warrants described as outstanding in, and the grant of options and awards under existing equity incentive plans described in, the Registration Statement, the Pricing Disclosure Package and the Prospectus), short-term debt or long-term debt of the Company or any of its subsidiaries, or any dividend or distribution of any kind declared, set aside for payment, paid or made by the Company on any class of capital stock, or any material adverse change, or any development involving a prospective material adverse change, in or affecting the business, properties, management, financial position, stockholders' equity, results of operations or prospects of the Company and its subsidiaries taken as a whole; (ii) neither the Company nor any of its subsidiaries has entered into any transaction or agreement (whether or not in the ordinary course of business) that is material to the Company and its subsidiaries taken as a whole or incurred any liability or obligation, direct or contingent, that is material to the Company and its subsidiaries taken as a whole; and (iii) neither the Company nor any of its subsidiaries has sustained any loss or interference with its business that is material to the Company and its subsidiaries taken as a whole and that is either from fire, explosion, flood or other calamity, including a health epidemic or pandemic outbreak of infectious disease, whether or not covered by insurance, or from any labor disturbance or dispute or any action, order or decree of any court or arbitrator or governmental or regulatory authority, except in each case as otherwise disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

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

(h) *Capitalization.* The Company has an authorized capitalization as set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus; all the outstanding shares of capital stock of the Company have been duly and validly authorized and issued and are fully paid and non-assessable and are not subject to any pre-emptive or similar rights; except as described in or expressly contemplated by the Pricing Disclosure Package and the Prospectus, there are no outstanding rights (including, without limitation, pre-emptive rights), warrants or options to acquire, or instruments convertible into or exchangeable for, any shares of capital stock or other equity interest in the Company or any of its subsidiaries, or any contract, commitment, agreement, understanding or arrangement of any kind relating to the issuance of any capital stock of the Company or any such subsidiary, any such convertible or exchangeable securities or any such rights, warrants or options; the capital stock of the Company conforms in all material respects to the description thereof contained in the Registration Statement, the Pricing Disclosure Package and the Prospectus; and all the outstanding shares of capital stock or other equity interests of each subsidiary owned, directly or indirectly, by the Company have been duly and validly authorized and issued, are fully paid and non-assessable except as otherwise described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, and are owned directly or indirectly by the Company, free and clear of any material lien, charge, encumbrance, security interest, restriction on voting or transfer or any other claim of any third party.

(i) *Stock Options.* With respect to the stock options (the “**Stock Options**”) granted pursuant to the stock-based compensation plans of the Company and its subsidiaries (the “**Company Stock Plans**”), (i) each Stock Option intended to qualify as an “incentive stock option” under Section 422 of the Code so qualifies, (ii) each such grant was made in accordance with the terms of the Company Stock Plans, the Exchange Act and all other applicable laws and regulatory rules or requirements, including the rules of The Nasdaq Capital Market (the “**Nasdaq Market**”) and any other exchange on which Company securities are traded, and (iii) each such grant was properly accounted for in accordance with GAAP in the financial statements (including the related notes) of the Company and disclosed in the Company’s filings with the Commission in accordance with the Exchange Act and all other applicable laws.

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

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

(l) *The Securities.* The Shares to be issued and sold by the Company hereunder have been duly authorized and, when issued and delivered and paid for as provided herein, will be duly and validly issued, will be fully paid and non-assessable and will conform in all material respects to the descriptions thereof in the Registration Statement, the Pricing Disclosure Package and the Prospectus; and the issuance of the Shares is not subject to any preemptive or similar rights. The Pre-Funded Warrants in the form attached hereto as Exhibit B have been duly authorized by the Company and, when executed and delivered by the Company in accordance with this Agreement, will constitute valid and legally binding agreements of the Company, enforceable against the Company in accordance with their terms, except as enforceability may be limited by applicable bankruptcy, insolvency or similar laws affecting creditors' rights generally or by equitable principles relating to enforceability. The Warrants in the form attached hereto as Exhibit C have been duly authorized by the Company and, when executed and delivered by the Company in accordance with this Agreement, will constitute valid and legally binding agreements of the Company, enforceable against the Company in accordance with their terms, except as enforceability may be limited by applicable bankruptcy, insolvency or similar laws affecting creditors' rights generally or by equitable principles relating to enforceability. The Pre-Funded Warrant Shares have been duly authorized and reserved for issuance pursuant to the terms of the Pre-Funded Warrants, and when the Pre-Funded Warrant Shares are issued by the Company upon valid exercise of the Pre-Funded Warrants, such Pre-Funded Warrant Shares will be validly issued, fully paid and non-assessable and not subject to any preemptive rights, rights of first refusal or similar rights. The Warrant Shares have been duly authorized and reserved for issuance pursuant to the terms of the Warrants, and when the Warrant Shares are issued by the Company upon valid exercise of the Warrants, such Warrant Shares will be validly issued, fully paid and non-assessable and not subject to any preemptive rights, rights of first refusal or similar rights.

(m) *Stock Exchange Listing.* The Common Stock is registered pursuant to Section 12(b) of the Exchange Act and are listed on the Nasdaq Market, and the Company has taken no action designed to, or reasonably likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from the Nasdaq Market, nor has the Company received any notification that the Commission or the Nasdaq Market is contemplating terminating such registration or listing, except as disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

(n) *No Violation or Default.* Neither the Company nor any of its subsidiaries is (i) in violation of its charter or by-laws or similar organizational documents; (ii) in default, and no event has occurred that, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries is bound or to which any of the property or assets of the Company or any of its subsidiaries is subject; or (iii) in violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority, except, in the case of clauses (ii) and (iii) above, for any such default or violation that would not, individually or in the aggregate, have a Material Adverse Effect.

(o) *Statements in the Registration Statement.* The statements set forth in the Registration Statement, the Pricing Disclosure Package and the Prospectus under the caption "Description of Capital Stock", insofar as they purport to constitute a summary of the terms of the Common Stock, under the caption "Description of Securities We Are Offering," insofar as they purport to constitute a summary of the terms of each of the Securities, under the caption "Material U.S. Federal Income Tax Consequences" and "Underwriting," insofar as they purport to describe the provisions of the laws and documents referred to therein, are accurate, complete and fair in all material respects. The statements made in or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus under the captions "Business—Therapeutic Product Candidates in Development—Current Partnerships and Collaborations," "Business—Intellectual Property," "Business—Government Regulation" and "Risk Factors—Risks Relating to our Intellectual Property," insofar as they purport to constitute summaries of the terms of statutes, rules or regulations, legal or governmental proceedings or contracts and other documents, constitute accurate summaries of the terms of such statutes, rules and regulations, legal and governmental proceedings and contracts and other documents in all material respects.

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

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

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

(s) *Independent Auditors.* Ernst & Young LLP, who have audited certain financial statements of the Company and its subsidiaries is an independent registered public accounting firm with respect to the Company and its subsidiaries within the applicable rules and regulations adopted by the Commission and the Public Company Accounting Oversight Board (United States) and as required by the Securities Act.

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

(u) *Intellectual Property.* To the Company's knowledge with respect to patents, patent applications, trade and service marks, trade and service mark registrations, and trade names only, the Company and its subsidiaries own, possess, or license, and otherwise have legally enforceable rights to all patents, patent applications, trade and service marks, trade and service mark registrations, trade names, copyrights, licenses, inventions, trade secrets, technology, and know-how, except with regard to off-the-shelf software provided by third parties, (collectively, the "**Intellectual Property Rights**") necessary for the conduct of the Company's business as now conducted or, to the knowledge of the Company, as proposed in the Pricing Disclosure Package and the Prospectus to be conducted. Except as disclosed in the Pricing Disclosure Package and the Prospectus, (i) to the knowledge of the Company, there are no rights of third parties to any such Intellectual Property Rights that conflict with the Company's right to own, possess or license, as applicable, such Intellectual Property Rights; (ii) the Company is not aware of any material infringement by third parties of any such Intellectual Property Rights; (iii) there is no pending, or to the knowledge of the Company threatened, action, suit, proceeding or claim by others challenging the Company's rights in or to own, possess and license such Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (iv) there is no pending, or to the knowledge of the Company threatened, action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property Rights, and the Company is unaware of any facts which would form a reasonable basis for any such claim, except for any such action, suit, proceeding or claim that would not have a Material Adverse Effect; (v) there is no pending, or to the knowledge of the Company threatened, action, suit, proceeding or claim by others that the Company infringes or otherwise violates any patent, trademark, copyright, trade secret or other proprietary rights of others, and the Company is unaware of any other fact which would form a reasonable basis for any such claim, except for any such action, suit, proceeding or claim that would not have a Material Adverse Effect; (vi) to the knowledge of the Company, there is no U.S. patent or published U.S. patent application (other than U.S. patents or U.S. patent applications of the Company) which contains claims that dominate or may dominate any Intellectual Property Rights described in the Pricing Disclosure Package and the Prospectus as being owned by or licensed to the Company or that interferes with the issued or pending claims of any such Intellectual Property Rights, except for such claims and interferences that would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect; (vii) there is no prior art of which the Company is aware that may render any U.S. patent held by the Company invalid or any U.S. patent application held by the Company unpatentable which has not been disclosed to the U.S. Patent and Trademark Office, and (viii) to the knowledge of the Company, all pertinent prior art references known to the Company or its counsel during the prosecution of the patents and patent applications comprising the Intellectual Property Rights were disclosed to the relevant patent authority and, to the knowledge of the Company, neither such counsel nor the Company nor any licensor made any misrepresentation to, or concealed any material fact from, the relevant patent authority during such prosecution and the Company, and to the knowledge of the Company, any licensor, has complied with all applicable duty of candor requirements of the relevant patent authority with respect to such patents and patent applications. To the knowledge of the Company, all licenses to which the Company and its subsidiaries is a party relating to the Intellectual Property Rights are valid, subsisting, enforceable, and in good standing and each of the Company and its subsidiaries has, in all material respects, complied with its respective contractual obligations pursuant to all such licenses relating to the Intellectual Property Rights and has not committed any material breach thereof (declared or undeclared). The Company is not a party to or bound by any options, licenses, or agreements with respect to the intellectual property rights of any other person or entity that are required to be disclosed in Pricing Disclosure Package and the Prospectus and that are not disclosed therein. None of the Intellectual Property Rights used by the Company and its subsidiaries has been obtained by them or is being used by them in violation of any material contractual obligations binding on the Company, its subsidiaries or, to the knowledge of the Company, any of their officers, directors, or employees. Except as required to be set forth in the Pricing Disclosure Package and the Prospectus, (i) the Company and its subsidiaries are not obligated to pay a material royalty, grant a license or provide other consideration to any third party in connection with the Intellectual Property Rights and (ii) no third party, including any academic or governmental organization, possess material rights to the Intellectual Property Rights owned by the Company.

(v) *Compliance with Laws.* The Company has not been advised, and has no reason to believe, that it and each of its subsidiaries are not conducting business in compliance with all applicable laws, rules and regulations of the jurisdictions in which it is conducting business, except where failure to be so in compliance would not result in a Material Adverse Effect. Except as described in the Pricing Disclosure Package, each of the Company and its subsidiaries: (A) is and at all times has been in material compliance with all statutes, rules or regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product under development, manufactured or distributed by the Company (“**Applicable Laws**”); (B) has not, within the past five years, received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the U.S. Food and Drug Administration (the “**FDA**”) or any other federal, state, local or foreign governmental or regulatory authority alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws (“**Authorizations**”); (C) possesses all material Authorizations and such Authorizations are valid and in full force and effect and the Company is not in material violation of any term of any such Authorizations; (D) has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from the FDA or any other federal, state, local or foreign governmental or regulatory authority or third party alleging that any product operation or activity is in material violation of any Applicable Laws or Authorizations and has no knowledge that the FDA or any other federal, state, local or foreign governmental or regulatory authority or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (E) has not received notice that the FDA or any other federal, state, local or foreign governmental or regulatory authority has taken, is taking or intends to take action to limit, suspend, modify or revoke any material Authorizations and has no knowledge that the FDA or any other federal, state, local or foreign governmental or regulatory authority is considering such action; (F) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission); and (G) has not, either voluntarily or involuntarily, initiated, conducted, or issued or caused to be initiated, conducted or issued, any recall, market withdrawal or replacement, safety alert, “dear doctor” letter, or other notice or action relating to the alleged lack of safety or efficacy of any product or any alleged product defect or violation and, to the Company’s knowledge, no third party has initiated, conducted or intends to initiate any such notice or action.

(w) *Clinical Studies.* The studies, tests and preclinical and clinical trials conducted by or on behalf of the Company or any of its subsidiaries were and, if still pending, are being conducted in all material respects in accordance with experimental protocols, procedures and controls pursuant to accepted professional scientific standards and all Applicable Laws and Authorizations, including, without limitation, the Federal Food, Drug and Cosmetic Act and the rules and regulations promulgated thereunder (collectively, “**FDCA**”); the descriptions of the results of such studies, tests and trials contained in the Registration Statement and the Pricing Disclosure Package are accurate and complete in all material respects and fairly present the data derived from such studies, tests and trials; except as disclosed in the Pricing Disclosure Package, the Company is not aware of any studies, tests or trials, the results of which the Company believes reasonably call into question the study results, test results, or trial results described or referred to in the Registration Statement and the Pricing Disclosure Package when viewed in the context in which such results are described and the clinical state of development; and, except as otherwise disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, since December 31, 2018, the Company has not received any notices or correspondence from the FDA or any other federal, state, local or foreign governmental or regulatory authority requiring the termination, suspension or material modification of any studies, tests or preclinical or clinical trials conducted by or on behalf of the Company.

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

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

(z) *Taxes.* The Company and its subsidiaries have paid all material federal, state, local and foreign taxes and filed all tax returns required to be paid or filed through the date hereof; and except as otherwise disclosed in the Registration Statement, the Pricing Disclosure Package and the Prospectus, there is no material tax deficiency that has been, or could reasonably be expected to be, asserted against the Company or any of its subsidiaries or any of their respective properties or assets.

(aa) *Licenses or Permits.* Except as otherwise described in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus, the Company and its subsidiaries possess all licenses, certificates, permits and other authorizations issued by, and have made all declarations and filings with, the appropriate federal, state, local or foreign governmental or regulatory authorities that are necessary for the ownership or lease of their respective properties or the conduct of their respective businesses, except where the failure to possess or make the same would not, individually or in the aggregate, have a Material Adverse Effect; and except as described in each of the Registration Statement, the Pricing Disclosure Package and the Prospectus, neither the Company nor any of its subsidiaries has received notice of any revocation or modification of any such license, certificate, permit or authorization or has any reason to believe that any such license, certificate, permit or authorization will not be renewed in the ordinary course that, individually or in the aggregate, if revoked, modified or failed to renew, could result in a Material Adverse Effect.

(bb) *No Labor Disputes.* No labor disturbance by or dispute with employees of the Company or any of its subsidiaries exists or, to the knowledge of the Company, 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 its or its subsidiaries' principal suppliers, contractors or customers, except as would not have a Material Adverse Effect.

(cc) *Environmental Laws and Hazardous Materials.* Except as described in the Pricing Disclosure Package and the Prospectus or except as would not, singly or in the aggregate, result in a Material Adverse Effect, (i) the Company has not been advised, and has no reason to believe, that either the Company or any of its subsidiaries is in violation of any applicable federal, state, local or foreign statute, law, rule, regulation, ordinance, code or rule of common law or any binding and enforceable judicial or administrative interpretation thereof, including any binding and enforceable judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health or the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata), including, without limitation, laws and regulations relating to the release or threatened release of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum or petroleum products (collectively, "**Hazardous Materials**") or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, "**Environmental Laws**"), (ii) the Company has not been advised, and has no reason to believe, that the Company and its subsidiaries do not have all permits, authorizations and approvals required under any applicable Environmental Laws to operate the business of the Company as currently conducted or are not each in compliance with their requirements, (iii) there are no pending or to the Company's knowledge, threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, investigation or proceedings relating to any Environmental Law against the Company or any of its subsidiaries and (iv) the Company has not been advised, and has no reason to believe, that there are any events or circumstances that might reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or governmental body or agency, against the Company or any of its subsidiaries relating to Hazardous Materials pursuant to any applicable Environmental Laws.

(dd) *Compliance with ERISA.* The Company and its subsidiaries and any "**employee benefit plan**" (as defined in Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended (collectively with the regulations and published interpretations thereunder, "**ERISA**")) established or maintained by the Company, its subsidiaries or their "**ERISA Affiliates**" (as defined below) ("**Company Benefit Plans**") are in compliance in all material respects with ERISA. "**ERISA Affiliate**" means, with respect to the Company or a subsidiary, any member of any group of organizations described in Sections 414(b), (c), (m) or (o) of the Internal Revenue Code of 1986, as amended, and the regulations and published interpretations thereunder (the "**Code**") of which the Company or such subsidiary is a member. No Company Benefit Plan is a multiemployer plan (as defined in Section 4001(a)(3) and Section 3(37) of ERISA) or a "multiple employer plan" (as defined in Section 4063 or 4064 of ERISA). Furthermore, no Company Benefit Plan is a "defined benefit plan" as defined in Section 3(35) of ERISA or plan subject to Part 3, Subtitle B of Title I of ERISA, Section 412 of the Code or Title IV of ERISA. None of the Company, its subsidiaries or any of their ERISA Affiliates has incurred or reasonably expects to incur any material liability under Sections 4975 or 4980B of the Code. Each Company Benefit Plan that is intended to be qualified under Section 401(a) of the Code is so qualified and nothing has occurred, whether by action or failure to act, which would cause the loss of such qualification, except where such act or failure to act would not, individually or in the aggregate, result in a Material Adverse Effect.

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

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

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

(hh) *Critical Accounting Policies.* The section entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” set forth or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus accurately and fully describes (i) the accounting policies that the Company believes are the most important in the portrayal of the Company’s financial condition and results of operations and that require management’s most difficult, subject or complex judgments (“**Critical Accounting Policies**”); (ii) the judgments and uncertainties affecting the application of Critical Accounting Policies; and (iii) the likelihood that materially different amounts would be reported under different conditions or using different assumptions and an explanation thereof.

(ii) *Insurance.* The Company and its subsidiaries have insurance covering their respective properties, operations, personnel and businesses, including business interruption insurance, which insurance is in amounts and insures against such losses and risks as are adequate to protect the Company and its subsidiaries and their respective businesses; and neither the Company nor any of its subsidiaries has (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, except for such notices or non-renewal that would not result in a Material Adverse Effect.

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

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

(ll) *No Conflicts with Sanctions Laws.* Neither the Company nor any of its subsidiaries, nor any director, officer or employee of the Company or any of its subsidiaries nor, to the knowledge of the Company, any agent, affiliate or other person associated with or acting on behalf of the Company or any of its subsidiaries is (i) 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**”), (ii) located, organized, or resident in a country or territory that is the subject or target of Sanctions (a “**Sanctioned Jurisdiction**”), and the Company will not directly or indirectly use the proceeds of the offering of the Securities hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity (i) to fund or facilitate any activities of or business with any person, or in any country or territory, that, at the time of such funding or facilitation, is the subject or the target of Sanctions (ii) to fund or facilitate any activities of or business in any Sanctioned Jurisdiction or (iii) in any other manner that will result in a violation by any person (including any person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions; neither the Company nor any of its subsidiaries is engaged in, or has, at any time in the past five years, 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; the Company and its subsidiaries have instituted, and maintain, policies and procedures designed to promote and achieve continued compliance with Sanctions.

(mm) *No Restrictions on Subsidiaries.* No subsidiary of the Company is currently prohibited, directly or indirectly, under any agreement or other instrument to which it is a party or is subject, from paying any dividends to the Company, from making any other distribution on such subsidiary’s capital stock or similar ownership interest, from repaying to the Company any loans or advances to such subsidiary from the Company or from transferring any of such subsidiary’s properties or assets to the Company or any other subsidiary of the Company.

(nn) *No Broker’s Fees.* Neither the Company nor any of its subsidiaries is 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 of its subsidiaries or any Underwriter for a brokerage commission, finder’s fee or like payment in connection with the offering and sale of the Securities.

(oo) *No Registration Rights.* Except as disclosed in the Pricing Disclosure Package, no person has the right to require the Company or any of its subsidiaries to register any securities for sale under the Securities Act by reason of the filing of the Registration Statement with the Commission or the issuance and sale of the Securities.

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

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

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

(ss) *Sarbanes-Oxley Act Compliance.* There is and has been no failure on the part of the Company or, to the knowledge of the Company, any of the Company's directors or officers, in their capacities as such, to comply with any provision of the Sarbanes-Oxley Act of 2002, as amended and the rules and regulations promulgated in connection therewith (the "**Sarbanes-Oxley Act**"), including Section 402 related to loans and Sections 302 and 906 related to certifications.

(tt) *No Outstanding Loans or Other Extensions of Credit.* Since the adoption of Section 13(k) of the Exchange Act, neither the Company nor any of its subsidiaries has extended or maintained credit, arranged for the extension of credit, or renewed any extension of credit, in the form of a personal loan, to or for any director or executive officer (or equivalent thereof) of the Company and/or such subsidiary except for such extensions of credit as are expressly permitted by Section 13(k) of the Exchange Act.

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

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

(ww) *Cyber Security; Data Protection.* The Company and its subsidiaries' information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, data and databases (collectively, "**IT Systems**") are adequate for, and operate and perform as required in connection with the operation of the business of the Company and the subsidiaries as currently conducted, free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants, except where such inadequacy in, or failure to operate or perform, would not, individually or in the aggregate, have a Material Adverse Effect. The Company and its subsidiaries have implemented and maintained commercially reasonable controls, policies, procedures, and safeguards to maintain and protect their material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and data (including all personal, personally identifiable, sensitive, confidential or regulated data ("**Personal Data**")) used in connection with their businesses, and, except as disclosed in the Pricing Disclosure Package, there have been no breaches, violations, outages or unauthorized uses of or accesses to same, except for those that have been remedied without material cost or liability or the duty to notify any other person or as would not, individually or in the aggregate, have a Material Adverse Effect, nor any incidents under internal review or investigations relating to the same. The Company and its subsidiaries are presently in compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority having jurisdiction over the Company and its subsidiaries or any of their properties or assets, internal policies and contractual obligations relating to the privacy and security of IT Systems and Personal Data and to the protection of such IT Systems and Personal Data from unauthorized use, access, misappropriation or modification, except where such non-compliance or failure to protect would not, individually or in the aggregate, result in a Material Adverse Effect.

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

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

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

(c) *Amendments or Supplements, Issuer Free Writing Prospectuses.* Before preparing, using, authorizing, approving, referring to or filing any Issuer Free Writing Prospectus, and before filing any amendment or supplement to the Registration Statement or the Prospectus, whether before or after the time that the Registration Statement becomes effective, the Company will furnish to the Representative and counsel for the Underwriters a copy of the proposed Issuer Free Writing Prospectus, amendment or supplement for review and will not prepare, use, authorize, approve, refer to or file any such Issuer Free Writing Prospectus or file any such proposed amendment or supplement to which the Representative reasonably objects.

(d) *Renewal of Registration.* If by the third anniversary (the “**Renewal Deadline**”) of the initial effective date of the Registration Statement, any of the 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 automatic shelf registration statement relating to the Securities, in a form satisfactory to you. If at the Renewal Deadline the Company is no longer eligible to file an automatic shelf registration statement, the Company will, if it has not already done so, file a new shelf registration statement relating to the Securities, in a form satisfactory to you and will use its best efforts to cause such registration statement to be declared effective within 180 days after the Renewal Deadline. The Company will take all other action necessary or appropriate to permit the offering and sale of the Securities to continue as contemplated in the expired registration statement relating to the Securities. References herein to the Registration Statement shall include such new automatic shelf registration statement or such new shelf registration statement, as the case may be.

(e) *Notice to the Representative.* The Company will advise the Representative promptly, and confirm such advice in writing, (i) when the Registration Statement has become effective; (ii) when any amendment to the Registration Statement has been filed or becomes effective; (iii) when any supplement to the Prospectus or any Issuer Free Writing Prospectus or any amendment to the Prospectus has been filed or distributed; (iv) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus or the receipt of any comments from the Commission relating to the Registration Statement or any other request by the Commission for any additional information; (v) of the issuance by the Commission of any order suspending the effectiveness of the Registration Statement or preventing or suspending the use of any of the Pricing Disclosure Package or the Prospectus or the initiation or threatening of any proceeding for that purpose or pursuant to Section 8A of the Securities Act; (vi) of the occurrence of any event or development within the Prospectus Delivery Period as a result of which the Prospectus, the Pricing Disclosure Package or any Issuer Free Writing Prospectus as then amended or supplemented would include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing when the Prospectus, the Pricing Disclosure Package or any such Issuer Free Writing Prospectus is delivered to a purchaser, not misleading; (vii) of the receipt by the Company of any notice of objection of the Commission to the use of the Registration Statement or any post-effective amendment thereto pursuant to Rule 401(g)(2) under the Securities Act; and (viii) of the receipt by the Company of any notice with respect to any suspension of the qualification of the Securities for offer and sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose; and the Company will use its best efforts to prevent the issuance of any such order suspending the effectiveness of the Registration Statement, preventing or suspending the use of any of the Pricing Disclosure Package or the Prospectus or suspending any such qualification of the Securities and, if any such order is issued, will obtain as soon as possible the withdrawal thereof.

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

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

(h) *Earning Statement.* The Company will make generally available to its security holders and the Representative as soon as practicable an earning statement that satisfies the provisions of Section 11(a) of the Securities Act and Rule 158 of the Commission promulgated thereunder covering a period of at least twelve months beginning with the first fiscal quarter of the Company occurring after the “effective date” (as defined in Rule 158) of the Registration Statement.

(i) *Clear Market.* For a period of 30 days after the date of the Prospectus (the “**Lock-Up Period**”), the Company will not (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, make any short sale or otherwise transfer or dispose of, directly or indirectly, or file with the Commission a registration statement under the Securities Act relating to, any shares of the Company that are substantially similar to the Securities, including but not limited to any options or warrants to purchase shares of Stock or any securities convertible into or exercisable or exchangeable for, or that represent the right to receive, Stock or any such substantially similar securities, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing, or (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, without the prior written consent of the Representative, other than (A) the Company’s sale of the Securities hereunder, (B) the issuance of securities issued on a pro rata basis to all holders of a class of outstanding equity securities of the Company, (C) the issuance of restricted Common Stock, restricted stock units or options to acquire Common Stock pursuant to the Company’s employee benefit plans, qualified stock option plans or other employee compensation plans as such plans are in existence on the date hereof and described in the Registration Statement and the Prospectus, (D) issuances of Common Stock upon the exercise or settlement of options, warrants or restricted stock units disclosed as outstanding in Registration Statement and the Prospectus; (E) the purchase or sale of the Company’s securities pursuant to a plan, contract or instruction, if any, that satisfies all of the requirements of Rule 10b5-1(c)(1)(i)(B) that was in effect prior to the date hereof; or (F) the issuance of securities representing in the aggregate no more than 10% of the Company’s issued and outstanding shares of Common Stock as of the date of this Agreement, which may be sold, on an arm’s-length basis, only to unaffiliated service providers, vendors, customers, strategic partners and collaborators pursuant to a collaboration, licensing agreement, strategic alliance, lease, manufacturing or distribution agreement or similar transaction in connection with the acquisition of assets, technologies or other entities, so long as recipients of such securities agree to be bound by a “lock-up” agreements, substantially in the form of Exhibit A hereto. The Company also agrees that during such period, the Company will not file any registration statement, preliminary prospectus or prospectus, or any amendment or supplement thereto, under the Securities Act for any such transaction or which registers, or offers for sale, Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, except for a registration statement on Form S-8 relating to employee benefit plans.

(j) *Use of Proceeds.* The Company will apply the net proceeds from the sale of the Securities (including any cash exercise of the Pre-Funded Warrants or the Warrants) as described in the Registration Statement, the Pricing Disclosure Package and the Prospectus under the heading “Use of Proceeds.”

(k) *No Stabilization.* The Company will not take, directly or indirectly, any action designed to or that could reasonably be expected to cause or result in any stabilization or manipulation of the price of the Stock.

(l) *Exchange Listing.* The Company will use its best efforts to list the Shares, the Pre-Funded Warrant Shares and the Warrant Shares on the Nasdaq Market.

(m) *Reports.* So long as the Securities are outstanding, the Company will furnish to the Representative, as soon as they are available, copies of all reports or other communications (financial or other) furnished to holders of the Securities, and copies of any reports and financial statements furnished to or filed with the Commission or any national securities exchange or automatic quotation system; provided the Company will be deemed to have furnished such reports and financial statements to the Representative to the extent they are filed on the Commission’s Electronic Data Gathering, Analysis, and Retrieval system (“**EDGAR**”).

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

(o) *FinCEN.* The Company has provided to the Representative a properly completed and executed Certificate Regarding Beneficial Owners of Legal Entity Customers, together with any required identifying documentation, and the Company hereby undertakes to provide such additional supporting documentation as the Representative may reasonably request in connection with verification of the forgoing certification.

(p) *Reservation of Pre-Funded Warrant Shares and Warrant Shares.* The Company will reserve and keep available for the exercise of the Pre-Funded Warrants such number of authorized but unissued shares of Common Stock as are sufficient to permit the exercise in full of the Pre-Funded Warrants for the Pre-Funded Warrant Shares. The Company will reserve and keep available for the exercise of the Warrants such number of authorized but unissued shares of Common Stock as are sufficient to permit the exercise in full of the Warrants for the Warrant Shares.

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

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

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

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

6. Conditions of Underwriters’ Obligations. The obligation of each Underwriter to purchase the Underwritten Securities on the Closing Date as provided herein is subject to the performance by the Company of its covenants and other obligations hereunder and to the following additional conditions:

(a) *Registration Compliance; No Stop Order.* No order suspending the effectiveness of the Registration Statement shall be in effect, and no proceeding for such purpose, pursuant to Rule 401(g)(2) or pursuant to Section 8A under the Securities Act shall be pending before or threatened by the Commission; the Prospectus and each Issuer Free Writing Prospectus shall have been timely filed with the Commission under the Securities Act (in the case of an Issuer Free Writing Prospectus, to the extent required by Rule 433 under the Securities Act) and in accordance with Section 4(a) hereof; and all requests by the Commission for additional information shall have been complied with to the reasonable satisfaction of the Representative.

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

(c) *No Material Adverse Change.* (i) Neither the Company nor any of its subsidiaries shall have sustained since the date of the latest audited financial statements included or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus any loss or interference with its business from fire, explosion, flood or other calamity, including a health epidemic or pandemic outbreak of infectious disease, 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 Registration Statement, the Pricing Disclosure Package and the Prospectus, and (ii) since the respective dates as of which information is given in the Registration Statement, the Pricing Disclosure Package and the Prospectus there shall not have been any change in the capital stock or long term debt of the Company or any of its subsidiaries 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, results of operations or prospects of the Company and its subsidiaries, taken as a whole, except as set forth or contemplated in the Registration Statement, the Pricing Disclosure Package and the Prospectus, or (y) the ability of the Company to perform its obligations under this Agreement, including the issuance and sale of the Securities, or to consummate the transactions contemplated in the Registration Statement, the Pricing Disclosure Package and the Prospectus, the effect of which, in any such case described in clause (i) or (ii), is in your judgment so material and adverse as to make it impracticable or inadvisable to proceed with the offering or the delivery of the Securities on the terms and in the manner contemplated in the Registration Statement, the Pricing Disclosure Package and the Prospectus.

(d) *Officer's Certificate.* The Representative shall have received on and as of the Closing Date a certificate of the chief financial officer or chief accounting officer of the Company and one additional senior executive officer of the Company who is satisfactory to the Representative (i) confirming that such officers have carefully reviewed the Registration Statement, the Pricing Disclosure Package and the Prospectus and, to the knowledge of such officers, the representation set forth in Section 3(a) hereof is true and correct, (ii) confirming that the other representations and warranties of the Company in this Agreement are true and correct and that the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied hereunder at or prior to the Closing Date and (iii) to the effect set forth in paragraphs (a) and (c) above.

(e) *Comfort Letters.* On the date of this Agreement and on the Closing Date, Ernst & Young LLP shall have furnished to the Representative, at the request of the Company, letters, dated the respective dates of delivery thereof and addressed to the Underwriters, in form and substance reasonably satisfactory to the Representative, containing statements and information of the type customarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained or incorporated by reference in the Registration Statement, the Pricing Disclosure Package and the Prospectus; provided, that the letter delivered on the Closing Date shall use a "cut-off" date no more than three business days prior to such Closing Date.

(f) *Opinion and 10b-5 Statement of Counsel for the Company.* Cooley LLP, counsel for the Company, shall have furnished to the Representative, at the request of the Company, their written opinion and 10b-5 statement, dated the Closing Date and addressed to the Underwriters, in form and substance reasonably satisfactory to the Representative.

(g) *Opinion and 10b-5 Statement of Counsel for the Underwriters.* The Representative shall have received on and as of the Closing Date an opinion and 10b-5 statement of White & Case LLP, counsel for the Underwriters, with respect to such matters as the Representative may reasonably request, and such counsel shall have received such documents and information as they may reasonably request to enable them to pass upon such matters.

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

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

(j) *No Suspension of Trading.* On or after the Applicable Time there shall not have occurred any of the following: (i) a suspension or material limitation in trading in securities generally on the New York Stock Exchange or on the Nasdaq Market; (ii) a suspension or material limitation in trading in the Company's securities on the Nasdaq Market; (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 your judgment makes it impracticable or inadvisable to proceed with the offering or the delivery of the Securities being delivered at such time of delivery on the terms and in the manner contemplated in the Pricing Disclosure Package and the Prospectus.

(k) *Prospectus Delivery Requirement.* The Company shall have complied with the provisions of Section 4(b) hereof with respect to furnishing prospectuses.

(l) *Exchange Listing.* The Company shall have filed a notification for the listing of the Shares, the Pre-Funded Warrant Shares and the Warrant Shares with the Nasdaq Market and shall have received no objection thereto from the Nasdaq Market.

(m) *Warrants.* The Representative shall have received electronic copies of the Pre-Funded Warrants, substantially in the form of Exhibit B, and the Warrants, substantially in the form of Exhibit C, executed by the Company.

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

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

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

7. Indemnification and Contribution.

(a) *Indemnification of the Underwriters.* 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 Securities Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, the base prospectus included in the Registration Statement, the Pricing Disclosure Package or the Prospectus, or any amendment or supplement thereto, any Issuer Free Writing Prospectus, any "roadshow" as defined in Rule 433(h) under the Securities Act (a "**roadshow**"), any "issuer information" filed or required to be filed pursuant to Rule 433(d) under the Securities Act, 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, the base prospectus included in the Registration Statement, the Pricing Disclosure Package or the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus, in reliance upon and in conformity with the Underwriter Information.

(b) *Indemnification of the Company.* 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 Securities Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof), joint or several, arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, the base prospectus included in the Registration Statement, the Pricing Disclosure Package or the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus, or any roadshow, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, the base prospectus included in the Registration Statement, the Pricing Disclosure Package or the Prospectus or any such amendment or supplement thereto, or any Issuer Free Writing Prospectus, or any roadshow, 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 Representative 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 first paragraph under the caption "Commissions and Expenses," the information contained in the first and second paragraphs under the caption "Market Making, Stabilization and Other Transactions" and the information contained under the caption "Passive Market Making," in the "Underwriting" section.

(c) *Notice and Procedures.* Promptly after receipt by an indemnified party under subsection (a) or (b) above 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 7 except to the extent that it has been materially prejudiced (through the forfeiture of substantive rights or defenses) by such failure; and provided further that the failure to notify the indemnifying 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 7. In case any such action shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate therein and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel satisfactory to such indemnified party (who shall not, except with the consent of the indemnified party, be counsel to the indemnifying party), and, after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such subsection for any legal expenses of other counsel or any other expenses, in each case subsequently incurred by such indemnified party, in connection with the defense thereof other than reasonable costs of investigation. No indemnifying party shall, without the written consent of the indemnified party, effect the settlement or compromise of, or consent to the entry of any judgment with respect to, any pending or threatened action or claim in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified party is an actual or potential party to such action or claim) unless such settlement, compromise or judgment (i) includes an unconditional release of the indemnified party from all liability arising out of such action or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of any indemnified party.

(d) *Contribution.* If the indemnification provided for in this Section 7 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 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.

(e) *Limitation on Liability.* The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to paragraph (d) above were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take account of the equitable considerations referred to in paragraph (d) above. The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions in respect thereof) referred to in paragraph (d) above shall be deemed to include, subject to the limitations set forth above, 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 paragraphs (d) and (e), in no event shall an Underwriter be required to contribute any amount in excess of the amount by which the total price at which the Securities underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages that 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 Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations to contribute pursuant to paragraphs (d) and (e) are several in proportion to their respective underwriting obligations hereunder and not joint.

(f) *Non-Exclusive Remedies.* The obligations of the Company under this Section 7 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 Securities Act and each broker-dealer or other affiliate of any Underwriter; and the obligations of the Underwriters under this Section 7 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 Securities Act.

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

9. Termination. This Agreement may be terminated in the absolute discretion of the Representative, by notice to the Company, if after the execution and delivery of this Agreement and prior to the Closing Date (i) trading generally shall have been suspended or materially limited on or by any of the New York Stock Exchange or the Nasdaq Market; (ii) trading of any securities issued or guaranteed by the Company shall have been suspended on any exchange or in any over-the-counter market; (iii) a general moratorium on commercial banking activities shall have been declared by federal or New York State authorities; or (iv) there shall have occurred any outbreak or escalation of hostilities or any change in financial markets or any calamity or crisis, either within or outside the United States, that, in the judgment of the Representative, is material and adverse and makes it impracticable or inadvisable to proceed with the offering, sale or delivery of the Shares on the Closing Date, on the terms and in the manner contemplated by this Agreement, the Pre-Funded Warrants, the Warrants, the Pricing Disclosure Package and the Prospectus.

10. Defaulting Underwriter.

(a) If, on the Closing Date, any Underwriter defaults on its obligation to purchase the Securities that it has agreed to purchase hereunder on such date, the non-defaulting Underwriters may in their discretion arrange for the purchase of such Securities by other persons satisfactory to the Company on the terms contained in this Agreement. If, within 36 hours after any such default by any Underwriter, the non-defaulting Underwriters do not arrange for the purchase of such Securities, then the Company shall be entitled to a further period of 36 hours within which to procure other persons satisfactory to the non-defaulting Underwriters to purchase such Securities on such terms. If other persons become obligated or agree to purchase the Securities of a defaulting Underwriter, either the non-defaulting Underwriters or the Company may postpone the Closing Date for up to five full business days in order to effect any changes that in the opinion of counsel for the Company or counsel for the Underwriters may be necessary in the Registration Statement and the Prospectus or in any other document or arrangement, and the Company agrees to promptly prepare any amendment or supplement to the Registration Statement and the Prospectus that effects any such changes. As used in this Agreement, the term "Underwriter" includes, for all purposes of this Agreement unless the context otherwise requires, any person not listed in Schedule 1 hereto that, pursuant to this Section 10, purchases Securities that a defaulting Underwriter agreed but failed to purchase.

(b) If, after giving effect to any arrangements for the purchase of the Securities of a defaulting Underwriter or Underwriters by the non-defaulting Underwriters and the Company as provided in paragraph (a) above, the aggregate number of Securities that remain unpurchased on the Closing Date does not exceed one-eleventh of the aggregate number of Securities to be purchased on such date, then the Company shall have the right to require each non-defaulting Underwriter to purchase the number of Securities that such Underwriter agreed to purchase hereunder on such date plus such Underwriter's pro rata share (based on the number of Securities that such Underwriter agreed to purchase on such date) of the Securities of such defaulting Underwriter or Underwriters for which such arrangements have not been made.

(c) If, after giving effect to any arrangements for the purchase of the Securities of a defaulting Underwriter or Underwriters by the non-defaulting Underwriters and the Company as provided in paragraph (a) above, the aggregate number of Securities that remain unpurchased on the Closing Date exceeds one-eleventh of the aggregate amount of Securities to be purchased on such date, or if the Company shall not exercise the right described in paragraph (b) above, then this Agreement. Any termination of this Agreement pursuant to this Section 10 shall be without liability on the part of the Company, except that the Company will continue to be liable for the payment of expenses as set forth in Section 11 hereof and except that the provisions of Section 7 hereof shall not terminate and shall remain in effect.

(d) Nothing contained herein shall relieve a defaulting Underwriter of any liability it may have to the Company or any non-defaulting Underwriter for damages caused by its default.

11. Payment of Expenses.

(a) 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 Securities under the Act and all other expenses in connection with the preparation, printing, reproduction and filing of the Registration Statement, the base prospectus included in the Registration Statement, any Issuer Free Writing Prospectus and the Prospectus and amendments and supplements thereto and the mailing and delivering of copies thereof to the Underwriters and dealers; (ii) the cost of printing or producing any Agreement among Underwriters, this Agreement, the Blue Sky Memorandum, closing documents (including any compilations thereof) and any other documents in connection with the offering, purchase, sale and delivery of the Securities; (iii) all expenses in connection with the qualification of the Securities for offering and sale under state securities laws as provided in Section 4(d) hereof, including the fees and disbursements of counsel for the Underwriters, not to exceed \$10,000, in connection with such qualification and in connection with the Blue Sky survey; (iv) all fees and expenses in connection with listing the Securities on the Nasdaq Capital Market; (v) the filing fees incident to, and the fees and disbursements of counsel for the Underwriters, not to exceed \$10,000, in connection with, any required review by FINRA of the terms of the sale of the Securities; (vi) the cost of preparing the Securities; (vii) the cost and charges of any transfer agent, registrar and warrant agent; (viii) the reasonable fees, disbursements and expenses of counsel to the Underwriters 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 Section 7 hereof, the Underwriters will pay all of their own costs and expenses, including the fees of their counsel not contemplated herein, transfer taxes on resale of any of the Securities by them, and any advertising expenses connected with any offers they may make.

(b) If (i) this Agreement is terminated pursuant to Section 9, (ii) the Company for any reason fails to tender the Securities for delivery to the Underwriters or (iii) the Underwriters decline to purchase the Securities for any reason permitted under this Agreement, the Company agrees to reimburse the Underwriters for all out-of-pocket costs and expenses (including fees and expenses of their counsel) reasonably incurred by the Underwriters in connection with this Agreement and the offering contemplated hereby.

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

13. Survival. The respective indemnities, rights of contribution, representations, warranties and agreements of the Company and the Underwriters contained in this Agreement or made by or on behalf of the Company or the Underwriters pursuant to this Agreement or any certificate delivered pursuant hereto shall survive the delivery of and payment for the Securities and shall remain in full force and effect, regardless of any termination of this Agreement or any investigation made by or on behalf of the Company or the Underwriters.

14. Certain Defined Terms. For purposes of this Agreement, (a) except where otherwise expressly provided, the term “affiliate” has the meaning set forth in Rule 405 under the Securities Act; (b) the term “business day” means any day other than a day on which banks are permitted or required to be closed in New York City; and (c) the term “subsidiary” has the meaning set forth in Rule 405 under the Securities Act.

15. Compliance with USA Patriot Act. In accordance with the requirements of the USA Patriot Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)), the 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.

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

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

For purposes of this Section 16 a “**BHC Act Affiliate**” has the meaning assigned to the term “affiliate” in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k). “**Covered Entity**” means any of the following: (i) a “covered entity” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b); (ii) a “covered bank” as that term is defined in, and interpreted in accordance with, 12 C.F.R. §7.3(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.

17. **Research Analysts.** The Company acknowledges that the Underwriters’ research analysts and research departments are required to be independent from their respective investment banking divisions and are subject to certain regulations and internal policies, and that such Underwriters’ research analysts may hold views and make statements or investment recommendations and/or publish research reports with respect to the Company and/or the offering that differ from the views of their respective investment banking divisions. The Company hereby waives and releases, to the fullest extent permitted by law, any claims that the Company may have against the Underwriters with respect to any conflict of interest that may arise from the fact that the views expressed by their independent research analysts and research departments may be different from or inconsistent with the views or advice communicated to the Company by such Underwriters’ investment banking divisions. The Company acknowledges that each of the Underwriters is a full service securities firm and as such from time to time, subject to applicable securities laws, may effect transactions for its own account or the account of its customers and hold long or short positions in debt or equity securities of the companies that may be the subject of the transactions contemplated by this Agreement.

18. **Miscellaneous.**

(a) **Notices.** All notices and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed or transmitted and confirmed by any standard form of telecommunication. Notices to the Underwriters shall be given to the Representative c/o Cantor Fitzgerald & Co., 110 East 59th Street, 6th Floor, New York, New York 10022, Attention: Capital Markets (Email: prospectus@cantor.com); with copies to White & Case LLP, 1221 Avenue of the Americas, New York, New York, 10020, Attention: Jessica Y. Chen. Notices to the Company shall be given to it at Sangamo Therapeutics, Inc., Attention: Prathyusha Duraibabu, Chief Financial Officer, 501 Canal Boulevard, Richmond, California 94804, facsimile: (510) 236-8951; with copies to Cooley LLP, 3 Embarcadero Center, 20th Floor, San Francisco, CA 94111, Attention: Chadwick Mills, facsimile: (415) 693-2222.

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

(c) **Submission to Jurisdiction.** The Company hereby submits to the exclusive jurisdiction of the U.S. federal and New York state courts in the Borough of Manhattan in The City of New York in any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby. The Company waives any objection which it may now or hereafter have to the laying of venue of any such suit or proceeding in such courts. The Company agrees that final judgment in any such suit, action or proceeding brought in such court shall be conclusive and binding upon the Company and may be enforced in any court to the jurisdiction of which Company is subject by a suit upon such judgment.

(d) *Counterparts.* This Agreement may be signed in counterparts (which may include counterparts delivered by any standard form of telecommunication), each of which shall be an original and all of which together shall constitute one and the same instrument.

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

(f) *Waiver of Jury Trial.* Each of the parties hereto hereby waives any right to trial by jury in any suit or proceeding arising out of or relating to this Agreement.

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

[Signature Page Follows]

If the foregoing is in accordance with your understanding, please indicate your acceptance of this Agreement by signing in the space provided below.

Very truly yours,

SANGAMO THERAPEUTICS, INC.

By: /s/ Alexander Macrae

Name: Alexander Macrae

Title: Chief Executive Officer

Accepted: As of the date first written above

CANTOR FITZGERALD & CO.

Acting on its own behalf
and as Representative of the
several Underwriters listed
in Schedule 1 hereto.

By: CANTOR FITZGERALD & CO.

By: /s/ Jason Fenton

Name: Jason Fenton

Title: Global Co-Head of ECM

[Signature Page to Underwriting Agreement.]

<u>Underwriter</u>	<u>Number of Shares</u>	<u>Number of Pre-Funded Warrants</u>	<u>Number of Warrants⁽¹⁾</u>
Cantor Fitzgerald & Co.	12,235,000	34,398,393	46,633,393
Total	12,235,000	34,398,393	46,633,393

(1) Each Warrant is exercisable for one share of common stock.

a. Free Writing Prospectuses:

Issuer Free Writing Prospectus, dated May 12, 2025.

b. Pricing Information Provided Orally by Underwriters:

The offering price per Share and accompanying Warrant is \$0.50.

The offering price per Pre-Funded Warrant and accompanying Warrant is \$0.49.

The Company is selling 12,235,000 Shares.

The Company is selling Pre-Funded Warrants to purchase up to an aggregate of 34,398,393 shares of Common Stock.

The Company is selling Warrants to purchase up to an aggregate of 46,633,393 shares of Common Stock.

Sangamo Therapeutics, Inc.

Pricing Term Sheet

None.

FORM OF LOCK-UP AGREEMENT

[See attached]

CANTOR FITZGERALD & CO.
As Representative of the several
Underwriters listed in Schedule 1 to the
Underwriting Agreement referred to
below

c/o Cantor Fitzgerald & Co.
110 East 59th Street, 6th Floor
New York, New York 10022

Re: Sangamo Therapeutics, Inc. – Offering

Ladies and Gentlemen:

The undersigned understands that you, as Representative of the several Underwriters, propose to enter into an underwriting agreement (the “**Underwriting Agreement**”) with Sangamo Therapeutics, Inc., a Delaware corporation (the “**Company**”), providing for the offering (the “**Offering**”) by the several Underwriters named in Schedule 1 to the Underwriting Agreement (the “**Underwriters**”), of common stock, par value \$0.01 per share, of the Company (the “**Common Stock**”), pre-funded warrants to purchase shares of Common Stock (the “**Pre-Funded Warrants**”) and warrants to purchase shares of Common Stock (the “**Warrants**”) and, together with the Common Stock and the Pre-Funded Warrants, the “**Securities**”). Capitalized terms used herein and not otherwise defined shall have the meanings set forth in the Underwriting Agreement.

In consideration of the Underwriters’ agreement to purchase and make the Offering of the Securities, and for other good and valuable consideration receipt of which is hereby acknowledged, the undersigned hereby agrees that, without the prior written consent of the Representative on behalf of the Underwriters, the undersigned will not, during the period ending 30 days after the date of the final prospectus supplement relating to the Offering (the “**Lock-Up Period**”), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock (including without limitation, Common Stock or such other securities which may be deemed to be beneficially owned now or hereafter by the undersigned in accordance with the rules and regulations of the Securities and Exchange Commission (such shares or securities, the “**Beneficially Owned Shares**”) and securities which may be issued upon exercise of a stock option or warrant), (2) 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 Beneficially Owned Shares, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise (any such sale, loan, pledge or other disposition, or transfer of economic consequences, a “**Transfer**”), (3) make any demand for or exercise any right with respect to the registration of any shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock, or (4) otherwise publicly announce any intention to engage in or cause any action, activity, transaction or arrangement described in clause (1), (2) or (3) above, in each case other than:

(a) transfers of Beneficially Owned Shares, Common Stock or securities convertible into or exercisable or exchangeable for Common Stock (i) as a bona fide gift or gifts, (ii) to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned, (iii) to any “affiliate” (as that term is defined in Rule 405 under the Securities Act of 1933, as amended) of the undersigned or (iv) by will or intestacy to the undersigned’s legal representative, heir or legatee;

- (b) pursuant to any contract, instruction or plan complying with Rule 10b5-1 under the Securities Exchange Act of 1934, as amended, that has been entered into by the undersigned prior to the date of this Lock-up Agreement;
- (c) the acquisition or exercise of any stock option issued pursuant to the Company's existing stock option plan, including any exercise effected by the delivery of shares of Common Stock held by the undersigned;
- (d) any conversion of restricted stock units into shares of Common Stock as provided in the applicable restricted stock unit issuance agreement;
- (e) any transfer of shares of Common Stock to the Company in connection with the undersigned's tax withholding obligation upon issuance of such shares pursuant to the applicable restricted stock unit issuance agreement;
- (f) any sale or transfer of shares of Common Stock (including in open market transactions through a broker) to satisfy the undersigned's tax withholding obligations in connection with the vesting of equity awards pursuant to the Company's equity compensation plans or arrangements, which are described in the Registration Statement, the Pricing Disclosure Package and the Prospectus, and which equity awards vest during the Lock-Up Period;
- (g) pursuant to a sale or an offer to purchase 100% of the outstanding Common Stock, whether pursuant to a merger, tender offer or otherwise, to a third party or group of third parties resulting in a Change of Control (as defined below) and approved by the Company's board of directors, provided that, in the event that such a Change of Control is not completed, the undersigned's shares shall remain subject to the restrictions contained in this Lock-up Agreement and title to the undersigned's shares shall remain with the undersigned; or
- (h) the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of Common Stock, provided that such plan does not provide for the transfer and sale of Common Stock during the Lock-Up Period, and provided further that, except as required by applicable securities laws, no public announcement of the establishment or existence of such plan, and no filing with the Securities and Exchange Commission or any other regulatory authority in respect thereof or for transactions thereunder or contemplated thereby, by the undersigned, the Company or any other person, shall be required, and no announcement or filing shall be made voluntarily by the undersigned, the Company or any other person prior to the expiration of the Lock-Up Period.
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In the case of any transfer or distribution pursuant to clause (b) above, each donee or distributee or transferee shall execute and deliver to the Representative a lock-up letter for the balance of the Lock-Up Period in the form of this paragraph and, pursuant to clauses (b)(ii) through (iv) above, no filing by any party (donor, donee, distributor, distributee, transferor or transferee) under the Exchange Act, or other public announcement reporting a reduction in the beneficial ownership shall be required or shall be made voluntarily in connection with such transfer or distribution. In the case of any transfer or distribution pursuant to clause (b)(i) above, it shall be a condition to such transfer that no public filing, report or announcement shall be voluntarily made and if any filing under Section 16(a) of the Exchange Act, or other public filing, report or announcement reporting a reduction in beneficial ownership of shares of Common Stock in connection with such transfer or distribution shall be legally required during the Lock-Up Period, such filing, report or announcement shall clearly indicate in the footnotes thereto the nature and conditions of such transfer. For the avoidance of doubt, any shares of Common Stock received by the undersigned upon the exercise of a stock option or conversion of restricted stock units as described in foregoing clauses (c) and (d) shall be subject to the restrictions under this Lock-up Agreement. In the case of any sale or transfer pursuant to clause (f) above, any public filing, report or announcement of any such sale or transfer shall disclose that the sale or transfer was for the purpose of covering the withholding taxes payable.

For the purposes of this Lock-up Agreement, (1) “**immediate family**” shall mean any spouse, domestic partner, lineal descendant (including adopted children), father, mother, brother or sister of the transferor and (2) “**Change of Control**” shall mean the transfer (whether by tender offer, merger, consolidation or other similar transaction), in one transaction or a series of related transactions, to a person or group of affiliated persons (other than an Underwriter pursuant to the Offering), of the Company’s voting securities if, after such transfer, such person or group of affiliated persons would hold more than 50% of the outstanding voting securities of the Company (or the surviving entity).

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 prohibited by this Lock-up Agreement during the Lock-Up Period.

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

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

The undersigned understands that, if (i) the Underwriting Agreement does not become effective by May 31, 2025, (ii) the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Securities to be sold thereunder, or (iii) the Company notifies the Representative in writing that it will not be proceeding with the Offering prior to the execution of the Underwriting Agreement, the undersigned shall be released from, all obligations under this Lock-up Agreement. The undersigned understands that the Underwriters are entering into the Underwriting Agreement and proceeding with the Offering in reliance upon this Lock-up Agreement.

This Lock-up Agreement and any claim, controversy or dispute arising under or related to this Lock-up Agreement shall be governed by and construed in accordance with the laws of the State of New York applicable to agreements made and to be performed in such state.

[Signature Page Follows]

Very truly yours,

Name:

Title:

FORM OF PRE-FUNDED WARRANT

[See attached]

FORM OF WARRANT

[See attached]

**PRE-FUNDED COMMON STOCK PURCHASE WARRANT
SANGAMO THERAPEUTICS, INC.**

Warrant Shares:

Date of Issuance: May [], 2025 (such date, the "Issue Date")

Warrant No.: PF-[]

THIS PRE-FUNDED COMMON STOCK PURCHASE WARRANT (the "Warrant") certifies that, for value received, the registered holder hereof or its permitted assigns (the "Holder") is entitled, upon the terms and subject to the limitations on exercise and the conditions set forth herein, at any time on or after the Issue Date, to subscribe for and purchase from Sangamo Therapeutics, Inc., a Delaware corporation (the "Company"), up to _____ shares (the "Warrant Shares") of the Company's common stock, par value \$0.01 per share ("Common Stock"). The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b). This Warrant has been issued pursuant to (i) the terms of the Underwriting Agreement, dated May 12, 2025, between the Company and Cantor Fitzgerald & Co., as the representative of the several underwriters named therein, (ii) the Company's registration statement on Form S-3 (File No. 333-283179) (the "Registration Statement") and (iii) the Company's prospectus supplement dated May 12, 2025 (the "Prospectus Supplement") to the base prospectus contained in the Registration Statement dated November 19, 2024.

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

- (a) "Affiliate" means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 under the Securities Act of 1933, as amended (the "1933 Act").
- (b) "Attribution Parties" means, collectively, the following Persons and entities: (i) any investment vehicle, including any funds, feeder funds or managed accounts, currently, or from time to time after the Issue Date, directly or indirectly managed or advised by the Holder's investment manager, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of Common Stock would or could be aggregated with the Holder's and the other Attribution Parties for purposes of Section 13(d) or Section 16 of the Securities Exchange Act of 1934, as amended (the "1934 Act"). For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage (as defined in Section 2(e)).
- (c) "Bloomberg" means Bloomberg Financial Markets.
- (d) "Business Day" means any day except any Saturday, any Sunday, any day that is a federal legal holiday in the United States or any day on which banking institutions in the city of New York, New York are authorized or required by law or other governmental action to close.
- (e) "Group" means a "group" as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.
- (f) "Person" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.
- (g) "Standard Settlement Period" means the standard settlement period, expressed in a number of Trading Days, for the Trading Market with respect to the Common Stock that is in effect on the date of delivery of an applicable Notice of Exercise, which as of the Issue Date was "T+1."
- (h) "Trading Day" means any day on which the Common Stock is traded on the Trading Market.
- (i) "Trading Market" means the principal securities exchange or securities market, including an over-the-counter market, on which the Common Stock is then traded in the United States.

(j) “Weighted Average Price” means, for any security as of any date, the dollar volume-weighted average price for such security on the Trading Market during the period beginning at 9:30:01 a.m., New York City time, and ending at 4:00:00 p.m., New York City time, as reported by Bloomberg through its “Volume at Price” function or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York City time, and ending at 4:00:00 p.m., New York City time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in the “pink sheets” published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices). If the Weighted Average Price cannot be calculated for such security on such date on any of the foregoing bases, the Weighted Average Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 5(n) with the term “Weighted Average Price” being substituted for the term “Exercise Price.” All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during such period.

Section 2. Exercise.

(a) Exercise of Warrant. Subject to the terms and conditions hereof, the purchase rights represented by this Warrant may be exercised, in whole or in part, at any time or times on or after the Issue Date by delivery (whether via email or otherwise) to the Company (or such other office or agency of the Company as it may designate by notice in writing to the registered Holder at the address of the Holder appearing on the books of the Company) of a duly executed copy of the Notice of Exercise form annexed hereto (the “Notice of Exercise”) and by payment to the Company of an amount equal to the aggregate Exercise Price of the Warrant Shares thereby purchased by wire transfer (or by notifying the Company that this Warrant is being exercised pursuant to a Cashless Exercise (as defined below)). 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 form be required. 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 after the date the 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 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 exercise price per share of Common Stock under this Warrant shall be \$0.01, subject to adjustment as provided herein (the “Exercise Price”).

(c) Mechanics of Exercise.

(i) Delivery of Warrant Shares Upon Exercise. Certificates for shares purchased hereunder shall be transmitted to the Holder by crediting the account of the Holder’s prime broker with The Depository Trust Company (“DTC”) through its Deposit/Withdrawal at Custodian (“DWAC”) system if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) the Warrant Shares are eligible for resale by the Holder without volume or manner-of-sale limitations pursuant to Rule 144 (assuming cashless exercise of the Warrant), and otherwise by physical delivery to the address specified by the Holder in the Notice of Exercise no later than the number of Trading Days comprising the Standard Settlement Period after the receipt by the Company of the Notice of Exercise (provided that payment of the Exercise Price (or notification of Cashless Exercise, if applicable) has then been received by the Company) (such date, the “Warrant Share Delivery Date”). This Warrant shall be deemed to have been exercised upon proper delivery of the Notice of Exercise and payment of the Exercise Price (or notification of Cashless Exercise). The Warrant Shares shall be deemed to have been issued, and the Holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the date the Warrant has been exercised. The Company shall use commercially reasonable efforts to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable.

(ii). Delivery of New Warrant 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 certificate or certificates representing 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 to this Warrant.

(iii). 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 its transfer agent to transmit to the Holder the Warrant Shares in accordance with the provisions of Section 2(c)(i) pursuant to an exercise on or before the Warrant Share Delivery Date (other than a failure caused by incorrect or incomplete information provided by the Holder to the Company), and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall promptly, and in any event within two (2) Business Days of receipt of notice from the Holder of the occurrence of a Buy-In, either (A) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, or (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of this Warrant with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. In connection with the foregoing, the Holder shall provide the Company written notice within three (3) Business Days after the occurrence of a Buy-In, indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Subject to Section 5(i), 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 Warrant Shares upon exercise of the Warrant as required pursuant to the terms hereof.

(iv). 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 or down) to the nearest whole share.

(v). Charges, Taxes and Expenses. Issuance of certificates for 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 certificate, all of which taxes and expenses shall be paid by the Company, and such certificates 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 certificates for 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.

(vi). 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.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, the Holder may exercise this Warrant, whether in whole or in part, and in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Exercise Price, by effecting a cashless exercise of this Warrant pursuant to which the Holder shall receive upon such cashless exercise the “Net Number” of Warrant Shares determined according to the following formula (a “Cashless Exercise”):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

- A = the total number of shares of Common Stock with respect to which this Warrant is then being exercised.
- B = the Weighted Average Price of the shares of Common Stock on the date immediately preceding the date of the Notice of Exercise.
- C = the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

If Warrant Shares are issued in such a Cashless Exercise, the Company acknowledges and agrees that in accordance with Section 3(a)(9) of the 1933 Act, the Warrant Shares shall take on the characteristics of the Warrant being exercised, and the holding period of the Warrant being exercised 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(d).

(e) Holder’s Exercise Limitations. Notwithstanding anything to the contrary contained herein, the Company shall not effect the exercise of any portion of this Warrant, and the Holder shall not have the right to exercise any portion of this Warrant, pursuant to the terms and conditions of this Warrant and any such exercise shall be null and void and treated as if never made, to the extent that immediately prior to or after giving effect to such exercise, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 4.99% (the “Maximum Percentage”) of the number of shares of Common Stock outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which the determination of such sentence is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (A) exercise of the remaining, unexercised portion of this Warrant beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including the other Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 2(e). For purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the 1934 Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the 1934 Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the 1934 Act and the rules and regulations promulgated thereunder. For purposes of this Warrant, in determining the number of outstanding shares of Common Stock the Holder may acquire upon the exercise of this Warrant without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company’s most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q and Current Reports on Form 8-K or other public filing with the Securities and Exchange Commission (the “SEC”), as the case may be, (y) a more recent public announcement by the Company or (z) any other written notice by the Company setting forth the number of shares of Common Stock outstanding (the “Reported Outstanding Share Number”). If the Company receives a Notice of Exercise from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Exercise Notice would otherwise cause the Holder’s beneficial ownership, as determined pursuant to this Section 2(e), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of Warrant Shares to be purchased pursuant to such Exercise Notice (the number of shares by which such purchase is reduced, the “Reduction Shares”) and (ii) as soon as reasonably practicable, the Company shall return to the Holder any exercise price paid by the Holder for the Reduction Shares. For any reason at any time, upon the written request of the Holder, the Company shall within five (5) Business Days confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of Common Stock to the Holder upon exercise of this Warrant results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the 1934 Act), the number of shares so issued by which the Holder’s and the other Attribution Parties’ aggregate beneficial ownership exceeds the Maximum Percentage (the “Excess Shares”) shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. As soon as reasonably practicable after the issuance of the Excess Shares has been deemed null and void, the Company shall return to the Holder the exercise price paid by the Holder for the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase or decrease the Maximum Percentage to any other percentage (not in excess of 19.99% of the issued and outstanding shares of Common Stock immediately after giving effect to the issuance of the shares of Common Stock issuable upon exercise of this Warrant if exceeding that limit would result in a change of control under Nasdaq Listing Rule 5635(b) or any successor rule) as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of Warrants that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Warrant in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the 1934 Act. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability. 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 the extent necessary to correct this paragraph or any portion of this paragraph which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 2(e) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Warrant.

Section 3. Certain Adjustments.

(a) Subdivision or Combination of Common Stock. If at any time while this Warrant is outstanding the Company subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision will be proportionately reduced and the number of Warrant Shares will be proportionately increased. If at any time while this Warrant is outstanding the Company combines (by combination, reverse stock split or otherwise) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Exercise Price in effect immediately prior to such combination will be proportionately increased and the number of Warrant Shares will be proportionately decreased. Any adjustment under this Section 3(a) shall become effective at the close of business on the date the subdivision or combination becomes effective.

(b) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if during such time as this Warrant is outstanding the Company grants, issues or sells any rights to purchase stock, warrants, securities or other property, in each case pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, Section 2(e) hereof) 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, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, 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 and the other Attribution Parties exceeding the Maximum Percentage).

(c) Pro Rata Distributions. If at any time while this Warrant is outstanding the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to all 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”), 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, Section 2(e) hereof) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, to the extent that the Holder’s right to participate in any such Distribution would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, 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 applicable 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 and the other Attribution Parties exceeding the Maximum Percentage).

(d) Fundamental Transaction. Unless earlier exercised, this Warrant shall automatically be deemed exercised in accordance with the provisions of Section 2(d) hereof immediately prior to the consummation of a Fundamental Transaction, without regard to any limitations on exercise contained herein. “Fundamental Transaction” means that (A) the Company shall, directly or indirectly, in one or more related transactions, (i) consolidate or merge with or into another Person in which the Company is not the surviving entity or the stockholders of the Company immediately prior to such merger or consolidation do not own, directly or indirectly, more than 50% of the voting power of the surviving entity immediately after such merger or consolidation, (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company to another Person, (iii) allow another Person to make a purchase, tender or exchange offer that is accepted by the holders of more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the Person or Persons making or party to, or associated or affiliated with the Persons making or party to, such purchase, tender or exchange offer), or (iv) consummate a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or similar transaction) with another Person whereby (A) such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock purchase agreement or other business combination) or (B) any Person or Group is or shall become the beneficial owner (determined in accordance with Section 13(d) of the 1934 Act and the rules and regulations promulgated thereunder), directly or indirectly, of more than 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock.

(e) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest whole share, as the case may be. For purposes of this Section 3, any calculation of the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall not include treasury shares, if any. In any case in which this Section 3 shall require that an adjustment in the Exercise Price be made effective as of a record date for a specified event, if Holder exercises this Warrant after such record date, the Company may elect to defer, until the occurrence of such event, the issuance of the shares of Common Stock and other capital stock of the Company in excess of the shares of Common Stock and other capital stock of the Company, if any, issuable upon such exercise on the basis of the Exercise Price in effect prior to such adjustment; provided, however, that in such case the Company shall deliver to the Holder a due bill or other appropriate instrument evidencing the Holder’s right to receive such additional shares and/or other capital securities upon the occurrence of the event requiring such adjustment.

(f) Par Value. Notwithstanding anything to the contrary in this Warrant, in no event shall the Exercise Price be reduced below the par value of the Company’s Common Stock.

Section 4. Transfer of Warrant.

(a) Transferability. Subject to compliance with any applicable securities laws, this Warrant and all rights hereunder are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company (or other 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. 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 (or other designated agent), 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 Issue Date set forth on the first page of this Warrant and shall be identical to this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

(c) Warrant Register. The Company shall initially serve as warrant agent under this Warrant. The Company shall register ownership of this Warrant, upon records to be maintained by the Company for that purpose (the "Warrant Register"), in the name of the record Holder (which shall include the initial Holder or, as the case may be, any assignee to which this Warrant is assigned hereunder) from time to time. Upon thirty (30) days' notice to the Holder, the Company may appoint a new warrant agent. Any corporation into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new warrant agent shall be a party or any corporation to which the Company or any new warrant agent transfers substantially all of its corporate trust or shareholders services business shall be a successor warrant agent under this Warrant without any further act. Any such successor warrant agent shall promptly cause notice of its succession as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder's last address as shown on the Warrant Register. 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.

Section 5. Miscellaneous.

(a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2.

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

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

(d) Authorized Shares. The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant (without regard to any limitations on exercise contained herein). The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for the 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. 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 issuance thereof (other than taxes in respect of any transfer occurring contemporaneously with such issuance). 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, issuance or sale of securities or any other voluntary action, in each case to 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.

(e) Governing Law. This Warrant shall be governed by, and construed in accordance with, the laws of the State of New York without giving effect to the conflicts of law principles thereof.

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

(g) Notices.

(i) Notice Procedures. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of: (a) the date of transmission, if such notice or communication is delivered via email at or prior to 5:30 p.m. (New York City time) on a Trading Day, (b) the next Trading Day after the date of transmission, if such notice or communication is delivered via email on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (c) the second (2nd) Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or by International Federal Express, (d) the third (3rd) Trading Day following the date of mailing if sent by first-class registered or certified mail domestic, or (e) upon actual receipt by the party to whom such notice is required to be given. The addresses for such communications shall be:

If to the Company:

Sangamo Therapeutics, Inc.
501 Canal Blvd.
Richmond, California 94804
Attention: Scott Willoughby

With copy to:

Cooley LLP
3 Embarcadero Center, 20th Floor
San Francisco, California 94111
Attention: Chadwick L. Mills

If to the Holder:

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

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

(iii). Notice to Allow Exercise by the Holder. After the Issue Date if (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company (which, for the avoidance of doubt, shall not include a license or other agreement granting rights to intellectual property), 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 mailed to the Holder at its last address as it shall appear upon the Warrant Register, at least ten (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 the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to mail such notice or any defect therein or in the mailing thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Company or any of its subsidiaries, the Company shall promptly file such notice with the SEC pursuant to a Current Report on Form 8-K.

(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. Notwithstanding the foregoing or anything else herein to the contrary, if the Company is for any reason unable to issue and deliver Warrant Shares upon exercise of this Warrant as required pursuant to the terms hereof, the Company shall have no obligation to pay to the Holder any cash or other consideration or otherwise “net cash settle” this Warrant.

(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 the 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) Confidentiality. The Holder agrees to keep confidential any proprietary information relating to the Company delivered by the Company hereunder; provided that nothing herein shall prevent the Holder from disclosing such information: (i) to any holder of Warrants or Warrant Shares, (ii) to any Affiliate of any holder of Warrants or Warrant Shares or any actual or potential transferee of the rights or obligations hereunder that agrees to be bound by this Section 5(m), (iii) upon order, subpoena, or other process of any court or administrative agency or otherwise required by law, (iv) upon the request or demand of any regulatory agency or authority having jurisdiction over such party, (v) which has been publicly disclosed without breach of any obligation to the Company, (vi) which has been obtained from any Person that is not a party hereto or an Affiliate of any such party without any breach of any obligation to the Company, (vii) in connection with the exercise of any remedy, or the resolution of any dispute hereunder, (viii) to the legal counsel or certified public accountants for any holder of Warrants or Warrant Shares, or (ix) as otherwise expressly contemplated by this Warrant. Notwithstanding the foregoing, the Company shall not provide material, non-public information or confidential or proprietary information to the Holder without such Holder's written consent. If the Company does provide material, non-public information or confidential or proprietary information to the Holder without such Holder's written consent, the Company shall promptly file such information with the SEC pursuant to a Current Report on Form 8-K and the Holder shall not be subject to any duty of confidentiality contained herein with respect to such information.

(n) Dispute Resolution. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall submit the disputed determinations or arithmetic calculations via email within two (2) Business Days of receipt of the Notice of Exercise giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within two (2) Business Days submit via email (i) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Holder or (ii) the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error. The expenses of the investment bank and accountant will be borne by the Company unless the investment bank or accountant determines that the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares by the Holder was incorrect, in which case the expenses of the investment bank and accountant will be borne by the Holder.

(o) 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 Pages Follow)

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.

SANGAMO THERAPEUTICS, INC.

By: _____
Name: _____
Title: _____

NOTICE OF EXERCISE

TO: Sangamo Therapeutics, Inc.

(1) The undersigned holder of Warrant No. PF-_____ 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):

Cash Exercise: lawful money of the United States; or

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

(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 or by physical delivery of a certificate to:

[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 exercise the warrant.)

FOR VALUE RECEIVED, [] all of or [] shares of the foregoing Warrant and all rights evidenced thereby are hereby assigned to

whose address is

Dated:

Holder's Signature: _____
Holder's Address: _____

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatsoever.

COMMON STOCK PURCHASE WARRANT

SANGAMO THERAPEUTICS, INC.

Warrant Shares:

Date of Issuance: May [], 2025 (such date, the “*Issue Date*”)

This **COMMON STOCK PURCHASE WARRANT** (the “*Warrant*”) certifies that, for value received, or its permitted assigns (the “*Holder*”) is entitled, upon the terms and subject to the limitations on exercise and the conditions set forth herein, at any time on or after the Issue Date and until 5:00 p.m., New York time, on the Expiration Date (but not thereafter), to subscribe for and purchase from Sangamo Therapeutics, Inc., a Delaware corporation (the “*Company*”), up to shares (the “*Warrant Shares*”) of the Company’s common stock, par value \$0.01 per share (“*Common Stock*”). The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b). This Warrant is one of the Common Stock Purchase Warrants issued in connection with the transactions contemplated by (i) that certain Underwriting Agreement, dated as of May 12, 2025, by and between the Company and Cantor Fitzgerald & Co., as the representative of the several underwriters named therein, (ii) the Company’s Registration Statement on Form S-3 (File No. 333-283179) (the “*Registration Statement*”) and (iii) the Company’s prospectus supplement dated May 12, 2025 (the “*Prospectus Supplement*”) to the base prospectus contained in the Registration Statement dated November 19, 2024.

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

- (a) “*Affiliate*” means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 under the Securities Act of 1933, as amended (the “*1933 Act*”).
- (b) “*Attribution Parties*” means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issue Date, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of Common Stock would or could be aggregated with the Holder’s and the other Attribution Parties for purposes of Section 13(d) or Section 16 of the Securities Exchange Act of 1934, as amended (the “*1934 Act*”). For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage (as defined in Section 2(e)).
- (c) “*Bloomberg*” means Bloomberg Financial Markets.
- (d) “*Business Day*” means any day except any Saturday, any Sunday, any day that is a federal legal holiday in the United States or any day on which the New York Stock Exchange is authorized or required by law or other governmental action to close.

(e) “**Change of Control**” means any Fundamental Transaction other than (i) any reorganization, recapitalization or reclassification of the Common Stock in which holders of the Company’s voting power immediately prior to such reorganization, recapitalization or reclassification continue after such reorganization, recapitalization or reclassification to hold publicly traded securities and, directly or indirectly, the voting power of the surviving entity or entities necessary to elect a majority of the members of the board of directors (or their equivalent if other than a corporation) of such entity or entities, or (ii) pursuant to a migratory merger effected solely for the purpose of changing the jurisdiction of incorporation of the Company.

(f) “**Convertible Securities**” means any stock or other security (other than Options) that is at any time and under any circumstances, directly or indirectly, convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any shares of Common Stock.

(g) “**Expiration Date**” means May [], 2031.

(h) “**Group**” means a “group” as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.

(i) “**Options**” means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

(j) “**Person**” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(k) “**Trading Day**” means any day on which the Common Stock is traded on the Trading Market.

(l) “**Trading Market**” means the principal securities exchange or securities market, including an over-the-counter market, on which the Common Stock is then traded in the United States.

(m) “**Weighted Average Price**” means, for any security as of any date, the dollar volume-weighted average price for such security on the Trading Market during the period beginning at 9:30:01 a.m., New York City time, and ending at 4:00:00 p.m., New York City time, as reported by Bloomberg through its “Volume at Price” function or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York City time, and ending at 4:00:00 p.m., New York City time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in the “pink sheets” published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices). If the Weighted Average Price cannot be calculated for such security on such date on any of the foregoing bases, the Weighted Average Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 5(n) with the term “Weighted Average Price” being substituted for the term “Exercise Price.” All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during such period.

(a) Exercise of Warrant. Subject to the terms and conditions hereof, the purchase rights represented by this Warrant may be exercised, in whole or in part, at any time or times on or after November [], 2025 and on or before the Expiration Date by delivery (whether via facsimile or otherwise) to the Company (or such other office or agency of the Company as it may designate by notice in writing to the registered Holder at the address of the Holder appearing on the books of the Company) of a duly executed copy of the Notice of Exercise form annexed hereto (the “**Notice of Exercise**”) and by payment to the Company of an amount equal to the aggregate Exercise Price of the Warrant Shares thereby purchased by wire transfer (or, if the provisions of Section 2(d) are applicable, by notifying the Company that this Warrant is being exercised pursuant to a Cashless Exercise (as defined below)). So long as this Warrant is held in book-entry form and the DTC is the sole registered holder of this Warrant, 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 form be required. 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 Trading Days after the date the 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 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.** For the avoidance of doubt, if the Holder does not exercise this Warrant prior to the expiration date, this Warrant shall expire unexercised, and the Company shall have no obligation to settle the Warrant in cash, shares of Common Stock or otherwise.

(b) Exercise Price. The exercise price per share of Common Stock under this Warrant shall be \$0.75, subject to adjustment as provided herein (the “**Exercise Price**”).

(c) Mechanics of Exercise.

(i) Delivery of Warrant Shares Upon Exercise. Certificates for shares purchased hereunder shall be transmitted by the Company to the Holder by crediting the account of the Holder’s prime broker with The Depository Trust Company (“DTC”) through its Deposit/Withdrawal at Custodian (“**DWAC**”) system if the Company is then a participant in such system by the date that is two Trading Days after the receipt by the Company of the Notice of Exercise and otherwise by physical delivery to the address specified by the Holder in the Notice of Exercise as soon as commercially practicable (in each case, provided that payment of the Exercise Price (or notification of Cashless Exercise, if applicable) has then been received by the Company) (such date, the “**Warrant Share Delivery Date**”). This Warrant shall be deemed to have been exercised upon proper delivery of the Notice of Exercise and payment of the Exercise Price (or notification of Cashless Exercise, if the provisions of Section 2(d) are applicable). The Warrant Shares shall be deemed to have been issued, and the Holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes, as of the date the Warrant has been exercised. The Company shall use commercially reasonable efforts to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable.

(ii) Delivery of New Warrant 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 certificate or certificates representing 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) 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(c)(i) above pursuant to an exercise on or before the Warrant Share Delivery Date (other than a failure caused by incorrect or incomplete information provided by the Holder to the Company), and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "**Buy-In**"), then the Company shall either (A) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, or (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of this Warrant with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. In connection with the foregoing, the Holder shall (i) use its reasonable efforts to notify the Company in advance of any pending exercise of this Warrant in order to enable to the Company to deliver the Warrant Shares by the Warrant Share Delivery Date and (ii) provide the Company written notice within three Business Days after the occurrence of a Buy-In, indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Subject to Section 5(i), 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 Warrant Shares upon exercise of the Warrant as required pursuant to the terms hereof.

(iv) 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 or down) to the nearest whole share.

(v) Charges, Taxes and Expenses. Issuance of certificates for 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 certificate, all of which taxes and expenses shall be paid by the Company, and such certificates 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 certificates for 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 (along with a medallion signature guarantee if requested by the and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

(vi) 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.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if at the time of exercise hereof a registration statement registering the issuance of the Warrant Shares under the 1933 Act is not effective or available for the issuance of all of the Warrant Shares to the Holder (a "**Registration Default**"), then the Holder may only exercise this Warrant, whether in whole or in part, and in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Exercise Price, by effecting a cashless exercise of this Warrant pursuant to which the Holder shall receive upon such cashless exercise the "Net Number" of Warrant Shares determined according to the following formula (a "**Cashless Exercise**"):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A = the total number of shares of Common Stock with respect to which this Warrant is then being exercised.

B = the Weighted Average Price of the shares of Common Stock on the date immediately preceding the date of the Notice of Exercise.

C = the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

For the avoidance of doubt, this Warrant may only be exercised by the Holder pursuant to a Cashless Exercise if, and only if, at the time of exercise hereof, a Registration Default is then existing, as determined by the Company in good faith. If Warrant Shares are issued in such a Cashless Exercise, the Company acknowledges and agrees that in accordance with Section 3(a)(9) of the 1933 Act, the Warrant Shares shall take on the registered characteristics of the Warrant being exercised, and the holding period of the Warrant being exercised 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(d).

(e) **Holder's Exercise Limitations.** Notwithstanding anything to the contrary contained herein, the Company shall not effect the exercise of any portion of this Warrant, and the Holder shall not have the right to exercise any portion of this Warrant, pursuant to the terms and conditions of this Warrant and any such exercise shall be null and void and treated as if never made, to the extent that immediately prior to or after giving effect to such exercise, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 4.99% (the "**Maximum Percentage**") of the number of shares of Common Stock outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which the determination of such sentence is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (A) exercise of the remaining, unexercised portion of this Warrant beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including the other Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 2(e). For purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the 1934 Act, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the 1934 Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the 1934 Act and the rules and regulations promulgated thereunder. For purposes of this Warrant, in determining the number of outstanding shares of Common Stock the Holder may acquire upon the exercise of this Warrant without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company's most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q and Current Reports on Form 8-K or other public filing with the Securities and Exchange Commission, as the case may be, (y) a more recent public announcement by the Company or (z) any other written notice by the Company setting forth the number of shares of Common Stock outstanding (the "**Reported Outstanding Share Number**"). If the Company receives a Notice of Exercise from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Exercise Notice would otherwise cause the Holder's beneficial ownership, as determined pursuant to this Section 2(e), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of Warrant Shares to be purchased pursuant to such Exercise Notice (the number of shares by which such purchase is reduced, the "**Reduction Shares**") and (ii) as soon as reasonably practicable, the Company shall return to the Holder any exercise price paid by the Holder for the Reduction Shares. For any reason at any time, upon the written request of the Holder, the Company shall within five Business Days confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of Common Stock to the Holder upon exercise of this Warrant results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the 1934 Act), the number of shares so issued by which the Holder's and the other Attribution Parties' aggregate beneficial ownership exceeds the Maximum Percentage (the "**Excess Shares**") shall be deemed null and void and shall be cancelled ab initio and any portion of this Warrant so exercised shall be reinstated, and the Holder shall not have the power to vote or to transfer the Excess Shares. As soon as reasonably practicable after the issuance of the Excess Shares has been deemed null and void, the Company shall return to the Holder the exercise price paid by the Holder for the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase or decrease the Maximum Percentage to any other percentage (not in excess of 19.99% of the issued and outstanding shares of Common Stock immediately after giving effect to the issuance of the shares of Common Stock issuable upon exercise of this Warrant if exceeding that limit would result in a change of control under Nasdaq Listing Rule 5635(b) or any successor rule) as specified in such notice; *provided* that (i) any such increase in the Maximum Percentage will not be effective until the 61st day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of Warrants that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Warrant in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the 1934 Act. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability. 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 the extent necessary to correct this paragraph or any portion of this paragraph which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 2(e) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Warrant.

(f) Subject to Section 2(e), at any time or times on or after November [], 2025 (x) the Weighted Average Price of the Company's Common Stock listed on the Trading Market exceeds \$2.75 (as adjusted for share splits, share dividends, recapitalizations and similar events) (the "**Forced Exercise Minimum Price**") for ten (10) consecutive Trading Days (each, a "**Forced Exercise Measuring Period**") and (y) no Equity Conditions Failure (defined below) then exists (collectively, the "**Forced Exercise Conditions**"), the Company shall have the right to require the Holder to exercise this Warrant pursuant to this Section 2 into up to such aggregate number of fully paid, validly issued and non-assessable Warrant Shares equal to the lesser of (I) the aggregate number of Warrant Shares then permitted to be issued to the Holder in compliance with Section 2(e) above and (II) the number of Warrant Shares then in effect (such lesser number of Warrant Shares, the "**Maximum Forced Exercise Share Amount**") as designated in the applicable Forced Exercise Notice (as defined below) to be issued and delivered in accordance with Section 2(a) hereof (each, a "**Forced Exercise**"). For the purposes hereof, "**Equity Conditions**" means, with respect to any given date of determination: (i) on such applicable date of determination one or more registration statements (each, the "**Forced Exercise Registration Statement**") shall be effective and the prospectus contained therein shall be available on such applicable date of determination (with, for the avoidance of doubt, any shares of Common Stock previously issued pursuant to such prospectus deemed unavailable) for the issuance of all the shares of Common Stock issuable upon exercise of this Warrant in connection with the event requiring determination (such applicable aggregate number of shares of Common Stock, each, a "**Required Minimum Securities Amount**"); (ii) on each day during the period beginning thirty (30) calendar days prior to the applicable date of determination and ending on and including the applicable date of determination (the "**Equity Conditions Measuring Period**"), the Common Stock (including the shares of Common Stock to be issued in the event requiring this determination) is listed or designated for quotation (as applicable) on a Trading Market and shall not have been suspended from trading on a Trading Market, nor shall delisting or suspension by a Trading Market have been threatened (with a reasonable prospect of delisting occurring after giving effect to all applicable notice, appeal, compliance and hearing periods) or reasonably likely to occur or pending as evidenced by (A) a writing by such Trading Market or (B) the Company falling below the minimum listing maintenance requirements of the primary Trading Market on which the Common Stock is then listed or designated for quotation (as applicable); (iii) during the Equity Conditions Measuring Period, the Company shall have delivered all Warrant Shares issuable upon exercise of this Warrant on a timely basis as set forth in Section 2 hereof; (iv) the Required Minimum Securities Amount of Common Stock to be issued in connection with the event requiring determination may be issued in full without violating the rules or regulations of the primary Trading Market on which the Common Stock is then listed or designated for quotation (as applicable); (v) on each day during the Equity Conditions Measuring Period, no public announcement of a pending, proposed or intended Fundamental Transaction shall have occurred which has not been abandoned, terminated or consummated; (vi) the Company shall have no knowledge of any fact that would reasonably be expected to cause the applicable Forced Exercise Registration Statement to not be effective or the prospectus contained therein to not be available for the issuance of the Required Minimum Securities Amount of shares of Common Stock in connection with the event requiring such determination; (vii) the Holder shall not be in possession of any material, non-public information provided to any of them by the Company, any of its subsidiaries or any of their respective affiliates, employees, officers, representatives, agents or the like; (viii) any Common Stock to be issued in connection with the event requiring determination may be issued in full without violating Section 2(e) hereof (or the equivalent provisions of any other applicable Warrants), (ix) no Forced Exercise hereunder shall have occurred during the seven (7) Trading Day period immediately prior to such date of determination, (xi) the Holder shall have exercised in full all warrant shares issuable pursuant to the pre-funded common stock purchase warrant issued to the Holder simultaneously with this Warrant, (xii) the average daily trading volume of the Company's Common Stock on the principal Trading Market for the ten (10) consecutive Trading Days immediately preceding the applicable date of determination, as reported by Bloomberg, shall be not less than ten times the number of Warrant Shares designated in the applicable Forced Exercise Notice, and (xiii) the shares of Common Stock issuable upon exercise of the Warrants are duly authorized and listed and eligible for trading without restriction on a Trading Market. For the purposes hereof, an "Equity Conditions Failure" means that on each day during the period commencing twenty (20) Trading Days prior to the applicable Forced Exercise Notice Date through and including the applicable Forced Exercise Date, the Equity Conditions have not been satisfied (or waived in writing by the Holder).

Mechanics. The Company may exercise its right to require a Forced Exercise under this Section 2(f) on the Trading Day immediately following any Forced Exercise Measuring Period by delivering a written notice thereof, by electronic mail to the Holder (each, a “**Forced Exercise Notice**”, and the date thereof, each a “**Forced Exercise Notice Date**”). For purposes of Section 2(a) hereof, “Forced Exercise Notice” shall be deemed to replace “Notice of Exercise” for all purposes thereunder as if the Holder delivered a Notice of Exercise to the Company on the Forced Exercise Notice Date, mutatis mutandis. The Company may only deliver one Forced Exercise Notice in any given twenty (20) Trading Day period. Each Forced Exercise Notice shall (x) state that the Company is electing to effect a Forced Exercise on the second (2nd) Trading Day following the applicable Forced Exercise Notice Date (the “**Forced Exercise Date**”), (y) state the aggregate number of Warrant Shares to be exercised by the Holder (not in excess of the Maximum Forced Exercise Share Amount) on the Forced Exercise Date (subject to any adjustments thereto pursuant to Section 2 that may occur prior to the Forced Exercise Date), and (z) contain a certification from an officer or director of the Company that the Forced Exercise Conditions shall have been satisfied as of the Forced Exercise Notice Date. Notwithstanding anything herein to the contrary, if the closing sale price of the Common Stock listed on the Trading Market fails to exceed the Forced Exercise Minimum Price on any Trading Day commencing on the Forced Exercise Notice Date and ending and including the Trading Day immediately prior to the applicable Forced Exercise Date (a “**Forced Exercise Price Failure**”) or an Equity Conditions Failure occurs at any time after the Forced Exercise Notice Date and on or prior to the Forced Exercise Date, (A) the Company shall provide the Holder a subsequent notice to that effect and (B) unless the Holder waives (in whole or in part) the applicable Equity Conditions Failure and/or Forced Exercise Price Failure, as applicable, the Forced Exercise shall be cancelled and the applicable Forced Exercise Notice shall be null and void.

Section 3. Certain Adjustments.

(a) Subdivision or Combination of Common Stock. During such time as this Warrant is outstanding, if the Company subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision will be proportionately reduced and the number of Warrant Shares will be proportionately increased. If the Company at any time on or after the Subscription Date combines (by combination, reverse stock split or otherwise) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Exercise Price in effect immediately prior to such combination will be proportionately increased and the number of Warrant Shares will be proportionately decreased. Any adjustment under this Section 3(a) shall become effective at the close of business on the date the subdivision or combination becomes effective.

(b) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if during such time as this Warrant is outstanding the Company grants, issues or sells any rights to purchase stock, warrants, securities or other property, in each case pro rata to the record holders of any class of shares of Common Stock (the "**Purchase Rights**"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, Section 2(e) hereof) 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*, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, 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 and the other Attribution Parties exceeding the Maximum Percentage).

(c) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to all 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, Section 2(e) hereof) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (*provided, however*, to the extent that the Holder's right to participate in any such Distribution would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, 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 and the other Attribution Parties exceeding the Maximum Percentage).

(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 with or into another Person, (ii) the Company, 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 (which, for the avoidance of doubt, shall not include a license or other agreement granting rights to intellectual property), (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 more than 50% 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 or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (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 (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 (together, the “**Alternate Consideration**”), if any, 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 Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. Notwithstanding anything to the contrary, in the event of a Change of Control, the Company or any Successor Entity shall, at the Holder’s option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Change of Control (or, if later, the date of the public announcement of the applicable Change of Control), purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value of the remaining unexercised portion of this Warrant on the date of the consummation of such Change of Control; *provided, however*, if the Change of Control is not within the Company’s control, including not approved by the Company’s Board of Directors, the Holder shall only be entitled to receive from the Company or any Successor Entity, as of the date of consummation of such Change of Control, the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of this Warrant, that is being offered and paid to the holders of Common Stock of the Company in connection with the Change of Control, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of Common Stock are given the choice to receive from among alternative forms of consideration in connection with the Change of Control; *provided, further*, that if holders of Common Stock of the Company are not offered or paid any consideration in such Change of Control, such holders of Common Stock will be deemed to have received common stock of the Successor Entity (which Entity may be the Company following such Change of Control) in such Change of Control. “**Black Scholes Value**” means the value of this Warrant based on the Black Scholes Option Pricing Model obtained from the “OV” function on Bloomberg, L.P. determined as of the day of consummation of the applicable Change of Control for pricing purposes and reflecting (A) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the time between the date of the public announcement of the applicable Change of Control and the Expiration Date, (B) an expected volatility equal to the 100 day volatility obtained from the HVT function on Bloomberg, L.P. (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the public announcement of the applicable Change of Control, (C) the underlying price per share used in such calculation shall be the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in such Change of Control and (D) a remaining option time equal to the time between the date of the public announcement of the applicable Change of Control and the Expiration Date. The payment of the Black Scholes Value will be made by wire transfer of immediately available funds (or such other consideration) within five Trading Days of the Holder’s election (or, if later, on the effective date of the Fundamental Transaction). The terms of any agreement pursuant to which a Fundamental Transaction is effected shall include terms requiring any such successor or surviving entity in which the Company is not the survivor (the “**Successor Entity**”) to comply with the provisions of this Section 3(d) and insuring that this Warrant (or any such replacement security) will be similarly adjusted upon any subsequent Fundamental Transaction. The Company shall cause any Successor Entity to assume in writing all of the obligations of the Company under this Warrant in accordance with the provisions of this Section 3(d) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall 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 adjustments to the 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 the Company (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. Notwithstanding the foregoing, and without limiting Section 2(e) hereof, the Holder may elect, at its sole option, by delivery of written notice to the Company to waive this Section 3(d) to permit a Fundamental Transaction without the assumption of this Warrant.

(e) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest whole share, as the case may be. For purposes of this Section 3, any calculation of the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall not include treasury shares, if any. Notwithstanding anything to the contrary in this Section 3, no adjustment in the Exercise Price shall be required unless such adjustment would require an increase or decrease of at least 1% in such price; *provided however*, that any adjustments which by reason of the immediately preceding sentence are not required to be made shall be carried forward and taken into account in any subsequent adjustment. In any case in which this Section 3 shall require that an adjustment in the Exercise Price be made effective as of a record date for a specified event, if Holder exercises this Warrant after such record date, the Company may elect to defer, until the occurrence of such event, the issuance of the shares of Common Stock and other capital stock of the Company in excess of the shares of Common Stock and other capital stock of the Company, if any, issuable upon such exercise on the basis of the Exercise Price in effect prior to such adjustment; *provided, however*, that in such case the Company shall deliver to the Holder a due bill or other appropriate instrument evidencing the Holder's right to receive such additional shares and/or other capital securities upon the occurrence of the event requiring such adjustment.

(f) Par Value. Notwithstanding anything to the contrary in this Warrant, in no event shall the Exercise Price be reduced below the par value of the Company's Common Stock.

Section 4. Transfer of Warrant.

(a) Transferability. Subject to compliance with any applicable securities laws, this Warrant and all rights hereunder are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company (or other 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 (along with a medallion signature guarantee if requested by the Company) 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. 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 (or other designated agent), 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 Issue Date set forth on the first page of this Warrant and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

(c) Warrant Register. The Company shall initially serve as warrant agent under this Warrant. The Company shall register ownership of this Warrant, upon records to be maintained by the Company for that purpose (the "**Warrant Register**"), in the name of the record Holder (which shall include the initial Holder or, as the case may be, any assignee to which this Warrant is assigned hereunder) from time to time. Upon 30 days' notice to the Holder, the Company may appoint a new warrant agent. Any corporation into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new warrant agent shall be a party or any corporation to which the Company or any new warrant agent transfers substantially all of its corporate trust or shareholders services business shall be a successor warrant agent under this Warrant without any further act. Any such successor warrant agent shall promptly cause notice of its succession as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder's last address as shown on the Warrant Register. 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.

Section 5. Miscellaneous.

(a) No Rights as Stockholder Until Exercise. Except as set forth in Section 3(c), 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.

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

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

(d) Authorized Shares. The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant (without regard to any limitations on exercise contained herein). The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for the 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. 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, in each case to 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.

(e) Governing Law. This Warrant shall be governed by, and construed in accordance with, the laws of the State of New York without giving effect to the conflicts of law principles thereof.

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

(g) Notices.

(i) Notice Procedures. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of: (a) the date of transmission, if such notice or communication is delivered via email or facsimile at or prior to 5:30 p.m. (New York City time) on a Trading Day, (b) the next Trading Day after the date of transmission, if such notice or communication is delivered via email or facsimile on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (c) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or by International Federal Express, (d) the third Trading Day following the date of mailing if sent by first-class registered or certified mail domestic, or (e) upon actual receipt by the party to whom such notice is required to be given. The addresses for such communications shall be:

If to the Company:

Sangamo Therapeutics, Inc.
501 Canal Blvd.
Richmond, California 94804
Attention: Scott Willoughby
Email: swilloughby@sangamo.com

With copy to:

Cooley LLP
3 Embarcadero Center, 20th Floor
San Francisco, California 94111
Attention: Chadwick L. Mills, Esq.
Email: cmills@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)(i).

(ii) Adjustment to Exercise Price. Whenever the Exercise Price or number of Warrant Shares is adjusted pursuant to any provision of Section 3, the Company shall promptly, but in no event later than two (2) Trading Days after such adjustment, provide the Holder a notice setting forth the Exercise Price and number of Warrant Shares after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

(iii) Notice to Allow Exercise by the Holder. After the Issue Date and on or prior to the Expiration Date, if (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company (which, for the avoidance of doubt, shall not include a license or other agreement granting rights to intellectual property), 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 mailed to the Holder at its last address as it shall appear upon the Warrant Register, 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 the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; *provided* that the failure to mail such notice or any defect therein or in the mailing thereof shall not affect the validity of the corporate action required to be specified in such notice. 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.

(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. Notwithstanding the foregoing or anything else herein to the contrary, if the Company is for any reason unable to issue and deliver Warrant Shares upon exercise of this Warrant as required pursuant to the terms hereof, the Company shall have no obligation to pay to the Holder any cash or other consideration or otherwise “net cash settle” this Warrant.

(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 the 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) Confidentiality. The Holder agrees to keep confidential any proprietary information relating to the Company delivered by the Company hereunder; provided that nothing herein shall prevent the Holder from disclosing such information: (i) to any holder of Warrants or Warrant Shares, (ii) to any Affiliate of any holder of Warrants or Warrant Shares or any actual or potential transferee of the rights or obligations hereunder that agrees to be bound by this Section 5(m), (iii) upon order, subpoena, or other process of any court or administrative agency or otherwise required by law, (iv) upon the request or demand of any regulatory agency or authority having jurisdiction over such party, (v) which has been publicly disclosed without breach of any obligation to the Company, (vi) which has been obtained from any Person that is not a party hereto or an Affiliate of any such party without any breach of any obligation to the Company, (vii) in connection with the exercise of any remedy, or the resolution of any dispute hereunder, (viii) to the legal counsel or certified public accountants for any holder of Warrants or Warrant Shares, or (ix) as otherwise expressly contemplated by this Warrant. Notwithstanding the foregoing, the Company shall not provide material, non-public information or confidential or proprietary information to the Holder without such Holder's written consent.

(n) Dispute Resolution. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall submit the disputed determinations or arithmetic calculations via facsimile within two Business Days of receipt of the Notice of Exercise giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within two Business Days submit via facsimile (i) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Holder or (ii) the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than 10 Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error. The expenses of the investment bank and accountant will be borne by the Company unless the investment bank or accountant determines that the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares by the Holder was incorrect, in which case the expenses of the investment bank and accountant will be borne by the Holder.

(o) 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.

[remainder of page intentionally left blank]

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.

SANGAMO THERAPEUTICS, INC.

By: _____
Name:
Title:

[Signature Page to Sangamo Therapeutics, Inc. Warrant]

NOTICE OF EXERCISE

TO: Sangamo Therapeutics, 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):
 - Cash Exercise: lawful money of the United States; or
 - Cashless Exercise (if permitted pursuant to Section 2(d) of the Warrant): the cancellation of such number of Warrant Shares as is necessary, in accordance with the formula set forth in Section 2(d), to exercise this Warrant with respect to the maximum number of Warrant Shares purchasable pursuant to the cashless exercise procedure set forth in Section 2(d). For the avoidance of doubt, this Warrant may only be exercised by the Holder pursuant to a Cashless Exercise if, and only if, at the time of exercise hereof, a Registration Default is then existing, as determined by the Company in good faith. See Section 2(d) of the Warrant.
- (3) Please issue said Warrant Shares in the name of the undersigned or in such other name as is specified below:

The Warrant Shares shall be delivered to the following DWAC Account Number or by physical delivery of a certificate to:

[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 exercise the warrant.)

FOR VALUE RECEIVED, [] all of or [] shares of the foregoing Warrant and all rights evidenced thereby are hereby assigned to

whose address is

Date

Holder's Signature

Holder's Address:

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatsoever.



Courtney Tygesson
T: +1 312 881-6680
ctygesson@cooley.com

May 13, 2025

Sangamo Therapeutics, Inc.
501 Canal Blvd.
Richmond, California 94804

Ladies and Gentlemen:

We have acted as counsel to Sangamo Therapeutics, Inc., a Delaware corporation (the "**Company**"), in connection with the offering of (i) 12,235,000 shares (the "**Shares**") of its common stock, par value \$0.01 per share ("**Common Stock**"), (ii) pre-funded warrants (the "**Pre-Funded Warrants**") to purchase up to 34,398,393 shares of Common Stock (the "**Pre-Funded Warrant Shares**"), and (iii) accompanying warrants (together with the Pre-Funded Warrants, the "**Warrants**") to purchase up to 46,633,393 shares of Common Stock (together with the Pre-Funded Warrant Shares, the "**Warrant Shares**"), pursuant to the Registration Statement on Form S-3 (File No. 333-283179) (the "**Registration Statement**") filed with the Securities and Exchange Commission (the "**Commission**") by the Company 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 dated May 12, 2025, filed with the Commission pursuant to Rule 424(b) under the Securities Act (together with the Base Prospectus, the "**Prospectus**").

In connection with this opinion, we have examined and relied upon the Registration Statement, the Prospectus, the forms of Warrants, the Company's certificate of incorporation and bylaws, each as currently in effect, and such other records, documents, opinions, certificates, memoranda and 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 Warrant Shares, we express no opinion to the extent that future issuances of securities by 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 per share of the Common Stock.

With regard to our opinion concerning the Warrants constituting valid and 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 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 as to any provision of the Warrants that: (a) provides for liquidated damages, buy-in damages, monetary penalties, prepayment or make-whole payments or other economic remedies to the extent such provisions may constitute unlawful penalties, (b) relates to advance waivers of claims, defenses, rights granted by law, or notice, opportunity for hearing, evidentiary requirements, statutes of limitations, trial by jury, or procedural rights, (c) restricts non-written modifications and waivers, (d) provides for the payment of legal and other professional fees where such payment is contrary to law or public policy, (e) relates to exclusivity, election or accumulation of rights or remedies, (f) authorizes or validates conclusive or discretionary determinations, or (g) 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.
- (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.

Our opinion 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.

On the basis of the foregoing, in reliance thereon and subject to the qualifications set forth herein, we are of the opinion that (i) the Shares, when sold and issued against payment therefor in accordance with the Registration Statement and the Prospectus, will be validly issued, fully paid and non-assessable, (ii) the Warrants, when duly executed by the Company and delivered to the purchasers thereof 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 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.

We consent to the reference to our firm under the heading "Legal Matters" in the Prospectus and to the filing of this opinion as an exhibit to the Company's Current Report on Form 8-K filed with the Commission for incorporation by reference into the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.



Sangamo Therapeutics, Inc.

May 13, 2025

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Very truly yours,

COOLEY LLP

By: /s/ Courtney Tygesson
 Courtney Tygesson

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