
**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): July 21, 2025

SAB BIOTHERAPEUTICS, INC.

(Exact name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-39871
(Commission File Number)

85-3899721
(IRS Employer
Identification No.)

**777 W 41st St
Suite 401
Miami Beach, Florida**
(Address of Principal Executive Offices)

33140
(Zip Code)

Registrant's Telephone Number, Including Area Code: 305 845-2813

(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, \$0.0001 par value per share	SABS	The Nasdaq Stock Market LLC
Warrants, each exercisable for one share of Common Stock	SABSW	The Nasdaq Stock Market LLC

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

Emerging growth company

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

Item 1.01. Entry into a Material Definitive Agreement.

Securities Purchase Agreement

On July 21, 2025, SAB Biotherapeutics, Inc. (the “**Company**”) entered into a securities purchase agreement (the “**Securities Purchase Agreement**”) with certain accredited investors (the “**Investors**”), pursuant to which the Company agreed to issue and sell, in a private placement (the “**Offering**”), (i) 1,000,000 shares (the “**Shares**”) of the Company’s newly-designated Series B Convertible Preferred Stock, par value \$0.0001 per share (the “**Preferred Stock**”), convertible into 100,000,000 shares of the Company’s common stock, par value \$0.0001 per share (the “**Common Stock**”, and the shares of Common Stock issuable upon conversion of the Preferred Stock, the “**Conversion Shares**”), (ii) Release Date purchase warrants (the “**Release Date Warrants**”) to purchase up to 500,000 shares of Preferred Stock (the “**Release Date Warrant Shares**”), and (iii) Enrollment Date purchase warrants (the “**Enrollment Date Warrants**”, and together with the Release Date Warrants, the “**Warrants**”) to purchase up to 1,000,000 shares of Preferred Stock (together with the Release Date Warrant Shares, the “**Warrant Shares**”).

Pursuant to the Certificate of Designations of Preferences, Rights and Limitations of the Series B Convertible Preferred Stock, which is filed as Exhibit 3.1 to this Current Report on Form 8-K (the “**Certificate of Designations**”), each share of Preferred Stock, subject to the Stockholder Approval (as defined below), is convertible at the option of the holder into shares of Common Stock at a conversion price of \$1.75 per Conversion Share, subject to certain adjustments as set forth in the Certificate of Designations (the “**Conversion Price**”). Subject to the terms and limitations contained in the Certificate of Designations, the Preferred Stock will not become convertible until the Company’s stockholders approve the issuance of all Common Stock issuable upon conversion of the Preferred Stock (inclusive of the maximum number of shares of Preferred Stock issuable upon exercise of the Warrants) (the “**Stockholder Approval**”) at a special meeting of stockholders, to be held in accordance with the terms of the Securities Purchase Agreement (the “**Special Meeting**”). Upon receipt of Stockholder Approval, the shares of Preferred Stock will convert automatically at the Conversion Price, subject to a conversion cap that limits the conversion of the Preferred Stock such that an Investor may not beneficially own more than 4.99% (the “**Maximum Percentage**”) of the shares of Common Stock that would be issued and outstanding following such conversion. An Investor may decrease or increase the Maximum Percentage by written notice to the Company from time to time to any other percentage not in excess of 19.99%, provided that any increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company. Each whole Share is accompanied by one Enrollment Date Warrant and one-half of one Release Date Warrant. The purchase price for each Share and accompanying Warrants is \$175. Each Enrollment Date Warrant is exercisable at a price of \$175 per share beginning upon receipt of the Stockholder Approval until the earlier of (x) five years from the date of issuance and (y) the Phase II Enrollment Date (as defined in the Enrollment Date Warrant. Each Release Date Warrant is exercisable at a price of \$218.75 per share beginning upon receipt of the Stockholder Approval until the earlier of (x) five years from the date of issuance and (y) the Phase II Release Date (as defined in the Release Date Warrant).

The aggregate gross proceeds to the Company from the issuance and sale of the Shares and Warrants are expected to be approximately \$175 million, before deducting fees to be paid to the placement agents and financial advisors of the Company and other estimated offering expenses payable by the Company. The aggregate exercise price of the Warrants is approximately \$284 million.

Leerink Partners LLC, UBS Investment Bank, Chardan Capital Markets, LLC, and Oppenheimer & Co. Inc. acted as placement agents for the Offering. As compensation in connection with the Offering, the Company has agreed to pay the placement agents a placement agent fee equal to 6% of the aggregate gross proceeds received by the Company (i) upon the issuance of the Shares and Warrants at closing and (ii) upon the cash exercise of the Warrants.

The Offering

The closing of the issuance of Shares and Warrants is expected to occur on or about July 22, 2025. The Company intends to use the net proceeds from the Offering to fully fund the Phase 2b SAFEGUARD study of SAB-142 in Stage 3 T1D and for working capital and general corporate purposes.

The securities issued in the Offering have not been registered under the Securities Act of 1933, as amended (the “**Securities Act**”), and until so registered the securities may not be offered or sold absent registration or availability of an applicable exemption from registration. There is no established public trading market for the Preferred Stock or Warrants, and the Company does not intend to list such securities on any national securities exchange or nationally recognized trading system.

In connection with the Offering, the Company and each Investor entered into a registration rights agreement simultaneously with the Securities Purchase Agreement (the “**Registration Rights Agreement**”). Pursuant to the Registration Rights Agreement, as promptly as reasonably practicable following the filing of a definitive proxy statement in connection with obtaining the Stockholder Approval, but, in any event, not later than seven days thereafter (the “**Filing Date**”) the Company shall file a resale registration statement on Form S-3 (or Form S-1 if Form S-3 is not available) providing for the resale by the Investors of the Registrable Securities (as defined in the Registration Rights Agreement) and to use commercially reasonable efforts to cause such resale registration statement to be declared effective by the staff of the Securities and Exchange Commission (the “**Commission**”) following the receipt of Stockholder

Approval, but no later than three (3) days following the receipt of Stockholder Approval (or, in the event that the staff of the Commission reviews and has written comments to such registration statement, within forty (40) days following the Filing Date). The Company further agreed to take all steps necessary to keep such registration statement effective at all times until all Registrable Securities have been resold, or there remains no Registrable Securities.

In addition, the Company and certain holders of the Company's securities have entered into a support agreement (the "**Support Agreement**"). Pursuant to the Support Agreement, each securityholder party to the Support Agreement agreed to vote any such votable securities held by such securityholder in favor of the proposals to be voted upon at the Special Meeting.

The Securities Purchase Agreement, Registration Rights Agreement and Support Agreement contain certain representations and warranties, covenants and indemnities customary for similar transactions. The representations, warranties and covenants contained in the Securities Purchase Agreement, Registration Rights Agreement and Support Agreement were made solely for the benefit of the parties to the Securities Purchase Agreement, Registration Rights Agreement and Support Agreement, respectively, and may be subject to limitations agreed upon by the contracting parties.

On July 21, 2025, the Company and RA Capital Healthcare Fund, L.P., an investor in the Offering ("**RA**") entered into a letter agreement (the "**Letter Agreement**"), whereby the Company agreed to nominate up to two individuals designated by RA (the "**RA Nominees**") to the Company's Board of Directors (the "**Board**") and to subsequently decrease the size of the Board by two members, such that the Board shall be comprised of nine persons. The RA Nominees shall remain on the Board, subject to the terms of the Letter Agreement, until such time as RA holds less than 50% of the Common Stock (including Common Stock issuable upon conversion of Preferred Stock) purchased by RA in the Offering.

The form of Certificate of Designations, form of Release Date Warrant, form of Enrollment Date Warrant, the Securities Purchase Agreement, Registration Rights Agreement, Support Agreement, and Letter Agreement are filed as Exhibits 3.1, 4.1, 4.2, 10.1, 10.2, 10.3, and 10.4, respectively, to this Current Report on Form 8-K. The foregoing summaries of the terms of the Certificate of Designations, the Preferred Stock, the Warrants, the Warrant Shares and the Common Stock and the terms of the Securities Purchase Agreement, Registration Rights Agreement and Support Agreement are subject to, and qualified in their entirety by, the full text of such documents, where applicable, which are incorporated herein by reference.

No statement in this report or the attached exhibits is an offer to sell or a solicitation of an offer to purchase the Company's securities, and no offer, solicitation or sale will be made in any jurisdiction in which such offer, solicitation or sale is unlawful.

Item 3.02 Unregistered Sales of Equity Securities.

The information contained above in Item 1.01 and below in Item 8.01 below are hereby incorporated by reference into this Item 3.02. The Shares and Warrants are being sold and, upon exercise the securities underlying the Warrants and conversion of the Preferred Shares, will be issued without registration under the Securities Act, in reliance on the exemptions provided by Section 4(a)(2) of the Securities Act as a transaction not involving a public offering and Rule 506 promulgated under the Securities Act as sales to accredited investors, and in reliance on similar exemptions under applicable state laws.

Item 5.03 Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year.

Series B Preferred Stock

The information contained above in Item 1.01 is hereby incorporated by reference into this Item 5.03.

Pursuant to the terms of the Securities Purchase Agreement, on July 21, 2025, the Company filed the Certificate of Designations with the Delaware Secretary of State designating 2,811,429 shares of its authorized and unissued preferred stock as Series B Convertible Preferred Stock. The Certificate of Designations sets forth the rights, preferences and limitations of the shares of Preferred Stock. Terms not otherwise defined in this item shall have the meanings given in the Certificate of Designations.

The following is a summary of the terms of the Preferred Stock:

Dividends. At all times while shares of Preferred Stock are issued and outstanding, holders of Preferred Stock shall be entitled to receive dividends on shares of Preferred Stock equal (on an as-if-converted-to-Common-Stock basis) to and in the same form as dividends actually paid on shares of the Common Stock.

Voting Rights. Prior to the Requisite Approval, neither the Company nor any of its subsidiaries shall take any of the following actions without the consent of the Requisite Holders: (i) effect any Liquidation (as defined below); (ii) materially change the nature of the Company's business; (iii) amend or waive any provisions of their respective organizational documents in a manner that adversely and

disproportionately affects the rights, preferences, privileges or power of the shares of Preferred Stock; (iv) issue additional equity securities senior to or pari passu with the Preferred Stock; (v) pay any dividends on the Common Stock, the Series A Preferred Stock or any equity securities junior to or pari passu with the Preferred Stock or repurchase any equity interests (other than repurchases of, or dividends paid (including through payment-in-kind) on, the shares of Preferred Stock); (vi) enter into or be a party to any transaction with any director, officer, or employee of the Company or any “associate” (as defined in Rule 12b-2 promulgated under the Exchange Act) of any such person or entity except for transactions made in the ordinary course of business and pursuant to reasonable requirements of the Company’s business and upon fair and reasonable terms that are approved by a majority of the Board; or (vii) sell, assign, license, pledge, or encumber material technology or intellectual property, other than licenses granted in the ordinary course of business. Except as provided above, holders of the Preferred Stock have no voting rights.

Liquidation. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, including a change of control transaction, or Deemed Liquidation Event (any such event, a “**Liquidation**”), the assets of the Company available for distribution to its stockholders shall, following Stockholder Approval, be distributed among the holders of the shares of Preferred Stock and Common Stock pro rata based on the number of shares held by each such holder, treating for this purpose all shares of Preferred Stock as if they had been converted to Common Stock immediately prior to such Liquidation, without regard to any limitations on conversion or otherwise and without regard as to whether sufficient shares of Common Stock are available out of the Company’s authorized but unissued stock for the purpose of effecting the conversion of the Preferred Stock. Prior to receipt of Stockholder Approval, in the event of a Liquidation, the holders of Preferred Stock will be entitled to be paid out of the assets of the Company in an amount equal to the greater of (i) three times the Original Per Share Price (as defined in the Certificate of Designations) or (ii) such amount per share as would have been payable had all shares of Preferred Stock been converted into Common Stock.

The foregoing summary of the terms of the Preferred Stock is qualified in its entirety by reference to the text of the Certificate of Designations, which is filed hereto as Exhibit 3.1 and is incorporated herein by reference.

Item 8.01 Other Events.

Press Releases Related to Offering

On July 21, 2025 the Company issued a press release announcing the entry into the Offering, a copy of which is attached hereto as Exhibit 99.1, and incorporated by reference herein.

FDA

On May 29th, 2025, the Company held a constructive Type B meeting with the U.S. Food and Drug Administration (the “**FDA**”). The meeting followed positive topline data from a Phase 1 single-ascending dose trial in healthy volunteers for SAB-142. The primary discussion centered on questions related to all aspects of SAB-142’s Phase 2b SAFEGUARD clinical trial design and chemistry, manufacturing, and controls processes. The FDA provided clear, constructive, and actionable guidance during the discussion leading to alignment on the design and advancement of our Phase 2b SAFEGUARD study. SAB confirmed its intent with the FDA to utilize the data from this study as supportive evidence for future regulatory approval.

Forward-Looking Statements

This Current Report on Form 8-K contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995, including without limitation statements regarding the Company’s intended use of the net proceeds from the Offering, the filing and timing of a resale registration statement. Actual results might differ materially from those explicit or implicit in the forward-looking statements. Important factors that could cause actual results to differ materially include: risks associated with market conditions; risks associated with the Company’s cash needs; and risks and uncertainties associated with the Company’s business and finances in general; and other risks and uncertainties set forth from time to time in the Company’s filings with the Commission. Any forward-looking statements contained in this Current Report on Form 8-K speak only as of the date hereof, and the Company expressly disclaims any obligation to update any forward-looking statements, whether because of new information, future events or otherwise.

Item 9.01 Financial Statements and Exhibits.

Exhibit Number	Description
3.1	Certificate of Designations of Preferences, Rights and Limitations of the Series B Convertible Non-Voting Preferred Stock
4.1	Form of Preferred Warrant
4.2	Form of Preferred Warrant
10.1	Form of Securities Purchase Agreement, dated July 21, 2025 by and among SAB Biotherapeutics, Inc. and the purchasers named therein
10.2	Form of Registration Rights Agreement, dated July 21, 2025 by and among SAB Biotherapeutics, Inc. and the holders named therein
10.3	Form of Support Agreement, dated July 21, 2025 by and among SAB Biotherapeutics, Inc. and the holders named therein
10.4	Letter Agreement, dated July 21, 2025 by and between SAB Biotherapeutics, Inc. and RA Capital Healthcare Fund, L.P.
99.1	Press Release dated July 21, 2025
104	Cover Page Interactive Data File-the cover page XBRL tags are embedded within the Inline XBRL document.

* Confidential treatment has been granted or requested with respect to portions of this exhibit.

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.

SAB Biotherapeutics, Inc.

Date: July 21, 2025

By: /s/ Samuel J. Reich
Samuel J. Reich
Chief Executive Officer

SAB BIOTHERAPEUTICS, INC.
CERTIFICATE OF DESIGNATION OF PREFERENCES, RIGHTS AND LIMITATIONS
OF
SERIES B CONVERTIBLE PREFERRED STOCK
PURSUANT TO SECTION 151 OF THE
DELAWARE GENERAL CORPORATION LAW

SAB BIOTHERAPEUTICS, INC., a Delaware corporation (the “**Corporation**”), in accordance with the provisions of Section 103 of the Delaware General Corporation Law (the “**DGCL**”), does hereby certify that, in accordance with Sections 141(c) and 151 of the DGCL, the following resolution was duly adopted by a committee of the Board of Directors of the Corporation (the “**Board of Directors**”) acting upon authority delegated by the Board of Directors, which resolution remains in full force and effect on the date hereof:

RESOLVED, pursuant to authority expressly set forth in the Amended and Restated Certificate of Incorporation of the Corporation, as amended (the “**Certificate of Incorporation**”), the issuance of a series of Preferred Stock designated as the Series B Convertible Preferred Stock, par value \$0.0001 per share, of the Corporation is hereby authorized and the designation, number of shares, powers, preferences, rights, qualifications, limitations and restrictions thereof (in addition to any provisions set forth in the Certificate of Incorporation that are applicable to the Preferred Stock of all classes and series) are hereby fixed, and the Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock is hereby approved as follows:

SERIES B CONVERTIBLE PREFERRED STOCK

Section 1. Definitions. For the purposes hereof, the following terms shall have the following meanings:

“**Affiliate**” means any person or entity that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a person or entity, as such terms are used in and construed under Rule 144 under the U.S. Securities Act of 1933, as amended.

“**Attribution Parties**” means, collectively, the following Persons and entities: (i) any direct or indirect Affiliates of the Holder, (ii) any investment vehicle, including any funds, feeder funds or managed accounts, currently, or from time to time after the date hereof, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any Attribution Parties and (iv) any other Persons whose beneficial ownership of the Common Stock would or could be aggregated with the Holder’s and/or any other Attribution Parties for purposes of Section 13(d) or Section 16 of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

“**Business Day**” means any day except Saturday, Sunday, any day which shall be a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

“**Commission**” means the U.S. Securities and Exchange Commission.

“**Common Stock**” means the Corporation’s common stock, par value \$0.0001 per share, and stock of any other class of securities into which such securities may hereafter be reclassified into.

“**Conversion Price**” for the Series B Preferred Stock shall initially be \$1.75 per share of Common Stock, subject to adjustment pursuant to Section 7 hereof in the event of any stock dividend, stock split, combination or other similar recapitalization.

“**Conversion Shares**” means, collectively, the shares of Common Stock issuable upon conversion of the shares of Series B Preferred Stock in accordance with the terms hereof.

“**Deemed Liquidation Event**” means (a) a merger or consolidation in which (i) the Corporation is a constituent party or (ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger, consolidation, statutory conversion, transfer, domestication or continuance, except any such merger, consolidation, statutory conversion, transfer, domestication or continuance involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger, consolidation, statutory conversion, transfer, domestication or continuance continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger, consolidation, statutory conversion, transfer, domestication or continuance at least a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation; or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; or (b) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, or the sale or disposition (whether by merger, consolidation or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation.

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

“**Group**” shall have the meaning ascribed to it in Section 13(d) of the Exchange Act, and all related rules, regulations and jurisprudence.

“**Holder**” means any holder of Series B Preferred Stock.

“**Initial Issuance Date**” means the date that the Series B Preferred Stock are first issued.

“**Original Per Share Price**” means \$175.00 per share.

“**Person**” means any individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“**Requisite Approval**” means the date that the Corporation’s stockholders first approve the Proposal.

“**Requisite Holders**” means Holders of a majority of the then outstanding shares of Series B Preferred Stock, voting together as a single class.

“**Securities Purchase Agreement**” means that certain Securities Purchase Agreement for the purchase and sale of the Series B Preferred Stock, dated as of July 21, 2025, by and between the Corporation and the investors set forth therein.

“**Series A Preferred Stock**” means the Corporation’s Series A-2 Convertible Voting Preferred Stock, par value of \$0.0001 per share.

“**Standard Settlement Period**” means the standard settlement period, expressed in a number of Trading Days, for the Corporation’s primary trading market or quotation system with respect to the Common Stock that is in effect on the Conversion Date, which as of the Initial Issuance Date was “T+1”.

“**Trading Day**” means a day on which the Common Stock is traded for any period on a principal securities exchange or if the Common Stock is not traded on a principal securities exchange, on a day that the Common Stock is traded on another securities market on which the Common Stock is then being traded.

Section 2. Designation, Amount and Par Value; Assignment; Ranking.

(a) The distinctive serial designations of the series of Preferred Stock designated by this Certificate of Designation shall be designated as the Corporation’s Series B Convertible Preferred Stock (the “**Series B Preferred Stock**”). The number of shares of Series B Preferred Stock so designated shall be 2,811,429. The Series B Preferred Stock shall have a par value of \$0.0001 per share.

(b) The Corporation shall register shares of the Series B Preferred Stock, upon records to be maintained by the Corporation’s transfer agent for that purpose (the “**Series B Preferred Stock Register**”), in the name of the Holders thereof from time to time. The Corporation and its transfer agent may deem and treat the registered Holder of shares of Series B Preferred Stock as the absolute owner thereof for the purpose of any conversion thereof and for all other purposes. Shares of Series B Preferred Stock may be issued solely in book-entry form. The Corporation or its transfer agent shall register the transfer of any shares of Series B Preferred Stock in the Series B Preferred Stock Register, upon surrender of the shares of Series B Preferred Stock evidencing such shares to be transferred, to the Corporation’s transfer agent. Upon any such registration or transfer, a new or book-entry notation evidencing the shares of Series B Preferred Stock so transferred shall be issued to the transferee and a new book-entry notation evidencing the remaining portion of the shares not so transferred, if any, shall be issued to the transferring Holder, in each case, within three Business Days. The provisions of this Certificate of Designation are intended to be for the benefit of all Holders from time to time and shall be enforceable by any such Holder.

(c) Prior to the Requisite Approval, the Series B Preferred Stock will rank senior to the Common Stock, Series A Preferred Stock and all other series or classes of stock and equity securities of the Corporation with respect to dividend rights and rights on the distribution of assets on any voluntary or involuntary Liquidation, dissolution or winding up of the affairs of the Corporation. Following the Requisite Approval, the Series B Preferred Stock shall rank pari passu with the Common Stock with respect to dividend rights and rights on the distribution of assets on any voluntary or involuntary Liquidation, dissolution or winding up of the affairs of the Corporation.

Section 3. Dividends. At all times following the Issuance Date, while shares of Series B Preferred Stock are issued and outstanding, holders of Series B Preferred Stock shall be entitled to receive, and the Corporation shall pay, dividends on shares of Series B Preferred Stock equal (on an as-if-converted-to-Common-Stock basis and without regard to any limitations on conversion set forth herein or otherwise) to and in the same form as dividends actually paid on shares of the Common Stock when, as and if such dividends are paid on shares of the Common Stock (other than a stock dividend on the Common Stock payable solely in the form of additional shares of Common Stock). No other dividends shall be paid on

shares of Series B Preferred Stock. Dividends shall be paid only if, when and as declared by the Board of Directors of the Corporation.

Section 4. Voting Rights.

(a) The Corporation shall not, without the consent of the Requisite Holders, alter or change adversely the powers, preferences or rights given to the Series B Preferred Stock or alter or amend this Certificate of Designation of Preferences, Rights and Limitations, provided, that in no case shall the economic terms of the shares of Series B Preferred Stock, including but not limited to Conversion Price, Liquidation Preference, and any voting rights associated therewith, be amended or waived without the prior written consent of each Holder of Series B Preferred Stock.

(b) Except as provided in Section 4(c), holders of shares of Series B Preferred Stock shall have no voting rights on any Corporation matter. For the avoidance of doubt, following the Requisite Approval, the provisions set forth in Section 4(c) shall cease to apply.

(c) Prior to the Requisite Approval, neither the Corporation nor any of its subsidiaries shall take any of the following actions without the consent of the Requisite Holders:

(i) effect any Liquidation;

(ii) materially change the nature of the Corporation's business;

(iii) amend or waive any provisions of their respective organizational documents in a manner that adversely and disproportionately affects the rights, preferences, privileges or power of the shares of Series B Preferred Stock;

(iv) issue additional equity securities senior to or pari passu with the Series B Preferred Stock;

(v) pay any dividends on the Common Stock, the Series A Preferred Stock or any equity securities junior to or pari passu with the Series B Preferred Stock or repurchase any equity interests (other than repurchases of, or dividends paid (including through payment-in-kind) on, the shares of Series B Preferred Stock);

(vi) enter into or be a party to any transaction with any director, officer, or employee of the Corporation or any "associate" (as defined in Rule 12b-2 promulgated under the Exchange Act) of any such person or entity except for transactions made in the ordinary course of business and pursuant to reasonable requirements of the Corporation's business and upon fair and reasonable terms that are approved by a majority of the Corporation's Board of Directors; or

(vii) sell, assign, license, pledge, or encumber material technology or intellectual property, other than licenses granted in the ordinary course of business.

Section 5. Liquidation.

(a) Prior to the Requisite Approval, in the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, including a change of control transaction, or Deemed Liquidation Event (any such event, a "**Liquidation**") the holders of shares of Series B Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, and in the event of a Deemed Liquidation Event, the holders of shares of Series B Preferred

Stock then outstanding shall be entitled to be paid out of the consideration payable to stockholders in such Deemed Liquidation Event or the other proceeds available for distribution to stockholders, before any payment shall be made to the holders of any other shares of capital stock of the Corporation by reason of their ownership thereof, an amount in cash per share equal to the greater of (i) three times (3X) the Original Per Share Price, together with any dividends declared but unpaid thereon (the “**Liquidation Preference**”) or (ii) such amount per share as would have been payable had all shares of Series B Preferred Stock been converted into Common Stock (without regard to any limitations on conversion set forth herein or otherwise and without regard as to whether sufficient shares of Common Stock are available out of the Corporation’s authorized but unissued stock for the purpose of effecting the conversion of the Series B Preferred Stock) pursuant to Section 6 immediately prior to such Liquidation (the amount payable pursuant to this sentence is hereinafter referred to as the “**Series B Liquidation Amount**”). If upon any such Liquidation, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series B Preferred Stock the full Liquidation Preference, the holders of shares of Series B Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full. After the payment in full of all Series B Liquidation Amount, the remaining assets of the Corporation available for distribution to its stockholders or, in the case of a Deemed Liquidation Event, the consideration not payable to the holders of shares of Series B Preferred Stock pursuant to this paragraph shall be distributed among the holders of shares of Common Stock and Series A Preferred Stock (on an as-converted basis) pro rata based on the number of shares held by each such holder.

(b) Following the Requisite Approval, upon any Liquidation, the assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of the shares of Series B Preferred Stock, Series A Preferred Stock and Common Stock, pro rata, in the same form of consideration, based on the number of shares held by each such holder, treating for this purpose all shares of Series B Preferred Stock or Series A Preferred Stock, as applicable, as if they had been converted to Common Stock pursuant to the terms of this Certificate of Designation or the terms of the Series A Preferred Stock as set forth in that certain Certificate of Designation dated October 2, 2023, as applicable, immediately prior to such Liquidation, without regard to any limitations on conversion set forth herein or otherwise and without regard as to whether sufficient shares of Common Stock are available out of the Corporation’s authorized but unissued stock for the purpose of effecting the conversion of the Series B Preferred Stock or Series A Preferred Stock. For the avoidance of doubt, following the Requisite Approval, there will be no Liquidation Preference on the shares of Series B Preferred Stock.

Section 6. Conversion.

(a) No Conversion Prior to Requisite Approval. Prior to the receipt of the Requisite Approval, the Series B Preferred Stock is not convertible by the Holder thereof.

(b) Automatic Conversion Upon Requisite Approval. Subject to the limitations set forth in Section 6(g), on the first (1st) Trading Day following the public announcement of the Requisite Approval (the “**Automatic Conversion Date**”), each share of Series B Preferred Stock issued and outstanding shall automatically convert into such number of shares of Common Stock equal to the quotient of (A) the Original Per Share Price, plus all declared and unpaid dividends, divided by (B) the Conversion Price, rounded down to the nearest whole share of Common Stock (the “**Share Conversion Number**”); provided that if a Holder notifies the Corporation prior to the public announcement of the Requisite Approval that such Holder does not want to convert its shares of Series B Preferred Stock pursuant to this Section 6(b), such Holder’s shares of Series B Preferred Stock that would otherwise have been converted into Common Stock pursuant to this Section 6(b) shall remain outstanding as Series B Preferred Stock.

(c) Conversions at Option of Holder. From and after the time that the Requisite Approval is obtained, and subject to the limitations set forth in Section 6(g), at the option of the Holder thereof, each share of Series B Preferred Stock shall be convertible into a number of shares of Common Stock equal to the quotient of (A) the Original Per Share Price, plus all declared and unpaid dividends, divided by (B) the Conversion Price, rounded down to the nearest whole share of Common Stock.

(d) HSR Limitation. To the extent any conversion in accordance with Section 6(b) would (i) cause a Holder to beneficially own a number of shares of Common Stock that exceeds the amount that could be issued to such Holder pursuant to Section 6(g) or (ii) in the reasonable judgment of the applicable Holder, result in a violation by such Holder of the Hart Scott Rodino Antitrust Improvements Act of 1976, as amended from time to time (an “**HSR Violation**”), then, at the Automatic Conversion Date, (x) only such portion of such Holder’s shares of Series B Preferred Stock that may be converted without exceeding the limitations in Section 6(g) and without resulting in an HSR Violation shall be converted to Common Stock and (y) the remaining shares of Series B Preferred Stock that would otherwise have been converted into Common Stock shall remain outstanding as Series B Preferred Stock.

(e) Mechanics of Conversion.

(i) Notice of Conversion. Holders shall effect optional conversions pursuant to Section 6(c) by providing the Corporation with the form of conversion notice attached hereto as Annex A (a “**Notice of Conversion**”), duly completed and executed. The Notice of Conversion must specify the number of shares of Series B Preferred Stock to be converted, the number of shares of Series B Preferred Stock owned immediately prior to the conversion at issue, and the number of shares of Common Stock to be issued in respect of the conversion at issue. Provided the Corporation’s transfer agent is participating in the Depository Trust Company (“**DTC**”) Fast Automated Securities Transfer program, the Notice of Conversion may specify, at the Holder’s election, whether the applicable Conversion Shares shall be credited to the DTC participant account nominated by the Holder through DTC’s Deposit Withdrawal Agent Commission system (a “**DWAC Delivery**”). The date on which such an optional conversion shall be deemed effective (an “**Optional Conversion Date**”, and together with the Automatic Conversion Date, a “**Conversion Date**”), shall be defined as the Trading Day that the Notice of Conversion, completed and executed, is sent by electronic transmission to, and received during regular business hours by, the Corporation, or at such later time as is specified in the Notice of Conversion. The calculations set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error.

(ii) Delivery of Electronic Issuance Upon Conversion. Not later than the number of Trading Days comprising the Standard Settlement Period after the applicable Conversion Date (the “**Share Delivery Date**”), the Corporation’s transfer agent shall (a) in the case of a DWAC Delivery (if so requested by the Holder and subject to compliance with applicable securities laws and Section 5.5 of the Securities Purchase Agreement), electronically transfer such Conversion Shares by crediting the DTC participant account nominated by the Holder through DTC’s DWAC system or (b) if the shares of Series B Preferred Stock being converted have been issued in global form eligible for book-entry settlement with DTC, the Conversion Shares shall be delivered to the Holder through book-entry transfer through the facilities of DTC. If in the case of a DWAC Delivery, such shares are not electronically delivered to or as directed by, the applicable Holder by the Share Delivery Date, the applicable Holder shall be entitled to elect to rescind such Notice of Conversion by written notice to the Corporation and its transfer agent at any time on or before its electronic receipt of such shares, as applicable, in which event the Corporation’s transfer agent shall promptly direct the return of any shares of Common Stock delivered to the Holder through the DWAC system, representing the shares of Series B Preferred Stock unsuccessfully tendered for conversion to the Corporation. It is understood and agreed that the Conversion Shares are restricted securities and shall bear the restrictive legend set forth in Section 4.10 of the Securities Purchase Agreement, provided, however,

that such restrictive legends may be removed subject and pursuant to the provisions of Section 5.5 of the Securities Purchase Agreement.

(iii) Obligation Absolute. Subject to the Holder's right to rescind a Notice of Conversion pursuant to Section 6(b)(ii) above, the Corporation's obligation to issue and deliver the Conversion Shares upon conversion of Series B Preferred Stock in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by a Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by such Holder or any other Person of any obligation to the Corporation or any violation or alleged violation of law by such Holder or any other Person, and irrespective of any other circumstance which might otherwise limit such obligation of the Corporation to such Holder in connection with the issuance of such Conversion Shares. Nothing herein shall limit a Holder's right to pursue actual damages for the Corporation's failure to deliver Conversion Shares within the period specified herein and such Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief; provided that such Holder shall not receive duplicate damages for the Corporation's failure to deliver Conversion Shares within the period specified herein. The exercise of any such rights shall not prohibit a Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

(iv) Compensation for Buy-In on Failure to Timely Deliver Shares Upon Conversion. If the Corporation fails to effect a DWAC Delivery, as applicable, by the Share Delivery Date pursuant to Section 6(e)(ii) (other than a failure caused by incorrect or incomplete information provided by the Holder to the Corporation), and if after such Share Delivery Date such Holder is required to purchase or otherwise purchases (in an open market transaction or otherwise), shares of Common Stock to deliver in satisfaction of a sale by such Holder of the Conversion Shares which such Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a "**Buy-In**"), then the Corporation shall, within four (4) Trading Days after such Holder's request and in such Holder's sole discretion, (A) pay in cash to such Holder (in addition to any other remedies available to or elected by such Holder) the amount by which (x) such Holder's total purchase price (including any brokerage commissions) for the shares of Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of such Holder, either reissue (if surrendered) the shares of Series B Preferred Stock equal to the number of shares of Series B Preferred Stock submitted for conversion or deliver to such Holder the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(e)(ii). For example, if a Holder purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of shares of Series B Preferred Stock with respect to which the actual sale price (including any brokerage commissions) giving rise to such purchase obligation was a total of \$10,000, under clause (A) of the immediately preceding sentence, the Corporation shall be required to pay such Holder \$1,000. The Holder shall provide the Corporation written notice, within three (3) Trading Days after the occurrence of a Buy-In, indicating the amounts payable to such Holder in respect of such Buy-In together with applicable confirmations and other evidence reasonably requested by the Corporation. 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 Corporation's failure to timely deliver shares of Common Stock upon conversion of the shares of Series B Preferred Stock as required pursuant to the terms hereof; *provided, however*, that the Holder shall not be entitled to both (i) require the reissuance of the shares of Series B Preferred Stock submitted for conversion for which such conversion was not timely honored and (ii) receive the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(e)(ii).

(v) Reservation of Shares Issuable Upon Conversion. The Corporation covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock for the sole purpose of issuance upon conversion of the Series B Preferred Stock, free from preemptive rights or any other actual or contingent purchase rights of Persons other than the Holders of the Series B Preferred Stock, not less than such aggregate number of shares of the Common Stock as shall be issuable (taking into account the adjustments of Section 7) upon the conversion of all outstanding shares of Series B Preferred Stock. Such reservation shall comply without regard to the provisions of Section 6(g). The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid, non-assessable and free and clear of all liens and other encumbrances.

(vi) Fractional Shares. No fractional shares or scrip representing fractional shares of Common Stock shall be issued upon the conversion of the Series B Preferred Stock. All fractional shares shall be rounded down to the nearest whole share of Common Stock.

(vii) Transfer Taxes. The issuance of book entry notations for Conversion Shares shall be made without charge to any Holder for any documentary stamp or similar taxes that may be payable in respect of the issue or delivery of such book entry notation, provided that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of any such book entry notation upon conversion in a name other than that of the registered Holder(s) of such shares of Series B Preferred Stock and the Corporation shall not be required to issue or deliver such book entry notation unless or until the Person or Persons requesting the issuance thereof shall have paid to the Corporation the amount of such tax or shall have established to the satisfaction of the Corporation that such tax has been paid.

(f) Status as Stockholder. Upon each Conversion Date in which shares of the Series B Preferred Stock convert into Common Stock: (i) the shares of Series B Preferred Stock being converted shall be deemed converted into shares of Common Stock; and (ii) the Holder's rights as a holder of such converted shares of Series B Preferred Stock shall cease and terminate, excepting only the right to receive book entry notations for such shares of Common Stock and to any remedies provided herein or otherwise available at law or in equity to such Holder because of a failure by the Corporation to comply with the terms of this Certificate of Designation. In all cases, the holder shall retain all of its rights and remedies for the Corporation's failure to convert Series B Preferred Stock.

(g) Limitations on Conversion. Notwithstanding anything to the contrary contained herein, the Corporation shall not effect the conversion of any shares of Series B Preferred Stock, and the Holder shall not have the right to convert any shares of Series B Preferred Stock, and any such conversion shall be null and void ab initio and treated as if the conversion had not been made, to the extent that immediately prior to or following such conversion, the Holder, together with the Attribution Parties, beneficially owns or would beneficially own as determined in accordance with Section 13(d) of the Exchange Act and the rules promulgated thereunder, in excess of 4.99% (or, upon written election to the Corporation by a Holder prior to the issuance of any shares of Series B Preferred Stock to such holder, 9.99%) (the "**Maximum Percentage**") of the Common Stock that would be issued and outstanding following such conversion. For purposes of calculating beneficial ownership for determining whether the Maximum Percentage is or will be exceeded, the aggregate number of shares of Common Stock held and/or beneficially owned by the Holder together with the Attribution Parties, shall include the number of shares of Common Stock held and/or beneficially owned by the Holder together with the Attribution Parties plus the number of shares of Common Stock issuable upon conversion of the Series B Preferred Stock with respect to which the determination is being made but shall exclude shares of Common Stock which would be issuable upon (i) conversion of the remaining, unconverted shares of Series B Preferred Stock held and/or beneficially owned by the Holder or the Attribution Parties and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation held and/or beneficially owned by such Holder or any

Attribution Party (including, without limitation, any convertible notes, convertible stock or warrants) that are subject to a limitation on conversion or exercise analogous to the limitation contained herein. For purposes of this Section 6(g), beneficial ownership of the Holder or the Attribution Parties shall, except as set forth in the immediately preceding sentence, be calculated and determined in accordance with Section 13(d) of the Exchange Act and the rules promulgated thereunder. For purposes of this Section 6(g), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (1) the Corporation's most recent Form 10-K, Proxy Statement, Form 10-Q, Current Report on Form 8-K or other public filing with the Commission, as the case may be, (2) a more recent public announcement by the Corporation or (3) any other notice by the Corporation or the Corporation's transfer agent setting forth the number of shares of Common Stock outstanding (such as issued and outstanding shares, the "**Reported Outstanding Share Number**"). For any reason at any time, upon the written or oral request of a Holder, the Corporation shall within one (1) Trading Day confirm orally and in writing or by electronic mail to such Holder the number of shares of Common Stock then outstanding. The Holder shall disclose to the Corporation the number of shares of Common Stock that it, together with the Attribution Parties holds and/or beneficially owns and has the right to acquire through the conversion or exercise of derivative securities and any limitations on exercise or conversion analogous to the limitation contained herein contemporaneously or immediately prior to submitting a Notice of Conversion. If the Corporation receives a Notice of Conversion 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 Corporation shall notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Notice of Conversion would otherwise cause the Holder's, together with the Attribution Parties', beneficial ownership, as determined pursuant to this Section 6(g), to exceed the Maximum Percentage, the Holder must notify the Corporation of a reduced number of Shares of Series B Preferred Stock to be converted pursuant to such Notice of Conversion. 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 Corporation, including any shares of Series B Preferred Stock, by the Holder and the Attribution Parties since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon the conversion of any of such Holder's shares of Series B Preferred Stock results in the Holder, together with the 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 Exchange Act), the number of shares so issued by which such Holder's, together with the 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 such Holder and/or the Attribution Parties 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 Corporation shall return to the Holder the number of shares of Series B Preferred Stock corresponding to such excess. By written notice to the Corporation, a Holder may from time to time increase or decrease the Maximum Percentage to any other percentage not in excess of 19.99% specified in such notice; provided that (i) any increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Corporation and (ii) any such increase or decrease will apply only to such Holder and other Attribution Parties and not to any other holder of Series B Preferred Stock, provided, for the avoidance of doubt, that no such decrease shall affect the validity of any prior conversion of the Series B Preferred Stock by Holder or any Attribution Party. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms hereof in excess of the Maximum Percentage shall not be deemed to be beneficially owned by a Holder or the Attribution Parties for any purpose including for purposes of Section 13(d) of the Exchange Act and the rules promulgated thereunder or Section 16 of the Exchange Act and the rules promulgated thereunder, including Rule 16a-1(a)(1). No prior inability to convert Series B Preferred Stock pursuant to this Section 6(g) shall have any effect on the applicability of the provisions of this Section 6(g) with respect to any subsequent determination of whether Series B Preferred Stock may be converted. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 6(g) 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 6(g) or to make changes or supplements necessary or desirable to properly give effect to such limitation.

Section 7. Certain Adjustments.

(a) Stock Dividends and Stock Splits. If the Corporation, at any time while any shares of Series B Preferred Stock are outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions payable in shares of Common Stock with respect to the then outstanding shares of Common Stock; (ii) subdivides outstanding shares of Common Stock into a larger number of shares; or (iii) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares, then the Conversion Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding any treasury shares of the Corporation) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event (excluding any treasury shares of the Corporation). Any adjustment made pursuant to this Section 7(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision or combination.

(b) Reclassification, Exchange or Substitution. If the Common Stock issuable upon the conversion of the Series B Preferred Stock shall be changed into the same or a different number of shares of any class or classes of stock, whether by capital reorganization, reclassification, or otherwise (other than a subdivision or combination of shares or stock dividend provided for above, or a reorganization, merger, consolidation, or sale of assets provided for below), then and in each such event the holder of each such share of Series B Preferred Stock shall have the right thereafter to convert such share into the kind and amount of shares of stock and other securities and property receivable, upon such reorganization, reclassification, or other change, by holders of the number of shares of Common Stock into which such shares of Series B Preferred Stock might have been converted immediately prior to such reorganization, reclassification, or change, all subject to further adjustment as provided herein.

(c) Merger or Reorganization, etc. If there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Series B Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by paragraphs (a) or (b) of this Section 7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Series B Preferred Stock shall be convertible into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one share of Series B Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction (without regard to any limitation in Section 6(g) on the conversion of Series B Preferred Stock); and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors) shall be made in the application of the provisions in this Section 7 with respect to the rights and interests thereafter of the holders of the Series B Preferred Stock to the end that the provisions set forth in this Section 7 (including provisions with respect to changes in and other adjustments of the Conversion Price, as applicable) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Series B Preferred Stock.

(d) Calculations. All calculations under this Section 7 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 7, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding any treasury shares of the Corporation) issued and outstanding.

(e) Notice to the Holders.

(i) Adjustment to Conversion Price. Whenever the Conversion Price is adjusted pursuant to any provision of this Section 7, the Corporation shall promptly deliver to each Holder a notice setting forth the Conversion Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

(ii) Other Notices. If (A) the Corporation shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Corporation shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Corporation shall authorize the granting to all holders of the Common Stock of 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 Corporation shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Corporation is a party, any sale or transfer of all or substantially all of the assets of the Corporation, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Corporation shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Corporation, then, in each case, the Corporation shall cause to be filed at each office or agency maintained for the purpose of conversion of the shares of Series B Preferred Stock, and shall cause to be delivered to each Holder at its last address as it shall appear upon the stock books of the Corporation, 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, distribution, 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 deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice; and provided further, that in each case, the Corporation will only be required to provide such information to the Holder if such information shall have been made known to the public prior to or in conjunction with such notice being provided to the Holder.

Section 8. Requisite Approval. The Corporation shall, as soon as practicable following the Issuance Date, but not more than thirty (30) days thereafter, file a preliminary proxy statement for a vote of its stockholders to approve the issuance of all Conversion Shares in compliance with the rules and regulations of Nasdaq (the “**Proposal**”). The Corporation shall, as soon as practicable following notification from the staff of the Commission that it has completed its review of the preliminary proxy statement or that it will not review the preliminary proxy statement, file and mail a definitive proxy statement for the vote of its stockholders to approve the Proposal. The Corporation covenants and agrees that its Board of Directors shall unanimously recommend that the Proposal be approved by the Corporation’s stockholders at all meetings in which the Proposal is considered (and the Corporation shall take the actions required to call and hold such meeting as required under the Securities Purchase Agreement). If the Corporation’s stockholders do not approve such Proposal at such initial meeting, the Corporation covenants and agrees that it will submit the Proposal for approval of the Corporation’s stockholders at least semi-annually until such approval is obtained.

Section 9. Redemption by the Corporation.

(a) The provisions of this Section 9 will cease to apply following the Requisite Approval.

(b) **General.** Unless prohibited by (i) Delaware law governing distributions to stockholders or (ii) applicable stock exchange rule or regulation, at any time following the thirteen (13) month anniversary of the Initial Issuance Date and ending on the three (3) year anniversary of the Initial Issuance Date, the shares of Series B Preferred Stock shall be redeemed by the Corporation at a price equal to the then-applicable Liquidation Preference (the “**Redemption Price**”) not more than sixty (60) days after receipt by the Corporation from the Requisite Holders of written notice (the “**Redemption Request**”) requesting redemption of all shares of Series B Preferred Stock (such date, the “**Redemption Date**”). Upon receipt of a Redemption Request, the Corporation shall apply all of its assets to any such redemption, and to no other corporate purpose, except to the extent prohibited by Delaware law governing distributions to stockholders. On the Redemption Date, the Corporation shall redeem, on a pro rata basis in accordance with the number of shares of Series B Preferred Stock owned by each holder, the total number of shares of Series B Preferred Stock outstanding immediately prior to the Redemption Date; provided, however, that Excluded Shares (as defined below) shall not be redeemed and shall be excluded from the calculations set forth in this sentence. If on the Redemption Date Delaware law governing distributions to stockholders prevents the Corporation from redeeming all shares of Series B Preferred Stock to be redeemed, the Corporation shall ratably redeem the maximum number of shares that it may redeem consistent with such law, and shall redeem the remaining shares as soon as it may lawfully do so under such law.

(c) **Redemption Notice.** The Corporation shall send written notice of the mandatory redemption (the “**Redemption Notice**”) to each holder of record of Series B Preferred Stock not less than forty (40) days prior to the Redemption Date. The Redemption Notice shall state:

- (i) the number of shares of Series B Preferred Stock held by the holder that the Corporation shall redeem on the Redemption Date specified in the Redemption Notice;
- (ii) the Redemption Price;
- (iii) the date upon which the holder’s right to convert such shares terminates (which shall be the date that is one Business Day immediately preceding the Redemption Date); and
- (iv) for holders of shares in certificated form, that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Series B Preferred Stock to be redeemed.

(d) **Excluded Shares.** If the Corporation receives, on or prior to the twentieth (20th) day after the date of delivery of the Redemption Notice to a holder of Series B Preferred Stock, written notice from such holder that such holder elects to be excluded from the redemption provided in this Section 9, then the shares of Series B Preferred Stock registered on the books of the Corporation in the name of such holder at the time of the Corporation’s receipt of such notice shall thereafter be “**Excluded Shares.**” Excluded Shares shall not be redeemed or redeemable pursuant to this Section 9, whether on the Redemption Date or thereafter.

(e) **Surrender of Certificates; Payment.** On or before the Redemption Date, each holder of shares of Series B Preferred Stock to be redeemed on the Redemption Date shall, if a holder of shares in certificated form, surrender the certificate or certificates representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation, in the manner and at the place designated in the Redemption Notice, and thereupon the Redemption Price for such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof. In the event less than all of the shares of Series B Preferred

Stock represented by a certificate are redeemed, a new certificate, instrument, or book entry representing the unredeemed shares of Series B Preferred Stock shall promptly be issued to such holder.

(f) Interest. If any shares of Series B Preferred Stock are not redeemed for any reason on the Redemption Date, all such unredeemed shares shall remain outstanding and entitled to all the rights and preferences provided herein, and the Corporation shall pay interest on the Redemption Price applicable to such unredeemed shares at an aggregate per annum rate equal to 10% (increased by one percent (1%) each month following the Redemption Date until the Redemption Price, and any interest thereon, is paid in full), with such interest to accrue daily in arrears and be compounded annually; provided, however, that in no event shall such interest exceed the maximum permitted rate of interest under applicable law (the “**Maximum Permitted Rate**”), provided, however, that the Corporation shall take all such actions as may be necessary, including without limitation, making any applicable governmental filings, to cause the Maximum Permitted Rate to be the highest possible rate. In the event any provision hereof would result in the rate of interest payable hereunder being in excess of the Maximum Permitted Rate, the amount of interest required to be paid hereunder shall automatically be reduced to eliminate such excess; provided, however, that any subsequent increase in the Maximum Permitted Rate shall be retroactively effective to the Redemption Date to the extent permitted by law.

(g) Rights Subsequent to Redemption. If the Redemption Notice shall have been duly given, and if on the Redemption Date the Redemption Price (including any accrued and unpaid interest as provided in Section 9(f) above) payable upon redemption of the shares of Series B Preferred Stock to be redeemed on the Redemption Date is paid or tendered for payment or deposited with an independent payment agent so as to be available therefor in a timely manner, then notwithstanding that any certificates evidencing any of the shares of Series B Preferred Stock so called for redemption shall not have been surrendered, dividends with respect to such shares of Series B Preferred Stock shall cease to accrue after the Redemption Date and all rights with respect to such shares shall forthwith after the Redemption Date terminate, except only the right of the holders to receive the Redemption Price (plus accrued and unpaid interest as provided in Section 9(e) above) upon surrender of any such certificate or certificates therefor.

Section 10. Miscellaneous.

(a) Waiver. Any waiver by the Corporation or a Holder of a breach of any provision of this Certificate of Designation shall not operate as or be construed to be a waiver of any other breach of such provision or of any breach of any other provision of this Certificate of Designation or a waiver by any other Holders. The failure of the Corporation or a Holder to insist upon strict adherence to any term of this Certificate of Designation on one or more occasions shall not be considered a waiver or deprive that party (or any other Holder) of the right thereafter to insist upon strict adherence to that term or any other term of this Certificate of Designation. Any waiver by the Corporation or a Holder must be in writing. Notwithstanding any provision in this Certificate of Designation to the contrary, any provision contained herein and any right of the Holders of Series B Preferred Stock granted hereunder may be waived or amended as to all shares of Series B Preferred Stock (and the Holders thereof) upon the written consent of the Requisite Holders, unless a higher percentage is required by the DGCL, in which case the written consent of the Holders of not less than such higher percentage shall be required, provided, that in no case shall the economic terms of the shares of Series B Preferred Stock, including but not limited to Conversion Price, Liquidation Preference, and any voting rights associated therewith, be amended or waived without the prior written consent of each Holder of Series B Preferred Stock. Any waiver or amendment effected in accordance with this Section 10(a) shall be binding on all the Holders of Series B Preferred Stock, and all of such party’s successors and permitted assigns, whether or not any such party, successor or assignee entered into or approved such waiver or amendment.

(b) Severability. If any provision of this Certificate of Designation is invalid, illegal or unenforceable, the balance of this Certificate of Designation shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances. If it shall be found that any interest or other amount deemed interest due hereunder violates the applicable law governing usury, the applicable rate of interest due hereunder shall automatically be lowered to equal the maximum rate of interest permitted under applicable law.

(c) Next Business Day. Whenever any payment or other obligation hereunder shall be due on a day other than a Business Day, such payment shall be made on the next succeeding Business Day.

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

(e) Status of Converted Series B Preferred Stock. If any shares of Series B Preferred Stock shall be converted by the Corporation, such shares shall resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series B Preferred Stock.

IN WITNESS WHEREOF, SAB Biotherapeutics, Inc., has caused this Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock to be executed by its duly authorized officer this [] day of July, 2025.

By: _____
Name: Samuel J. Reich
Title: Chief Executive Officer

ANNEX A
NOTICE OF CONVERSION
(TO BE EXECUTED BY THE REGISTERED HOLDER
IN ORDER TO CONVERT SHARES OF SERIES B PREFERRED STOCK)

The undersigned Holder hereby irrevocably elects to convert the number of shares of Series B Preferred Stock indicated below, represented by stock certificate No(s). _____, into the number of shares of Common Stock of SAB Biotherapeutics, Inc., a Delaware corporation (the “**Corporation**”), equal to the Share Conversion Number times the number of shares of Series B Preferred Stock indicated below, provided that, to the extent such conversion would cause such Holder to exceed the Maximum Percentage, any shares of Series B Preferred Stock convertible into the number of shares of Common Stock that would result in the foregoing exceeding the Maximum Percentage shall not convert into shares of Common Stock and such Holder shall retain any such shares of Series B Preferred Stock. If securities are to be issued in the name of a person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto. Capitalized terms utilized but not defined herein shall have the meaning ascribed to such terms in that certain Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock (the “**Certificate of Designation**”) filed by the Corporation with the Delaware Secretary of State on July 21, 2025. The undersigned Holder’s right to convert the shares of Series B Preferred Stock is subject to the Maximum Percentage described in Section 6(g) of the Certificate of Designation. Therefore, the number of shares of Common Stock beneficially owned by the undersigned Holder (together with any Attribution Parties), including the number of shares of Common Stock issuable upon conversion of the Series B Preferred Stock subject to this Notice of Conversion, but excluding (i) exercise of the remaining, unconverted portion of the Series B Preferred Stock beneficially owned by such Person and its Attribution Parties and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation beneficially owned by such Person and its Attribution Parties (including, without limitation, any convertible notes or convertible preferred stock or warrants) subject to a limitation on conversion or exercise analogous to the limitation contained herein, is 4.99% or 9.99%.

Conversion calculations:

Date to Effect Conversion: _____

Number of shares of Series B Preferred Stock owned prior to Conversion: _____

Number of shares of Series B Preferred Stock to be Converted: _____

Number of shares of Common Stock to be Issued: _____

Number of shares of Common Stock beneficially owned by the Holder and its Attribution Parties: _____

Address for delivery of physical certificates: _____

Or for DWAC Delivery

DWAC Instructions:

Broker no:

Account no:

HOLDER:

By:

Name:

Title:

Date:

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THIS WARRANT AND THE SHARES OF SERIES B CONVERTIBLE PREFERRED STOCK ISSUABLE UPON THE EXERCISE OF THIS WARRANT (THE “SECURITIES”) HAVE NOT BEEN REGISTERED UNDER SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES. THE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND MAY NOT BE SOLD, TRANSFERRED OR ASSIGNED UNLESS (I) SUCH SECURITIES HAVE BEEN REGISTERED FOR SALE PURSUANT TO THE SECURITIES ACT, (II) SUCH SECURITIES MAY BE SOLD PURSUANT TO RULE 144 UNDER THE SECURITIES ACT, (III) THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO IT THAT SUCH TRANSFER MAY LAWFULLY BE MADE WITHOUT REGISTRATION UNDER THE SECURITIES ACT, OR (IV) THE SECURITIES ARE TRANSFERRED WITHOUT CONSIDERATION TO AN AFFILIATE OF SUCH HOLDER OR A CUSTODIAL NOMINEE (WHICH FOR THE AVOIDANCE OF DOUBT SHALL REQUIRE NEITHER CONSENT NOR THE DELIVERY OF AN OPINION). NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN FINANCING ARRANGEMENT.

**WARRANT TO PURCHASE
SERIES B PREFERRED STOCK**

Warrant No. [] Original Issue Date: July [], 2025

SAB Biotherapeutics, Inc., a Delaware corporation (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, [] or its registered assigns (the “**Holder**”), is, by virtue of the issuance of this warrant (including any Warrants to Purchase Preferred Stock issued in exchange, transfer or replacement hereof, this “**Warrant**”), entitled, subject to the terms set forth below, to purchase from the Company up to a total of [] shares (the “**Warrant Shares**”) of the Company’s Series B Convertible Preferred Stock, par value \$0.0001 per share (and including any other class of securities into which the Series B Convertible Preferred Stock may hereafter be reclassified or changed into, the “**Preferred Stock**”). The exercise price for the purchase of Preferred Stock is equal to \$175.00 per share (the “**Exercise Price**”), as adjusted from time to time as provided in Section 8.

This Warrant may be exercised at any time and from time to time on or after the Original Issue Date and on or prior to 5:00 p.m. (New York City time) on the earlier of (x) July [], 2030 and (y) the 30th Trading Day after the Company notifies the Holder in writing of the Phase II Enrollment Date (the “**Termination Date**”) but not thereafter.

This Warrant is one of a series of similar warrants issued pursuant to that certain Securities Purchase Agreement, dated July 21, 2025, by and among the Company and the Investors identified therein (the “**Purchase Agreement**”).

Each Warrant Share is convertible into a number of shares of the Company’s Common Stock, par value \$0.0001 per share (“**Common Stock**”), pursuant to the terms of the Preferred Stock.

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

“**Affiliate**” means, with respect to any Person, any other Person that, directly or indirectly through one or more intermediates, controls, is controlled by or is under common control with such Person.

“**Attribution Parties**” means, collectively, the following Persons and entities: (i) any direct or indirect Affiliates of the Holder, (ii) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the date hereof, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any Attribution Parties and (iv) any other Persons whose beneficial ownership of the Company’s Common Stock would or could be aggregated with the Holder’s and/or any other Attribution Parties for purposes of Section 13(d) or Section 16 of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

“**Certificate of Designation**” means that certain Certificate of Designations of Preferences, Rights and Limitations of Series B Convertible Preferred Stock of the Company, dated as of July 21, 2025.

“**Commission**” means the U.S. Securities and Exchange Commission.

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

“**Group**” shall have the meaning ascribed to it in Section 13(d) of the Exchange Act, and all related rules, regulations and jurisprudence.

“**Person**” means an individual, partnership, corporation, limited liability company, business trust, joint stock company, trust, incorporated or unincorporated association, joint venture, government (or an agency or subdivision thereof) or any other entity or organization.

“**Phase II Enrollment Date**” means the date that the Company enrolls its last patient in the Company’s planned Phase 2b clinical trial (which will be no less than 135 patients) to evaluate SAB-142 in accordance with the SAFEGuard protocol, a potential disease-modifying therapy for Type 1 Diabetes (“**T1D**”), in patients with new or recent-onset T1D.

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

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

“**Standard Settlement Period**” means the standard settlement period, expressed in a number of Trading Days, for the Principal Trading Market with respect to the Common Stock that is in effect on the date of delivery of an applicable Exercise Notice, which as of the Original Issue Date was “T+1.”

“**Trading Day**” means any weekday on which the Principal Trading Market is normally open for trading.

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

“**Transfer Agent**” means Continental Stock Transfer & Trust Company, the Company’s transfer agent and registrar for the Common Stock and Preferred Stock, and any successor appointed in such capacity.

2. Issuance of Securities; Registration of Warrants. 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 permissibly assigned hereunder) from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

3. Registration of Transfers. This Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Subject to compliance with all applicable securities laws, the Company shall, or will cause its Transfer Agent to, register the transfer of all or any portion of this Warrant in the Warrant Register, upon surrender of this Warrant, and payment for all applicable transfer taxes (if any). Upon any such registration or transfer, a new warrant to purchase Preferred Stock in substantially the form of this Warrant (any such new warrant, a “**New Warrant**”) evidencing the portion of this Warrant so transferred shall be issued to the transferee, and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance by such transferee of all of the rights and obligations in respect of the New Warrant that the Holder has in respect of this Warrant. The Company shall, or will cause its Transfer Agent to, prepare, issue and deliver at the Company’s own expense any New Warrant under this Section 3. Until due presentment for registration of transfer, the Company may treat the registered Holder hereof as the owner and holder for all purposes, and the Company shall not be affected by any notice to the contrary.

4. Exercise of Warrants.

(a) All or any part of this Warrant shall be exercisable by the registered Holder in any manner permitted by this Warrant at any time and from time to time on or after the Original Issue Date and on or before the Termination Date.

(b) The Holder may exercise this Warrant by delivering to the Company (i) an exercise notice, in the form attached as Schedule 1 hereto (the “**Exercise Notice**”), completed and duly signed, and (ii) payment of the Exercise Price for the number of Warrant Shares as to which this Warrant is being exercised, and the date on which the last of such items is delivered to the Company (as determined in accordance with the notice provisions hereof) is an “**Exercise Date**.” The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. No ink original Exercise Notice shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Exercise Notice be required. Execution and delivery of the Exercise Notice shall have the same effect as cancellation of the original Warrant and issuance of a New Warrant evidencing the right to purchase the remaining number of Warrant Shares, if any. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within two (2) Trading Days of receipt of such notice.

(c) Subject to all limitations set forth in this Warrant and the Certificate of Designation, the Holder may submit an Exercise Notice simultaneously with a Notice of Conversion (as defined in the Certificate of Designation). In such case, the Company will take all actions required under

this Warrant and the Certificate of Designation to deliver shares of Common Stock to such Holders in connection with such exercise and conversion.

(d) The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this section, 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.

(e) Upon exercise of this Warrant, the Company shall promptly (but in no event later than the number of Trading Days comprising the Standard Settlement Period following the Exercise Date), upon the request of the Holder, cause the Transfer Agent to (i) record such aggregate number of shares of Preferred Stock specified by the Holder in the Exercise Notice and to which the Holder is entitled pursuant to such exercise (the “**Exercise Shares**”) in the name of the Holder or its designee on the certificates reflecting the Exercise Shares with an appropriate legend regarding restriction on transferability, which shall be issued and dispatched by overnight courier to the address as specified in the Exercise Notice, and on the Company’s share register or (ii) issue such Exercise Shares in the name of the Holder or its designee in restricted book-entry form in the Company’s share register. The Holder, or any Person so designated by the Holder to receive Warrant Shares, shall be deemed to have become the holder of record of such Warrant Shares as of the Exercise Date, irrespective of the date of the book entry positions or the date of delivery of the certificates evidencing such Exercise Shares, as the case may be. As of the Exercise Date, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the book-entry accounts evidencing such Warrant Shares.

(f) To the extent permitted by law, the Company’s obligations to issue and deliver Warrant Shares in accordance with and subject to the terms hereof (including the limitations set forth in Section 9 below) are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other Person of any obligation to the Company or any violation or alleged violation of law by the Holder or any other Person, and irrespective of any other circumstance that might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Warrant Shares. Nothing herein shall limit the Holder’s right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company’s failure to timely deliver Exercise Shares; provided, however, that the Holder shall not be entitled to both (i) require the Company to reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not timely honored and (ii) receive the number of Warrant Shares that would have been issued if the Company had timely complied with its delivery requirements under Section 4(e).

(g) In the event that this Warrant is exercised and the Company fails to credit the Warrant Shares to the DTC participant account nominated by the Holder through DTC’s Deposit Withdrawal Agent Commission system (a “**DWAC Delivery**”) no later than the Share Delivery Date (as defined in the Certificate of Designation) and after such and if after such Share Delivery Date such Holder is required to purchase or otherwise purchases (in an open market transaction or otherwise), shares of Common Stock to deliver in satisfaction of a sale by such Holder of the Warrant Shares which such Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a “**Buy-In**”), then the Company shall, within four (4) Trading Days after such Holder’s request and in such Holder’s sole discretion, (A) pay in cash to such Holder (in addition to any other remedies available to or elected by such Holder) the amount by which (x) such Holder’s total purchase price (including any brokerage commissions) for the shares of Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares

of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of such Holder, either reissue (if surrendered) the shares of Preferred Stock equal to the number of shares of Preferred Stock submitted for conversion or deliver to such Holder the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(e)(ii) of the Certificate of Designation.

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

6. **Replacement of Warrant.** If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction (in such case) and, in each case, a customary and reasonable contractual indemnity, if requested by the Company. If a New Warrant is requested as a result of a mutilation of this Warrant, then the Holder shall deliver such mutilated Warrant to the Company as a condition precedent to the Company's obligation to issue the New Warrant.

7. **Reservation of Warrant Shares and Common Stock.**

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

(b) The Company covenants that it will, at all times while this Warrant is outstanding, reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue Common Stock upon conversion of the Warrant Shares pursuant to their terms, the number of shares of Common Stock that are initially issuable and deliverable upon (x) the complete exercise of this Warrant and (y) the immediate conversion of the Warrant Shares issuable upon such exercise into shares of Common Stock, free from preemptive rights or any other contingent purchase rights of persons other than the Holder (taking into account the adjustments of Section 8). The Company covenants that all shares of Common Stock so issuable and deliverable shall, upon conversion of the Warrant Shares in accordance with the terms thereof, be duly and validly authorized, issued and fully paid and non-assessable. The Company further covenants that it will not, without the prior

written consent of the Holder, take any actions to increase the par value of the Common Stock at any time while this Warrant is outstanding.

(c) The Company shall, as soon as practicable following the Original Issue Date, but not more than thirty (30) days thereafter, file a preliminary proxy statement for a vote of its stockholders at a special meeting (the “**Special Meeting**”) to approve the issuance of shares of Common Stock upon conversion of the Warrant Shares in compliance with Nasdaq Listing Rule 5635 (the “**Proposal**”). The Company, as soon as practicable following notification from the staff of the Securities and Exchange Commission that it has completed its review of the preliminary proxy statement or that it will not review the preliminary proxy statement, will (i) file and mail a definitive proxy statement for the vote of its stockholders to approve the Proposal and (ii) duly call, convene and hold the Special Meeting. The Company covenants and agrees that (A) its Board of Directors shall unanimously recommend that the Proposal be approved by the Company’s stockholders at the Special Meeting and at all meetings in which the Proposal is considered, and (B) that the Company shall use commercially reasonable efforts to solicit and obtain such approval within the timeframe set forth in this Section 7(c). If the Company’s stockholders do not approve the Proposal at the first Special Meeting in which it is voted on by stockholders, the Company covenants and agrees that it will submit the Proposal for approval of the Company’s stockholders at least semi-annually until such approval is obtained.

8. **Certain Adjustments.** The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant (the “**Number of Warrant Shares**”) are subject to adjustment from time to time as set forth in this Section 8.

(a) **Stock Dividends and Splits.** If the Company, at any time while this Warrant is outstanding, (A) pays a stock dividend on its Preferred Stock or otherwise makes a distribution on any class of capital stock issued and outstanding on the Original Issue Date and in accordance with the terms of such stock on the Original Issue Date or as amended, that is payable in shares of Preferred Stock, (B) subdivides its outstanding shares of Preferred Stock into a larger number of shares of Preferred Stock, (C) combines its outstanding shares of Preferred Stock into a smaller number of shares of Preferred Stock or (D) issues by reclassification of shares of capital stock any additional shares of Preferred Stock of the Company, then in each such case the number of Warrant Shares shall be multiplied by a fraction, the numerator of which shall be the number of shares of Preferred Stock outstanding immediately after such event and the denominator of which shall be the number of shares of Preferred Stock outstanding immediately before such event. Any adjustment made pursuant to clause (A) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, provided, however, that if such record date shall have been fixed and such dividend is not fully paid on the date fixed therefor, the Number of Warrant Shares shall be recomputed accordingly as of the close of business on such record date and thereafter the Number of Warrant Shares shall be adjusted pursuant to this paragraph as of the time of actual payment of such dividends. Any adjustment pursuant to clause (B), (C) or (D) of this paragraph shall become effective immediately after the effective date of such subdivision, combination or issuance. The Conversion Price (as defined in the Certificate of Designations) shall be adjusted pursuant to Section 7 of the Certificate of Designations.

(b) **Pro Rata Distributions.** If, on or after the Original Issue Date, the Company shall declare or make any dividend or other pro rata distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock or Preferred Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction, but, for the avoidance of doubt, excluding any distribution of shares of Common Stock or Preferred Stock subject to Section 8(a), any distribution of Purchase Rights (as defined below) subject to Section 8(c) and any Fundamental Transaction (as defined

below) subject to Section 8(d)) (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 (x) the complete exercise of this Warrant and (y) the immediate conversion of the Warrant Shares issuable upon such exercise into shares of Common Stock (without regard to any limitations or restrictions on exercise of this Warrant or conversion of the Warrant Shares issuable upon such exercise, including without limitation, the Maximum Percentage (as defined below)) immediately before the date on 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*, that 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 (and shall not be entitled to beneficial ownership of such 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 or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation.

(c) Purchase Rights. If at any time on or after the Original Issue Date, the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property, in each case pro rata to the record holders of any class of Common Stock (the “**Purchase Rights**”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon (x) the complete exercise of this Warrant and (y) the immediate conversion of the Warrant Shares issuable upon such exercise into shares of Common Stock (without regard to any limitations or restrictions on exercise of this Warrant or conversion of the Warrant Shares issuable upon such exercise, including without limitation, the Maximum Percentage) 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 Common Stock are to be determined for the grant, issuance or sale of such Purchase Rights; *provided*, that 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 (and shall not be entitled to beneficial ownership of such Common Stock as a result of such Purchase Right (and beneficial ownership) to such extent) and at the Holder’s election, in its sole discretion, either (1) such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right to be held similarly in abeyance) to the same extent as if there had been no such limitation) or (2) the Company shall offer the Holder the right upon exercise of such Purchase Right to acquire a security (e.g. a pre-funded warrant) that would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage but will otherwise to the extent possible have economic and other rights, preferences and privileges substantially consistent and on par with the securities or other property issuable upon exercise of the originally offered Purchase Rights.). As used in this Section 8(c), (i) “Options” means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities and (ii) “Convertible Securities” mean any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for shares of Common Stock.

(d) Fundamental Transactions.

(i) If, at any time while this Warrant is outstanding (i) the Company effects any merger or consolidation of the Company with or into another Person, in which the Company is not the surviving entity or in which the stockholders of the Company immediately prior to such merger or consolidation do not own, directly or indirectly, at least 50% of the voting power of the surviving entity immediately after such merger or consolidation, (ii) the Company effects any sale to another Person of all or substantially all of its assets in one or a series of related transactions, (iii) pursuant to any tender offer or exchange offer (whether by the Company or another Person), holders of capital stock tender shares representing more than 50% of the voting power of the capital stock of the Company and the Company or such other Person, as applicable, accepts such tender for payment, (iv) the Company consummates a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the voting power of the capital stock of the Company (except for any such transaction in which the stockholders of the Company immediately prior to such transaction maintain, in substantially the same proportions, the voting power of such Person immediately after the transaction) or (v) the Company effects any reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 8(a), above) (in any such case, a “**Fundamental Transaction**”), then following such Fundamental Transaction the Holder shall have the right to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of shares of Common Stock then issuable upon (x) the complete exercise of this Warrant and (y) the immediate conversion of the Warrant Shares issuable upon such exercise into shares of Common Stock (including any Distributions or Purchase Rights then held in abeyance pursuant to Sections 8(b) or 8(c), above) without regard to any limitations on exercise contained herein or any limitations on conversion of the Warrant Shares issuable upon such exercise (the “**Alternate Consideration**”). The Company shall not effect any Fundamental Transaction in which the Company is not the surviving entity or the Alternate Consideration includes securities of another Person unless prior to or simultaneously with the consummation thereof, any successor to the Company, surviving entity or other Person (including any purchaser of assets of the Company) shall assume the obligation to deliver to the Holder such Alternate Consideration as, in accordance with the foregoing provisions, the Holder may be entitled to receive, and the other obligations under this Warrant. The provisions of this paragraph (d) shall similarly apply to subsequent transactions analogous to a Fundamental Transaction type. If the Company undertakes a Fundamental Transaction in which the Company is not the surviving entity and the Alternate Consideration includes securities of another Person, then the Company shall provide that, prior to or simultaneously with the consummation of such Fundamental Transaction, any successor to the Company, surviving entity or other Person (including any purchaser of assets of the Company) shall assume the obligation to deliver to the Holder such Alternate Consideration as the Holder is entitled to receive in accordance with the foregoing provisions, and to assume the other obligations under this Warrant. The provisions of this paragraph (d) shall similarly apply to subsequent transactions analogous of a Fundamental Transaction type.

(ii) Notwithstanding anything to the contrary, in the event of a Fundamental Transaction (other than (x) any stock split or reverse stock split, (y) any transaction effected solely for the purpose of changing the jurisdiction of incorporation of the Company, or (z) any holding company reorganization or parent-subsiidiary merger not requiring stockholder approval pursuant to Sections 251(g) or 253 of the General Corporation Law of the State of Delaware (or any successor provisions thereof)), the Company or any Successor Entity (as defined below) shall, at the Holder’s option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction (or, if later, the date of the public announcement of the applicable Fundamental Transaction), purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value (as defined below) of the remaining unexercised portion of this Warrant on the date of the consummation of such

Fundamental Transaction, provided, however, that, if the Fundamental Transaction is not within the Company's control, including not approved by the Company's Board of Directors, the Holder shall only be entitled to receive from the Company or any Successor Entity the same type or form of consideration (and in the same proportion). "**Black Scholes Value**" means the value of this Warrant based on the Black-Scholes Option Pricing Model obtained from the "OV" function on Bloomberg determined as of the day of consummation of the applicable Fundamental Transaction for pricing purposes and reflecting (A) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date, (B) an expected volatility equal to the greater of (i) 100% and (ii) the 100 day volatility, each obtained from the HVT function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the public announcement of the applicable Fundamental Transaction, (C) the underlying price per share used in such calculation shall be the greater of (i) the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in such Fundamental Transaction and (ii) the greater of (x) the last VWAP immediately prior to the public announcement of such Fundamental Transaction and (y) the last VWAP immediately prior to the consummation of such Fundamental Transaction (D) a remaining option time equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date and (E) a zero cost of borrow. The payment of the Black Scholes Value will be made by wire transfer of immediately available funds within five 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 to comply with the provisions of this Section 8(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 in a Fundamental Transaction in which the Company is not the survivor (the "**Successor Entity**") to assume in writing all of the obligations of the Company under this Warrant in accordance with the provisions of this Section 8(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, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Warrant Shares 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 Warrant Shares 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 9 hereof, the Holder may elect, at its sole option, by delivery of written notice to the Company to waive this Section 8(d)(ii) to permit a Fundamental Transaction without the assumption of this Warrant.

(e) Number of Warrant Shares. Simultaneously with any adjustment to the Number of Warrant Shares pursuant to this Section 8, the Exercise Price shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the increased or decreased Number of Warrant Shares shall be the same as the aggregate Exercise Price in

effect immediately prior to such adjustment. Notwithstanding the foregoing, in no event may the Exercise Price be adjusted below the par value of the Preferred Stock then in effect.

(f) Calculations. All calculations under this Section 8 shall be made to the nearest one-tenth of one cent or the nearest share, as applicable.

(g) Notice of Adjustments. Upon the occurrence of each adjustment pursuant to this Section 8, the Company at its expense will, at the written request of the Holder, promptly compute such adjustment, in good faith, in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Warrant Shares or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in detail the facts upon which such adjustment is based. Upon written request, the Company will promptly deliver a copy of each such certificate to the Holder and to the Company's transfer agent.

(h) Notice of Corporate Events. If, while this Warrant is outstanding, the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock or Preferred Stock, including, without limitation, any granting of rights or warrants to subscribe for or purchase any capital stock of the Company or any subsidiary, (ii) authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then the Company shall deliver to the Holder a notice of such transaction at least ten (10) days prior to the applicable record or effective date on which a Person would need to hold Common Stock in order to participate in or vote with respect to such transaction; provided, however, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice. In addition, if while this Warrant is outstanding, the Company authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction contemplated by Section 8(d), other than a Fundamental Transaction under clause (iii) of Section 8(d), the Company shall deliver to the Holder a notice of such Fundamental Transaction at least thirty (30) days prior to the date such Fundamental Transaction is consummated. Holder agrees to maintain any information disclosed pursuant to this Section 8(h) in confidence until such information is publicly available, and shall comply with applicable law with respect to trading in the Company's securities following receipt of any such information. If, while this Warrant is outstanding, the Company provides any notice to holders of Series B Preferred Stock pursuant to the terms of the Certificate of Designations (including pursuant to Section 6 and Section 7 of the Certificate of Designations), the Company will simultaneously provide such notice to the Holder.

(i) Voluntary Adjustment By Company. Subject to the rules and regulations of the Principal Trading Market, the Company may at any time during the term of this Warrant, reduce the then-current Exercise Price to any amount and for any period of time deemed appropriate by the board of directors of the Company.

9. Limitations on Exercise.

(a) Notwithstanding anything to the contrary contained herein, the Company shall not effect the exercise of any portion of this Warrant, and the Holder of this Warrant shall not have the right to exercise any portion of the Warrant, and any such exercise shall be null and void ab initio and treated as if the exercise had not been made, to the extent that immediately prior to or following such exercise, the Holder, together with the Attribution Parties, beneficially owns or would beneficially own as determined in accordance with Section 13(d) of the Exchange Act and the rules promulgated thereunder, in excess of

[4.99%] [9.99%]¹ (the “**Maximum Percentage**”) of the Common Stock that would be issued and outstanding following such exercise. For purposes of calculating beneficial ownership for determining whether the Maximum Percentage is or will be exceeded, the aggregate number of shares of Common Stock held and/or beneficially owned by the Holder together with the Attribution Parties, shall include the number of shares of Common Stock held and/or beneficially owned by the Holder together with the Attribution Parties but shall exclude the number of shares of Common Stock which would be issuable upon exercise or conversion of the unexercised or unconverted portion of any securities of the Company held and/or beneficially owned by such Holder or any Attribution Party (including, without limitation, this Warrant and any convertible notes, convertible stock or other warrants) that are subject to a limitation on conversion or exercise analogous to the limitation contained herein. For purposes of this Section 9(a), beneficial ownership of the Holder or the Attribution Parties shall, except as set forth in the immediately preceding sentence, be calculated and determined in accordance with Section 13(d) of the Exchange Act and the rules promulgated thereunder. For purposes of this Warrant, in determining the number of outstanding shares of Common Stock, a Holder of this Warrant may rely on the number of outstanding shares of Common Stock as reflected in (1) the Company’s most recent Form 10-K, Form 10-Q, Current Report on Form 8-K or other public filing with the Securities and Exchange Commission, as the case may be, (2) a more recent public announcement by the Company or (3) any other notice by the Company or the Company’s transfer agent setting forth the number of shares of Common Stock outstanding (such issued and outstanding shares, the “**Reported Outstanding Share Number**”). For any reason at any time, upon the written or oral request of the Holder, the Company shall within one business day confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. The Holder shall disclose to the Company the number of shares of Common Stock that it, together with the Attribution Parties holds and/or beneficially owns and has the right to acquire through the exercise of derivative securities and any limitations on exercise or conversion analogous to the limitation contained herein contemporaneously or immediately prior to submitting an Exercise Notice for the relevant Warrant. If the Company receives an Exercise Notice 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, together with the Attribution Parties’, beneficial ownership, as determined pursuant to this Section 9(a), 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. 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 the Attribution Parties since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of Warrant Shares to the Holder upon exercise of this Warrant results in the Holder, together with the 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 Exchange Act), the number of Warrant Shares so issued by which the Holder’s, together with the 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 and/or the Attribution Parties 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. By written notice to the Company, a Holder of this Warrant may from time to time increase or decrease the Maximum Percentage to any other percentage not in excess of 19.99% specified in such notice; provided that any increase in the Maximum

¹ Will be the percentage indicated by each Holder prior to closing.

Percentage will not be effective until the 61st day after such notice is delivered to the Company and shall not negatively affect any partial exercise effected prior to such change.

(b) This Section 9 shall not restrict the number of shares of Common Stock which a Holder or the Attribution Parties may receive or beneficially own in order to determine the amount of securities or other consideration that such Holder or the Attribution Parties may receive in the event of a Fundamental Transaction as contemplated in Section 8(c) of this Warrant. For purposes of clarity, the Warrant Shares issuable pursuant to the terms of this Warrant that would cause the Holder to beneficially own shares of Common Stock in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder or the Attribution Parties for any purpose including for purposes of Section 13(d) of the Exchange Act and the rules promulgated thereunder or Section 16 of the Exchange Act and the rules promulgated thereunder, including Rule 16a-1(a)(1). 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 9 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 9 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.

(c) No Fractional Shares. No fractional Warrant Shares will be issued in connection with any exercise of this Warrant. Warrants may only be exercised for whole Warrant Shares.

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

11. Warrant Agent. The Company shall initially serve as warrant agent under this Warrant. 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.

12. Miscellaneous.

(a) No Rights as a Stockholder. Except as otherwise set forth in this Warrant, the Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or

withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, amalgamation, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company.

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

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

(d) Amendment and Waiver. Except as otherwise provided herein, the provisions of this Warrant may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder. No amendment or modification of any provision of this Warrant issued by the Company on the Original Issue Date shall be made unless the same is also offered to the Holder of this Warrant. In addition, no consideration shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of this Warrant issued by the Company on the Original Issue Date unless the same consideration (other than the reimbursement of legal fees) also is offered to the Holder of this Warrant.

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

(f) Governing Law; Jurisdiction. ALL QUESTIONS CONCERNING THE CONSTRUCTION, VALIDITY, ENFORCEMENT AND INTERPRETATION OF THIS WARRANT SHALL BE GOVERNED BY AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS

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

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

(h) Severability. If any part or provision of this Warrant is held unenforceable or in conflict with the applicable laws or regulations of any jurisdiction, the invalid or unenforceable part or provisions shall be replaced with a provision which accomplishes, to the extent possible, the original business purpose of such part or provision in a valid and enforceable manner, and the remainder of this Warrant shall remain binding upon the parties hereto.

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

SAB BIOTHERAPEUTICS, INC.

By: _____

Name:

Title:

SCHEDULE 1

FORM OF EXERCISE NOTICE

[To be executed by the Holder to purchase shares of Preferred Stock under the Warrant]

Ladies and Gentlemen:

- (1) The undersigned is the Holder of Warrant No. __ (the "Warrant") issued by SAB Biotherapeutics, Inc., a Delaware corporation (the "Company"). Capitalized terms used herein and not otherwise defined herein have the respective meanings set forth in the Warrant.
- (2) The undersigned hereby exercises its right to purchase _____ Warrant Shares pursuant to the Warrant.
- (3) The Holder shall pay the sum of \$ _____ in immediately available funds to the Company in accordance with the terms of the Warrant.
- (4) Pursuant to this Exercise Notice, the Company shall deliver to the Holder Warrant Shares determined in accordance with the terms of the Warrant.
- (5) By its delivery of this Exercise Notice, the undersigned represents and warrants to the Company that in giving effect to the exercise evidenced hereby (i) the Holder is an "accredited investor" as defined in Regulation D promulgated under the Securities Act of 1933, as amended and (ii) 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 9(a) of the Warrant to which this notice relates.

Dated: _____

Name of Holder: _____

By: _____

Name: _____

Title: _____

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

THIS WARRANT AND THE SHARES OF SERIES B CONVERTIBLE PREFERRED STOCK ISSUABLE UPON THE EXERCISE OF THIS WARRANT (THE “SECURITIES”) HAVE NOT BEEN REGISTERED UNDER SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES. THE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND MAY NOT BE SOLD, TRANSFERRED OR ASSIGNED UNLESS (I) SUCH SECURITIES HAVE BEEN REGISTERED FOR SALE PURSUANT TO THE SECURITIES ACT, (II) SUCH SECURITIES MAY BE SOLD PURSUANT TO RULE 144 UNDER THE SECURITIES ACT, (III) THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO IT THAT SUCH TRANSFER MAY LAWFULLY BE MADE WITHOUT REGISTRATION UNDER THE SECURITIES ACT, OR (IV) THE SECURITIES ARE TRANSFERRED WITHOUT CONSIDERATION TO AN AFFILIATE OF SUCH HOLDER OR A CUSTODIAL NOMINEE (WHICH FOR THE AVOIDANCE OF DOUBT SHALL REQUIRE NEITHER CONSENT NOR THE DELIVERY OF AN OPINION). NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN FINANCING ARRANGEMENT.

**WARRANT TO PURCHASE
SERIES B PREFERRED STOCK**

Warrant No. [] Original Issue Date: July [], 2025

SAB Biotherapeutics, Inc., a Delaware corporation (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, [] or its registered assigns (the “**Holder**”), is, by virtue of the issuance of this warrant (including any Warrants to Purchase Preferred Stock issued in exchange, transfer or replacement hereof, this “**Warrant**”), entitled, subject to the terms set forth below, to purchase from the Company up to a total of [] shares (the “**Warrant Shares**”) of the Company’s Series B Convertible Preferred Stock, par value \$0.0001 per share (and including any other class of securities into which the Series B Convertible Preferred Stock may hereafter be reclassified or changed into, the “**Preferred Stock**”). The exercise price for the purchase of Preferred Stock is equal to \$218.75 per share (the “**Exercise Price**”), as adjusted from time to time as provided in Section 8.

This Warrant may be exercised at any time and from time to time on or after the Original Issue Date and on or prior to 5:00 p.m. (New York City time) on the earlier of (x) July [], 2030 and (y) the 30th Trading Day after the Company notifies the Holder in writing of the Phase II Release Date (the “**Termination Date**”) but not thereafter.

This Warrant is one of a series of similar warrants issued pursuant to that certain Securities Purchase Agreement, dated July 21, 2025, by and among the Company and the Investors identified therein (the “**Purchase Agreement**”).

Each Warrant Share is convertible into a number of shares of the Company’s Common Stock, par value \$0.0001 per share (“**Common Stock**”), pursuant to the terms of the Preferred Stock.

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

“**Affiliate**” means, with respect to any Person, any other Person that, directly or indirectly through one or more intermediates, controls, is controlled by or is under common control with such Person.

“**Attribution Parties**” means, collectively, the following Persons and entities: (i) any direct or indirect Affiliates of the Holder, (ii) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the date hereof, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any Attribution Parties and (iv) any other Persons whose beneficial ownership of the Company’s Common Stock would or could be aggregated with the Holder’s and/or any other Attribution Parties for purposes of Section 13(d) or Section 16 of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

“**Certificate of Designation**” means that certain Certificate of Designations of Preferences, Rights and Limitations of Series B Convertible Preferred Stock of the Company, dated as of July 21, 2025.

“**Commission**” means the U.S. Securities and Exchange Commission.

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

“**Group**” shall have the meaning ascribed to it in Section 13(d) of the Exchange Act, and all related rules, regulations and jurisprudence.

“**Person**” means an individual, partnership, corporation, limited liability company, business trust, joint stock company, trust, incorporated or unincorporated association, joint venture, government (or an agency or subdivision thereof) or any other entity or organization.

“**Phase II Release Date**” means the date that the Company releases topline data from the Company’s planned Phase 2b clinical trial to evaluate SAB-142, a potential disease-modifying therapy for Type 1 Diabetes (“**T1D**”), in patients with new or recent-onset T1D.

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

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

“**Standard Settlement Period**” means the standard settlement period, expressed in a number of Trading Days, for the Principal Trading Market with respect to the Common Stock that is in effect on the date of delivery of an applicable Exercise Notice, which as of the Original Issue Date was “T+1.”

“**Trading Day**” means any weekday on which the Principal Trading Market is normally open for trading.

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

“**Transfer Agent**” means Continental Stock Transfer & Trust Company, the Company’s transfer agent and registrar for the Common Stock and Preferred Stock, and any successor appointed in such capacity.

2. Issuance of Securities; Registration of Warrants. 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 permissibly assigned hereunder) from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

3. Registration of Transfers. This Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Subject to compliance with all applicable securities laws, the Company shall, or will cause its Transfer Agent to, register the transfer of all or any portion of this Warrant in the Warrant Register, upon surrender of this Warrant, and payment for all applicable transfer taxes (if any). Upon any such registration or transfer, a new warrant to purchase Preferred Stock in substantially the form of this Warrant (any such new warrant, a “**New Warrant**”) evidencing the portion of this Warrant so transferred shall be issued to the transferee, and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance by such transferee of all of the rights and obligations in respect of the New Warrant that the Holder has in respect of this Warrant. The Company shall, or will cause its Transfer Agent to, prepare, issue and deliver at the Company’s own expense any New Warrant under this Section 3. Until due presentment for registration of transfer, the Company may treat the registered Holder hereof as the owner and holder for all purposes, and the Company shall not be affected by any notice to the contrary.

4. Exercise of Warrants.

(a) All or any part of this Warrant shall be exercisable by the registered Holder in any manner permitted by this Warrant at any time and from time to time on or after the Original Issue Date and on or before the Termination Date.

(b) The Holder may exercise this Warrant by delivering to the Company (i) an exercise notice, in the form attached as Schedule 1 hereto (the “**Exercise Notice**”), completed and duly signed, and (ii) payment of the Exercise Price for the number of Warrant Shares as to which this Warrant is being exercised, and the date on which the last of such items is delivered to the Company (as determined in accordance with the notice provisions hereof) is an “**Exercise Date**.” The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. No ink original Exercise Notice shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Exercise Notice be required. Execution and delivery of the Exercise Notice shall have the same effect as cancellation of the original Warrant and issuance of a New Warrant evidencing the right to purchase the remaining number of Warrant Shares, if any. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within two (2) Trading Days of receipt of such notice.

(c) Subject to all limitations set forth in this Warrant and the Certificate of Designation, the Holder may submit an Exercise Notice simultaneously with a Notice of Conversion (as defined in the Certificate of Designation). In such case, the Company will take all actions required under

this Warrant and the Certificate of Designation to deliver shares of Common Stock to such Holders in connection with such exercise and conversion.

(d) The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this section, 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.

(e) Upon exercise of this Warrant, the Company shall promptly (but in no event later than the number of Trading Days comprising the Standard Settlement Period following the Exercise Date), upon the request of the Holder, cause the Transfer Agent to (i) record such aggregate number of shares of Preferred Stock specified by the Holder in the Exercise Notice and to which the Holder is entitled pursuant to such exercise (the “**Exercise Shares**”) in the name of the Holder or its designee on the certificates reflecting the Exercise Shares with an appropriate legend regarding restriction on transferability, which shall be issued and dispatched by overnight courier to the address as specified in the Exercise Notice, and on the Company’s share register or (ii) issue such Exercise Shares in the name of the Holder or its designee in restricted book-entry form in the Company’s share register. The Holder, or any Person so designated by the Holder to receive Warrant Shares, shall be deemed to have become the holder of record of such Warrant Shares as of the Exercise Date, irrespective of the date of the book entry positions or the date of delivery of the certificates evidencing such Exercise Shares, as the case may be. As of the Exercise Date, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the book-entry accounts evidencing such Warrant Shares.

(f) To the extent permitted by law, the Company’s obligations to issue and deliver Warrant Shares in accordance with and subject to the terms hereof (including the limitations set forth in Section 9 below) are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other Person of any obligation to the Company or any violation or alleged violation of law by the Holder or any other Person, and irrespective of any other circumstance that might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Warrant Shares. Nothing herein shall limit the Holder’s right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company’s failure to timely deliver Exercise Shares; provided, however, that the Holder shall not be entitled to both (i) require the Company to reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not timely honored and (ii) receive the number of Warrant Shares that would have been issued if the Company had timely complied with its delivery requirements under Section 4(e).

(g) In the event that this Warrant is exercised and the Company fails to credit the Warrant Shares to the DTC participant account nominated by the Holder through DTC’s Deposit Withdrawal Agent Commission system (a “**DWAC Delivery**”) no later than the Share Delivery Date (as defined in the Certificate of Designation) and after such and if after such Share Delivery Date such Holder is required to purchase or otherwise purchases (in an open market transaction or otherwise), shares of Common Stock to deliver in satisfaction of a sale by such Holder of the Warrant Shares which such Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a “**Buy-In**”), then the Company shall, within four (4) Trading Days after such Holder’s request and in such Holder’s sole discretion, (A) pay in cash to such Holder (in addition to any other remedies available to or elected by such Holder) the amount by which (x) such Holder’s total purchase price (including any brokerage commissions) for the shares of Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares

of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of such Holder, either reissue (if surrendered) the shares of Preferred Stock equal to the number of shares of Preferred Stock submitted for conversion or deliver to such Holder the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(e)(ii) of the Certificate of Designation.

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

6. **Replacement of Warrant.** If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction (in such case) and, in each case, a customary and reasonable contractual indemnity, if requested by the Company. If a New Warrant is requested as a result of a mutilation of this Warrant, then the Holder shall deliver such mutilated Warrant to the Company as a condition precedent to the Company's obligation to issue the New Warrant.

7. **Reservation of Warrant Shares and Common Stock.**

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

(b) The Company covenants that it will, at all times while this Warrant is outstanding, reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue Common Stock upon conversion of the Warrant Shares pursuant to their terms, the number of shares of Common Stock that are initially issuable and deliverable upon (x) the complete exercise of this Warrant and (y) the immediate conversion of the Warrant Shares issuable upon such exercise into shares of Common Stock, free from preemptive rights or any other contingent purchase rights of persons other than the Holder (taking into account the adjustments of Section 8). The Company covenants that all shares of Common Stock so issuable and deliverable shall, upon conversion of the Warrant Shares in accordance with the terms thereof, be duly and validly authorized, issued and fully paid and non-assessable. The Company further covenants that it will not, without the prior

written consent of the Holder, take any actions to increase the par value of the Common Stock at any time while this Warrant is outstanding.

(c) The Company shall, as soon as practicable following the Original Issue Date, but not more than thirty (30) days thereafter, file a preliminary proxy statement for a vote of its stockholders at a special meeting (the “**Special Meeting**”) to approve the issuance of shares of Common Stock upon conversion of the Warrant Shares in compliance with Nasdaq Listing Rule 5635 (the “**Proposal**”). The Company, as soon as practicable following notification from the staff of the Securities and Exchange Commission that it has completed its review of the preliminary proxy statement or that it will not review the preliminary proxy statement, will (i) file and mail a definitive proxy statement for the vote of its stockholders to approve the Proposal and (ii) duly call, convene and hold the Special Meeting. The Company covenants and agrees that (A) its Board of Directors shall unanimously recommend that the Proposal be approved by the Company’s stockholders at the Special Meeting and at all meetings in which the Proposal is considered, and (B) that the Company shall use commercially reasonable efforts to solicit and obtain such approval within the timeframe set forth in this Section 7(c). If the Company’s stockholders do not approve the Proposal at the first Special Meeting in which it is voted on by stockholders, the Company covenants and agrees that it will submit the Proposal for approval of the Company’s stockholders at least semi-annually until such approval is obtained.

8. **Certain Adjustments.** The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant (the “**Number of Warrant Shares**”) are subject to adjustment from time to time as set forth in this Section 8.

(a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding, (A) pays a stock dividend on its Preferred Stock or otherwise makes a distribution on any class of capital stock issued and outstanding on the Original Issue Date and in accordance with the terms of such stock on the Original Issue Date or as amended, that is payable in shares of Preferred Stock, (B) subdivides its outstanding shares of Preferred Stock into a larger number of shares of Preferred Stock, (C) combines its outstanding shares of Preferred Stock into a smaller number of shares of Preferred Stock or (D) issues by reclassification of shares of capital stock any additional shares of Preferred Stock of the Company, then in each such case the number of Warrant Shares shall be multiplied by a fraction, the numerator of which shall be the number of shares of Preferred Stock outstanding immediately after such event and the denominator of which shall be the number of shares of Preferred Stock outstanding immediately before such event. Any adjustment made pursuant to clause (A) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, provided, however, that if such record date shall have been fixed and such dividend is not fully paid on the date fixed therefor, the Number of Warrant Shares shall be recomputed accordingly as of the close of business on such record date and thereafter the Number of Warrant Shares shall be adjusted pursuant to this paragraph as of the time of actual payment of such dividends. Any adjustment pursuant to clause (B), (C) or (D) of this paragraph shall become effective immediately after the effective date of such subdivision, combination or issuance. The Conversion Price (as defined in the Certificate of Designations) shall be adjusted pursuant to Section 7 of the Certificate of Designations.

(b) Pro Rata Distributions. If, on or after the Original Issue Date, the Company shall declare or make any dividend or other pro rata distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock or Preferred Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction, but, for the avoidance of doubt, excluding any distribution of shares of Common Stock or Preferred Stock subject to Section 8(a), any distribution of Purchase Rights (as defined below) subject to Section 8(c) and any Fundamental Transaction (as defined

below) subject to Section 8(d)) (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 (x) the complete exercise of this Warrant and (y) the immediate conversion of the Warrant Shares issuable upon such exercise into shares of Common Stock (without regard to any limitations or restrictions on exercise of this Warrant or conversion of the Warrant Shares issuable upon such exercise, including without limitation, the Maximum Percentage (as defined below)) immediately before the date on 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*, that 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 (and shall not be entitled to beneficial ownership of such 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 or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation.

(c) Purchase Rights. If at any time on or after the Original Issue Date, the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property, in each case pro rata to the record holders of any class of Common Stock (the “**Purchase Rights**”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon (x) the complete exercise of this Warrant and (y) the immediate conversion of the Warrant Shares issuable upon such exercise into shares of Common Stock (without regard to any limitations or restrictions on exercise of this Warrant or conversion of the Warrant Shares issuable upon such exercise, including without limitation, the Maximum Percentage) 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 Common Stock are to be determined for the grant, issuance or sale of such Purchase Rights; *provided*, that 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 (and shall not be entitled to beneficial ownership of such Common Stock as a result of such Purchase Right (and beneficial ownership) to such extent) and at the Holder’s election, in its sole discretion, either (1) such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right to be held similarly in abeyance) to the same extent as if there had been no such limitation) or (2) the Company shall offer the Holder the right upon exercise of such Purchase Right to acquire a security (e.g. a pre-funded warrant) that would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage but will otherwise to the extent possible have economic and other rights, preferences and privileges substantially consistent and on par with the securities or other property issuable upon exercise of the originally offered Purchase Rights.). As used in this Section 8(c), (i) “Options” means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities and (ii) “Convertible Securities” mean any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for shares of Common Stock.

(d) Fundamental Transactions.

(i) If, at any time while this Warrant is outstanding (i) the Company effects any merger or consolidation of the Company with or into another Person, in which the Company is not the surviving entity or in which the stockholders of the Company immediately prior to such merger or consolidation do not own, directly or indirectly, at least 50% of the voting power of the surviving entity immediately after such merger or consolidation, (ii) the Company effects any sale to another Person of all or substantially all of its assets in one or a series of related transactions, (iii) pursuant to any tender offer or exchange offer (whether by the Company or another Person), holders of capital stock tender shares representing more than 50% of the voting power of the capital stock of the Company and the Company or such other Person, as applicable, accepts such tender for payment, (iv) the Company consummates a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the voting power of the capital stock of the Company (except for any such transaction in which the stockholders of the Company immediately prior to such transaction maintain, in substantially the same proportions, the voting power of such Person immediately after the transaction) or (v) the Company effects any reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 8(a), above) (in any such case, a “**Fundamental Transaction**”), then following such Fundamental Transaction the Holder shall have the right to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of shares of Common Stock then issuable upon (x) the complete exercise of this Warrant and (y) the immediate conversion of the Warrant Shares issuable upon such exercise into shares of Common Stock (including any Distributions or Purchase Rights then held in abeyance pursuant to Sections 8(b), or 8(c), above) without regard to any limitations on exercise contained herein or any limitations on conversion of the Warrant Shares issuable upon such exercise (the “**Alternate Consideration**”). The Company shall not effect any Fundamental Transaction in which the Company is not the surviving entity or the Alternate Consideration includes securities of another Person unless prior to or simultaneously with the consummation thereof, any successor to the Company, surviving entity or other Person (including any purchaser of assets of the Company) shall assume the obligation to deliver to the Holder such Alternate Consideration as, in accordance with the foregoing provisions, the Holder may be entitled to receive, and the other obligations under this Warrant. The provisions of this paragraph (d) shall similarly apply to subsequent transactions analogous to a Fundamental Transaction type. If the Company undertakes a Fundamental Transaction in which the Company is not the surviving entity and the Alternate Consideration includes securities of another Person, then the Company shall provide that, prior to or simultaneously with the consummation of such Fundamental Transaction, any successor to the Company, surviving entity or other Person (including any purchaser of assets of the Company) shall assume the obligation to deliver to the Holder such Alternate Consideration as the Holder is entitled to receive in accordance with the foregoing provisions, and to assume the other obligations under this Warrant. The provisions of this paragraph (d) shall similarly apply to subsequent transactions analogous of a Fundamental Transaction type.

(ii) Notwithstanding anything to the contrary, in the event of a Fundamental Transaction (other than (x) any stock split or reverse stock split, (y) any transaction effected solely for the purpose of changing the jurisdiction of incorporation of the Company, or (z) any holding company reorganization or parent-subsiidiary merger not requiring stockholder approval pursuant to Sections 251(g) or 253 of the General Corporation Law of the State of Delaware (or any successor provisions thereof)), the Company or any Successor Entity (as defined below) shall, at the Holder’s option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction (or, if later, the date of the public announcement of the applicable Fundamental Transaction), purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value (as defined below) of the remaining unexercised portion of this Warrant on the date of the consummation of such

Fundamental Transaction, provided, however, that, if the Fundamental Transaction is not within the Company's control, including not approved by the Company's Board of Directors, the Holder shall only be entitled to receive from the Company or any Successor Entity the same type or form of consideration (and in the same proportion). "**Black Scholes Value**" means the value of this Warrant based on the Black-Scholes Option Pricing Model obtained from the "OV" function on Bloomberg determined as of the day of consummation of the applicable Fundamental Transaction for pricing purposes and reflecting (A) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date, (B) an expected volatility equal to the greater of (i) 100% and (ii) the 100 day volatility, each obtained from the HVT function on Bloomberg (determined utilizing a 365 day annualization factor) as of the Trading Day immediately following the public announcement of the applicable Fundamental Transaction, (C) the underlying price per share used in such calculation shall be the greater of (i) the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in such Fundamental Transaction and (ii) the greater of (x) the last VWAP immediately prior to the public announcement of such Fundamental Transaction and (y) the last VWAP immediately prior to the consummation of such Fundamental Transaction (D) a remaining option time equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date and (E) a zero cost of borrow. The payment of the Black Scholes Value will be made by wire transfer of immediately available funds within five 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 to comply with the provisions of this Section 8(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 in a Fundamental Transaction in which the Company is not the survivor (the "**Successor Entity**") to assume in writing all of the obligations of the Company under this Warrant in accordance with the provisions of this Section 8(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, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Warrant Shares 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 Warrant Shares 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 9 hereof, the Holder may elect, at its sole option, by delivery of written notice to the Company to waive this Section 8(d)(ii) to permit a Fundamental Transaction without the assumption of this Warrant.

(e) Number of Warrant Shares. Simultaneously with any adjustment to the Number of Warrant Shares pursuant to this Section 8, the Exercise Price shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the increased or decreased Number of Warrant Shares shall be the same as the aggregate Exercise Price in

effect immediately prior to such adjustment. Notwithstanding the foregoing, in no event may the Exercise Price be adjusted below the par value of the Preferred Stock then in effect.

(f) Calculations. All calculations under this Section 8 shall be made to the nearest one-tenth of one cent or the nearest share, as applicable.

(g) Notice of Adjustments. Upon the occurrence of each adjustment pursuant to this Section 8, the Company at its expense will, at the written request of the Holder, promptly compute such adjustment, in good faith, in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Warrant Shares or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in detail the facts upon which such adjustment is based. Upon written request, the Company will promptly deliver a copy of each such certificate to the Holder and to the Company's transfer agent.

(h) Notice of Corporate Events. If, while this Warrant is outstanding, the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock or Preferred Stock, including, without limitation, any granting of rights or warrants to subscribe for or purchase any capital stock of the Company or any subsidiary, (ii) authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then the Company shall deliver to the Holder a notice of such transaction at least ten (10) days prior to the applicable record or effective date on which a Person would need to hold Common Stock in order to participate in or vote with respect to such transaction; provided, however, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice. In addition, if while this Warrant is outstanding, the Company authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction contemplated by Section 8(d), other than a Fundamental Transaction under clause (iii) of Section 8(d), the Company shall deliver to the Holder a notice of such Fundamental Transaction at least thirty (30) days prior to the date such Fundamental Transaction is consummated. Holder agrees to maintain any information disclosed pursuant to this Section 8(h) in confidence until such information is publicly available, and shall comply with applicable law with respect to trading in the Company's securities following receipt of any such information. If, while this Warrant is outstanding, the Company provides any notice to holders of Series B Preferred Stock pursuant to the terms of the Certificate of Designations (including pursuant to Section 6 and Section 7 of the Certificate of Designations), the Company will simultaneously provide such notice to the Holder.

(i) Voluntary Adjustment By Company. Subject to the rules and regulations of the Principal Trading Market, the Company may at any time during the term of this Warrant, reduce the then-current Exercise Price to any amount and for any period of time deemed appropriate by the board of directors of the Company.

9. Limitations on Exercise.

(a) Notwithstanding anything to the contrary contained herein, the Company shall not effect the exercise of any portion of this Warrant, and the Holder of this Warrant shall not have the right to exercise any portion of the Warrant, and any such exercise shall be null and void ab initio and treated as if the exercise had not been made, to the extent that immediately prior to or following such exercise, the Holder, together with the Attribution Parties, beneficially owns or would beneficially own as determined in accordance with Section 13(d) of the Exchange Act and the rules promulgated thereunder, in excess of

[4.99%] [9.99%]¹ (the “**Maximum Percentage**”) of the Common Stock that would be issued and outstanding following such exercise. For purposes of calculating beneficial ownership for determining whether the Maximum Percentage is or will be exceeded, the aggregate number of shares of Common Stock held and/or beneficially owned by the Holder together with the Attribution Parties, shall include the number of shares of Common Stock held and/or beneficially owned by the Holder together with the Attribution Parties but shall exclude the number of shares of Common Stock which would be issuable upon exercise or conversion of the unexercised or unconverted portion of any securities of the Company held and/or beneficially owned by such Holder or any Attribution Party (including, without limitation, this Warrant and any convertible notes, convertible stock or other warrants) that are subject to a limitation on conversion or exercise analogous to the limitation contained herein. For purposes of this Section 9(a), beneficial ownership of the Holder or the Attribution Parties shall, except as set forth in the immediately preceding sentence, be calculated and determined in accordance with Section 13(d) of the Exchange Act and the rules promulgated thereunder. For purposes of this Warrant, in determining the number of outstanding shares of Common Stock, a Holder of this Warrant may rely on the number of outstanding shares of Common Stock as reflected in (1) the Company’s most recent Form 10-K, Form 10-Q, Current Report on Form 8-K or other public filing with the Securities and Exchange Commission, as the case may be, (2) a more recent public announcement by the Company or (3) any other notice by the Company or the Company’s transfer agent setting forth the number of shares of Common Stock outstanding (such issued and outstanding shares, the “**Reported Outstanding Share Number**”). For any reason at any time, upon the written or oral request of the Holder, the Company shall within one business day confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. The Holder shall disclose to the Company the number of shares of Common Stock that it, together with the Attribution Parties holds and/or beneficially owns and has the right to acquire through the exercise of derivative securities and any limitations on exercise or conversion analogous to the limitation contained herein contemporaneously or immediately prior to submitting an Exercise Notice for the relevant Warrant. If the Company receives an Exercise Notice 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, together with the Attribution Parties’, beneficial ownership, as determined pursuant to this Section 9(a), 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. 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 the Attribution Parties since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of Warrant Shares to the Holder upon exercise of this Warrant results in the Holder, together with the 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 Exchange Act), the number of Warrant Shares so issued by which the Holder’s, together with the 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 and/or the Attribution Parties 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. By written notice to the Company, a Holder of this Warrant may from time to time increase or decrease the Maximum Percentage to any other percentage not in excess of 19.99% specified in such notice; provided that any increase in the Maximum

¹ Will be the percentage indicated by each Holder prior to closing.

Percentage will not be effective until the 61st day after such notice is delivered to the Company and shall not negatively affect any partial exercise effected prior to such change.

(b) This Section 9 shall not restrict the number of shares of Common Stock which a Holder or the Attribution Parties may receive or beneficially own in order to determine the amount of securities or other consideration that such Holder or the Attribution Parties may receive in the event of a Fundamental Transaction as contemplated in Section 8(c) of this Warrant. For purposes of clarity, the Warrant Shares issuable pursuant to the terms of this Warrant that would cause the Holder to beneficially own shares of Common Stock in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder or the Attribution Parties for any purpose including for purposes of Section 13(d) of the Exchange Act and the rules promulgated thereunder or Section 16 of the Exchange Act and the rules promulgated thereunder, including Rule 16a-1(a)(1). 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 9 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 9 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.

(c) No Fractional Shares. No fractional Warrant Shares will be issued in connection with any exercise of this Warrant. Warrants may only be exercised for whole Warrant Shares.

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

11. Warrant Agent. The Company shall initially serve as warrant agent under this Warrant. 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.

12. Miscellaneous.

(a) No Rights as a Stockholder. Except as otherwise set forth in this Warrant, the Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or

withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, amalgamation, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company.

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

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

(d) Amendment and Waiver. Except as otherwise provided herein, the provisions of this Warrant may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder. No amendment or modification of any provision of this Warrant issued by the Company on the Original Issue Date shall be made unless the same is also offered to the Holder of this Warrant. In addition, no consideration shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of this Warrant issued by the Company on the Original Issue Date unless the same consideration (other than the reimbursement of legal fees) also is offered to the Holder of this Warrant.

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

(f) Governing Law; Jurisdiction. ALL QUESTIONS CONCERNING THE CONSTRUCTION, VALIDITY, ENFORCEMENT AND INTERPRETATION OF THIS WARRANT SHALL BE GOVERNED BY AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS

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

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

(h) Severability. If any part or provision of this Warrant is held unenforceable or in conflict with the applicable laws or regulations of any jurisdiction, the invalid or unenforceable part or provisions shall be replaced with a provision which accomplishes, to the extent possible, the original business purpose of such part or provision in a valid and enforceable manner, and the remainder of this Warrant shall remain binding upon the parties hereto.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

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

SAB BIOTHERAPEUTICS, INC.

By: _____

Name:

Title:

SCHEDULE 1

FORM OF EXERCISE NOTICE

[To be executed by the Holder to purchase shares of Preferred Stock under the Warrant]

Ladies and Gentlemen:

- (1) The undersigned is the Holder of Warrant No. __ (the "Warrant") issued by SAB Biotherapeutics, Inc., a Delaware corporation (the "Company"). Capitalized terms used herein and not otherwise defined herein have the respective meanings set forth in the Warrant.
- (2) The undersigned hereby exercises its right to purchase _____ Warrant Shares pursuant to the Warrant.
- (3) The Holder shall pay the sum of \$ _____ in immediately available funds to the Company in accordance with the terms of the Warrant.
- (4) Pursuant to this Exercise Notice, the Company shall deliver to the Holder Warrant Shares determined in accordance with the terms of the Warrant.
- (5) By its delivery of this Exercise Notice, the undersigned represents and warrants to the Company that in giving effect to the exercise evidenced hereby (i) the Holder is an "accredited investor" as defined in Regulation D promulgated under the Securities Act of 1933, as amended and (ii) 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 9(a) of the Warrant to which this notice relates.

Dated: _____

Name of Holder: _____

By: _____

Name: _____

Title: _____

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

SECURITIES PURCHASE AGREEMENT

This **SECURITIES PURCHASE AGREEMENT** (this “**Agreement**”), dated as of July 21, 2025, is entered into by and among SAB Biotherapeutics, Inc., a Delaware corporation (the “**Company**”), and each of the entities listed on Exhibit A attached to this Agreement (each, an “**Investor**” and together, the “**Investors**”).

WHEREAS, the Company and the Investors are executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D promulgated under the Securities Act;

WHEREAS, the Company desires to sell to the Investors, and each Investor desires to purchase from the Company, severally and not jointly, upon the terms and subject to the conditions stated in this Agreement, (A) shares (the “**Preferred Shares**”) of Series B Convertible Preferred Stock, par value \$0.0001 per share (and including any other class of securities into which the Series B Convertible Preferred Stock may hereafter be reclassified or changed into, the “**Preferred Stock**”) of the Company, having the designation, preferences, conversion or other rights, voting powers, restrictions, limitations as to dividends, qualifications and terms and conditions as specified in the Certificate of Designations attached hereto as Exhibit B (the “**Certificate of Designations**”), (B) accompanying warrants to purchase shares of Preferred Stock substantially in the form attached hereto as Exhibit C-1 (the “**Enrollment Warrants**”) and (C) accompanying warrants to purchase shares of Preferred Stock substantially in the form attached hereto as Exhibit C-2 (the “**Data Release Warrants**” and, together with the Preferred Shares and the Enrollment Warrants, the “**Securities**”); and

WHEREAS, contemporaneously with the sale of the Securities, the parties hereto will execute and deliver a Registration Rights Agreement, substantially in the form attached hereto as Exhibit D, pursuant to which the Company will agree to provide certain registration rights in respect of the Conversion Shares (as defined below) under the Securities Act and applicable state securities laws.

NOW THEREFORE, in consideration of the mutual agreements, representations, warranties and covenants herein contained, the Company and each Investor, severally and not jointly, agree as follows:

1. **Definitions.** As used in this Agreement, the following terms shall have the following respective meanings:

“**Affiliate**” means, with respect to any Person, any other Person that, directly or indirectly through one or more intermediaries, controls, is controlled by or is under common control with such Person.

“**Agreement**” has the meaning set forth in the recitals.

“**Amended and Restated Bylaws**” means the Bylaws of the Company, as currently in effect.

“**Amended and Restated Certificate of Incorporation**” means the Certificate of Incorporation of the Company, as amended and as currently in effect.

“**Benefit Plan**” or “**Benefit Plans**” means employee benefit plans as defined in Section 3(3) of ERISA and all other employee benefit practices or arrangements, including, without limitation, any such practices or arrangements providing severance pay, sick leave, vacation pay, salary continuation for disability, retirement benefits, deferred compensation, bonus pay, incentive pay, stock options or other stock-based compensation, hospitalization insurance, medical insurance, life insurance, scholarships or tuition reimbursements, maintained by the Company or to which the Company or any of its subsidiaries is obligated to contribute for employees or former employees of the Company and its subsidiaries.

“**Board of Directors**” means the board of directors of the Company.

“**Business Day**” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

“**Certificate of Designations**” has the meaning set forth in the recitals.

“**Closing**” has the meaning set forth in [Section 2.2](#).

“**Closing Date**” has the meaning set forth in [Section 2.2](#).

“**Code**” means the U.S. Internal Revenue Code of 1986, as amended.

“**Common Stock**” means the Company’s common stock, par value \$0.0001 per share.

“**Common Stock Equivalents**” means any securities of the Company that would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, rights, options, warrants or other instrument that is at any time convertible into or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“**Company**” has the meaning set forth in the recitals.

“**Confidential Data**” has the meaning set forth in [Section 3.32](#).

“**Conversion Shares**” has the meaning set forth in [Section 3.4](#).

“**Data Release Warrants**” has the meaning set forth in the recitals.

“**Disclosure Document**” has the meaning set forth in [Section 5.3](#).

“**Disclosure Time**” means (i) if this Agreement is signed after 9:00 a.m. (New York City time) and before midnight (New York City time) on any Business Day, 9:01 a.m. (New York City time) on the Business Day immediately following the date hereof, or (ii) if this Agreement is signed between midnight (New York City time) and 9:00 a.m. (New York City time) on any Business Day, no later than 9:01 am (New York City time) on the date hereof.

“**Disqualification Event**” has the meaning set forth in Section 3.28.

“**Drug Regulatory Agency**” means the U.S. Food and Drug Administration (“**FDA**”) or other foreign, state, local or comparable governmental authority responsible for regulation of the research, development, testing, manufacturing, processing, storage, labeling, sale, marketing, advertising, distribution and importation or exportation of drug or biological products and drug or biological product candidates.

“**Enrollment Warrants**” has the meaning set forth in the recitals.

“**Environmental Laws**” has the meaning set forth in Section 3.15.

“**ERISA**” means the U.S. Employee Retirement Income Security Act of 1974, as amended.

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

“**Financial Statements**” has the meaning set forth in Section 3.8(b).

“**Fundamental Representations**” means the representations and warranties made by the Company in Sections 3.1 (Organization and Power), 3.2 (Capitalization), 3.4 (Authorization), 3.5 (Valid Issuance), 3.6 (No Conflict), 3.7 (Consents), 3.8 (SEC Filings; Financial Statements), 3.18 (Nasdaq Stock Market), 3.23 (Price Stabilization of Common Stock), 3.24 (Investment Company Act), 3.25 (General Solicitation; No Integration or Aggregation), 3.26 (Brokers and Finders), 3.27 (Reliance by the Investors), 3.28 (No Disqualification Events), 3.29 (Other Covered Persons), and 3.30 (No Additional Agreements).

“**GAAP**” has the meaning set forth in Section 3.8(b).

“**GDPR**” has the meaning set forth in Section 3.33.

“**Governmental Authorizations**” has the meaning set forth in Section 3.11.

“**Health Care Laws**” has the meaning set forth in Section 3.21.

“**HIPAA**” has the meaning set forth in Section 3.32.

“**Indemnified Persons**” has the meaning set forth in Section 5.9(a).

“**Intellectual Property**” has the meaning set forth in Section 3.12.

“**Investor**” and “**Investors**” have the meanings set forth in the recitals.

“**Issuer Covered Person**” has the meaning set forth in Section 3.28.

“**IT Systems**” has the meaning set forth in Section 3.32.

“**Material Adverse Effect**” means any change, event, circumstance, development, condition, occurrence or effect that, individually or in the aggregate, (a) was, is, or would

reasonably be expected to be, materially adverse to the business, financial condition, prospects, properties, assets, liabilities, stockholders' equity or results of operations of the Company and its subsidiaries, taken as a whole, or (b) materially delays or materially impairs the ability of the Company to comply, or prevents the Company from complying, with its obligations under this Agreement, the other Transaction Agreements, or with respect to the Closing, or would reasonably be expected to do so.

“**Nasdaq**” means The Nasdaq Capital Market or any other trading market of The Nasdaq Stock Market LLC.

“**National Exchange**” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question, together with any successor thereto: the NYSE American, The New York Stock Exchange, The Nasdaq Global Market, The Nasdaq Global Select Market and The Nasdaq Capital Market.

“**Other Filings**” has the meaning set forth in Section 5.2(c).

“**Person**” means an individual, partnership, corporation, limited liability company, business trust, joint stock company, trust, unincorporated association, joint venture or any other entity or organization.

“**Personal Data**” has the meaning set forth in Section 3.32.

“**Placement Agents**” means Leerink Partners LLC, UBS Securities LLC, Chardan Capital Markets, LLC and Oppenheimer and Co. Inc.

“**Preferred Share Price**” means \$175.00.

“**Preferred Shares**” has the meaning set forth in the recitals.

“**Preferred Stock**” has the meaning set forth in the recitals.

“**Privacy Laws**” has the meaning set forth in Section 3.33.

“**Privacy Statements**” has the meaning set forth in Section 3.33.

“**Process**” or “**Processing**” has the meaning set forth in Section 3.33.

“**Proposal**” has the meaning set forth in Section 5.2(b).

“**Registration Rights Agreement**” has the meaning set forth in Section 6.1(j).

“**Regulatory Agencies**” has the meaning set forth in Section 3.20.

“**Requisite Stockholder Approval**” has the meaning set forth in Section 3.7.

“**Rule 144**” means Rule 144 promulgated by the SEC pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the SEC having substantially the same effect as such Rule.

“**SEC**” means the U.S. Securities and Exchange Commission.

“**SEC Reports**” means (a) the Company’s most recently filed Annual Report on Form 10-K, and (b) all Quarterly Reports on Form 10-Q or Current Reports on Form 8-K filed or furnished (as applicable) by the Company following the end of the most recent fiscal year for which an Annual Report on Form 10-K has been filed and prior to the execution of this Agreement, together in each case with any documents incorporated by reference therein or exhibits thereto.

“**Securities**” has the meaning set forth in the recitals.

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

“**Short Sales**” include, without limitation, (a) all “short sales” as defined in Rule 200 promulgated under Regulation SHO under the Exchange Act, whether or not against the box, and all types of direct and indirect stock pledges, forward sale contracts, options, puts, calls, short sales, swaps, “put equivalent positions” (as defined in Rule 16a-1(h) under the Exchange Act) and similar arrangements (including on a total return basis), and (b) sales and other transactions through non-U.S. broker dealers or non-U.S. regulated brokers (but shall not be deemed to include the location and/or reservation of borrowable shares of Common Stock).

“**Special Meeting**” has the meaning set forth in Section 5.2(b).

“**Standard Settlement Period**” means the standard settlement period, expressed in a number of Trading Days, on the Company’s primary trading market with respect to the Common Stock as in effect on the date of delivery of a certificate or book entry notation representing Preferred Stock, Warrant Shares or the Conversion Shares, as applicable, issued with a restrictive legend.

“**Studies**” has the meaning set forth in Section 3.20.

“**Support Agreement**” means that certain support agreement, dated the date hereof, by and among the Company and each of the parties thereto in substantially the form attached hereto as Exhibit E.

“**Tax**” or “**Taxes**” means any and all federal, state, local, foreign and other taxes, levies, fees, imposts, duties and charges of whatever kind (including any interest, penalties or additions to the tax imposed in connection therewith or with respect thereto), whether or not imposed on the Company or its subsidiaries (if any) including, without limitation, taxes imposed on, or measured by, income, franchise, profits or gross receipts, and also ad valorem, value added, sales, use, service, real or personal property, capital stock, license, payroll, withholding, employment, social security, workers’ compensation, unemployment compensation, utility, severance, production, excise, stamp, occupation, premium, windfall profits, transfer and gains taxes and customs duties.

“**Tax Returns**” means returns, reports, information statements and other documentation (including any additional or supporting material) filed or maintained, or required to be filed or maintained, in connection with the calculation, determination, assessment or collection of any Tax

and shall include any amended returns required as a result of examination adjustments made by the Internal Revenue Service or other Tax authority.

“**Trading Day**” means a day on which the Common Stock is traded for any period on a National Exchange or if the Common Stock is not traded on a National Exchange, on a day that the Common Stock is traded on another securities market on which the Common Stock is then being traded.

“**Transaction Agreements**” means this Agreement, the Warrants, the Certificate of Designations, the Registration Rights Agreement, and the Support Agreement.

“**Transfer Agent**” means, with respect to the Common Stock, Continental Stock Transfer & Trust Company or such other financial institution that provides transfer agent services as the Company may engage from time to time.

“**Warrant Shares**” has the meaning set forth in Section 3.4.

“**Warrants**” means the Enrollment Warrants and the Data Release Warrants.

2. Purchase and Sale of Securities.

2.1 Purchase and Sale. On the Closing Date, upon the terms and subject to the conditions set forth herein, the Company agrees to sell, and the Investors, severally and not jointly, agree to purchase, the number and type of Securities, for the aggregate purchase price, set forth opposite the Investor’s name on Exhibit A. The purchase price per Preferred Share and accompanying Warrants is equal to the Preferred Share Price.

2.2 Closing. Subject to the satisfaction or waiver of the conditions set forth in Section 6 of this Agreement, the closing of the purchase and sale of the Securities (the “**Closing**” and the date on which the Closing occurs, the “**Closing Date**”) shall occur remotely via the exchange of documents and signatures at such time as agreed to by the Company and the Investors but (i) in no event earlier than the first Business Day after the date of this Agreement, and (ii) in no event later than the fifth Business Day after the date of this Agreement. At the Closing, the Securities shall be issued and registered in the name of the Investor, or in such nominee name(s) as designated by such Investor, representing the number of Securities to be purchased by the Investor at such Closing as set forth in Exhibit A, in each case against payment to the Company of the purchase price therefor (the “**Aggregate Purchase Amount**”) in full, by wire transfer to the Company of immediately available funds, at or prior to the Closing, in accordance with wire instructions provided by the Company to the Investors at least one Business Day prior to the Closing. On the Closing Date, the Company will (A) cause the Transfer Agent to issue the Preferred Shares in book-entry form, free and clear of all restrictive and other legends (except as expressly provided in Section 4.10 hereof) and the Company shall provide evidence of such issuance from the Company’s Transfer Agent as soon as reasonably practical following the Closing Date to each Investor, and (B) deliver to such Investor (or such Investor’s designated custodian per its delivery instructions), or in such nominee name(s) as designated by such Investor, Warrants exercisable for a number of shares of Preferred Stock as set forth in Exhibit A with respect to such Investor. In the event that the Closing has not occurred within one Business Day after the expected Closing Date, unless otherwise agreed by the Company and such Investor, the Company shall

promptly (but no later than one Business Day thereafter) return the previously wired Aggregate Purchase Amount to each respective Investor by wire transfer of United States dollars in immediately available funds to the account specified by each Investor, and any book entries for the Securities shall be deemed cancelled; provided that, unless this Agreement has been terminated pursuant to Section 7, such return of funds shall not terminate this Agreement or relieve such Investor of its obligation to purchase, or the Company of its obligation to issue and sell, the Securities at the Closing.

3. Representations and Warranties of the Company. Except as set forth in the SEC Reports (other than as to the Fundamental Representations, which are not so qualified), the Company hereby represents and warrants to each of the Investors and the Placement Agent that the statements contained in this Section 3 are true and correct as of the date of this Agreement and as of the Closing Date (except for the representations and warranties that speak as of a specific date, which shall be made as of such date).

3.1 Organization and Power. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware, has the requisite power and authority to own, lease and operate its properties and to carry on its business as now conducted and described in the SEC Reports and is qualified to do business in each jurisdiction in which the character of its properties or the nature of its business requires such qualification, except where such failure to be in good standing or to have such power and authority or to so qualify would not reasonably be expected to have a Material Adverse Effect. Each of the Company's subsidiaries is (i) duly incorporated and validly existing and in good standing under the laws of the jurisdiction of its incorporation and has the requisite power and authority to carry on its business as now conducted and to own or lease its properties, and (ii) qualified to do business as a foreign corporation and in good standing in each jurisdiction in which such qualification is required, except in each case as would not reasonably be expected to have a Material Adverse Effect.

3.2 Capitalization. The Company's disclosure of its authorized, issued and outstanding capital stock in the SEC Reports containing such disclosure was accurate in all material respects as of the date indicated in such SEC Reports. All of the issued and outstanding shares of Common Stock have been duly authorized and validly issued and are fully paid and non-assessable. None of the outstanding shares of capital stock of the Company were issued in violation of any preemptive or other similar rights of any securityholder of the Company which have not been waived, and such shares were issued in compliance in all material respects with applicable state and federal securities law and any rights of third parties. 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 SEC Reports; 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, in the case of any foreign subsidiary, for directors' qualifying shares) and are owned directly or indirectly by the Company,

free and clear of any lien, charge, encumbrance, security interest, restriction on voting or transfer or any other claim of any third party.

3.3 Registration Rights. Except as set forth in the Transaction Agreements or as disclosed in the SEC Reports, the Company is presently not under any obligation, and has not granted any rights, to register under the Securities Act any of the Company's presently outstanding securities or any of its securities that may hereafter be issued, other than such rights and obligations that have expired or been satisfied or waived.

3.4 Authorization. The Company has all requisite corporate power and authority to enter into the Transaction Agreements and to carry out and perform its obligations under the terms of the Transaction Agreements, including the issuance and sale of the Securities and the issuance of (i) the shares of Preferred Stock issuable upon exercise of the Warrants (the "**Warrant Shares**") and (ii) the shares of Common Stock issuable upon conversion of (A) the Preferred Shares and (B) the Warrant Shares ((A) and (B) collectively, the "**Conversion Shares**"). Except for the Requisite Stockholder Approval, all corporate action on the part of the Company, its officers, directors and stockholders necessary for the authorization of the Preferred Shares, the Conversion Shares and the Warrant Shares, the authorization, execution, delivery and performance of the Transaction Agreements and the consummation of the transactions contemplated herein, including the issuance and sale of the Securities, the Conversion Shares and the Warrant Shares has been taken, including, without limitation, the approval of the Board of Directors (or a committee thereof) in accordance with Section 144(b)(1) of the DGCL. This Agreement has been duly executed and delivered by the Company and, assuming the due authorization, execution and delivery by each Investor of this Agreement and that this Agreement constitutes the legal, valid and binding agreement of each Investor, this Agreement and each of the Warrants constitutes a legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium and similar laws relating to or affecting creditors generally or by general equity principles (regardless of whether such enforceability is considered in a proceeding in equity or at law). Upon its execution by the Company and the other parties thereto and assuming that it constitutes legal, valid and binding agreements of the other parties thereto, the Registration Rights Agreement will constitute a legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium and similar laws relating to or affecting creditors generally or by general equity principles (regardless of whether such enforceability is considered in a proceeding in equity or at law).

3.5 Valid Issuance. The Preferred Shares being purchased by the Investors hereunder have been duly and validly authorized and, upon issuance pursuant to the terms hereof, against full payment therefor in accordance with the terms of this Agreement, will be duly and validly issued, fully paid and non-assessable and will be issued free and clear of any liens or other restrictions (other than those as provided in the Transaction Agreements or restrictions on transfer under applicable state and federal securities laws) and the holder of the Preferred Shares shall be entitled to all rights accorded to a holder of Preferred Stock. The Conversion Shares have been duly and validly authorized and reserved for issuance and, upon issuance pursuant to the terms of the Certificate of Designations, will be duly and validly issued, fully paid and non-assessable and will be issued free and clear of any liens or other restrictions (other than those as provided in the

Transaction Agreements or restrictions on transfer under applicable state and federal securities laws) and the holder of the Conversion Shares shall be entitled to all rights accorded to a holder of Common Stock. The Warrant Shares have been duly and validly authorized and reserved for issuance and, upon issuance pursuant to the terms of the Warrants against full payment therefor in accordance with the terms of the Warrants, will be duly and validly issued, fully paid and non-assessable and will be issued free and clear of any liens or other restrictions (other than those as provided in the Transaction Agreements or restrictions on transfer under applicable state and federal securities laws), and the holder of the Warrant Shares shall be entitled to all rights accorded to a holder of Preferred Stock. The issuance and delivery of the Securities does not, and the conversion in full of the Preferred Shares or any shares of Preferred Stock issued upon exercise of the Warrants, the exercise in full of the Warrants and the issuance and delivery of the Conversion Shares or the Warrant Shares (as applicable) thereupon will not, (a) obligate the Company to offer to issue, or issue, shares of Common Stock or other securities to any Person (other than the Investors) pursuant to any preemptive rights, rights of first refusal, rights of participation or similar rights, or (b) result in any adjustment (automatic, at the election of any Person or otherwise) of the exercise, conversion, exchange or reset price under, or any other anti-dilution adjustment pursuant to, any outstanding securities of the Company. Subject to the accuracy of the representations and warranties made by the Investors in Section 4, the offer and sale of the Securities to the Investors is, and will be, (i) exempt from the registration and prospectus delivery requirements of the Securities Act, and (ii) exempt from (or otherwise not subject to) the registration and qualification requirements of applicable securities laws of the states of the United States.

3.6 No Conflict. The execution, delivery and performance of the Transaction Agreements by the Company, the issuance and sale of the Securities and the consummation of the other transactions contemplated by the Transaction Agreements will not (i) violate any provision of the Amended and Restated Certificate of Incorporation or Amended and Restated Bylaws of the Company, (ii) conflict with or result in a violation of or default (with or without notice or lapse of time, or both) under, or give rise to a right of termination, cancellation or acceleration of any obligation, a change of control right or to a loss of a benefit under any agreement or instrument, credit facility, franchise, license, judgment, order, statute, law, ordinance, rule or regulations, applicable to the Company or any of its subsidiaries or their respective properties or assets, or (iii) result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company or any of its subsidiaries is subject (including federal and state securities laws and regulations) and the rules and regulations of any self-regulatory organization to which the Company or its securities are subject, or by which any property or asset of the Company or any of its subsidiaries is bound or affected, except, in the case of clauses (ii) and (iii), as would not, individually or in the aggregate, be reasonably expected to have a Material Adverse Effect.

3.7 Consents. Assuming the accuracy of the representations and warranties of each Investor set forth in Section 4 hereof, no consent, approval, authorization, filing with or order of or registration with, any court or governmental agency or body is required in connection with the authorization, execution or delivery by the Company of the Transaction Agreements, the issuance and sale of the Securities and the performance by the Company of its other obligations under the Transaction Agreements, except (a) as have been or will be obtained or made under the Securities Act or the Exchange Act, (b) the filing of any requisite notices and/or application(s) to the National Exchange for the issuance and sale of the Conversion Shares and the listing of the

Conversion Shares for trading or quotation, as the case may be, thereon in the time and manner required thereby, (c) customary post-closing filings with the SEC or pursuant to state securities laws in connection with the offer and sale of the Preferred Shares, the Conversion Shares or the Warrant Shares by the Company in the manner contemplated herein, which will be filed on a timely basis, (d) the filing of any registration statement required to be filed by the Registration Rights Agreement, (e) approval of the Proposal by the stockholders of the Company (the “**Requisite Stockholder Approval**”), or (f) such that the failure of which to obtain would not have a Material Adverse Effect. All notices, consents, authorizations, orders, filings and registrations which the Company is required to deliver or obtain prior to the Closing pursuant to the preceding sentence have been obtained or made or will be delivered or obtained or effected, and shall remain in full force and effect, on or prior to the Closing.

3.8 SEC Filings; Financial Statements.

(a) The Company has filed all forms, statements, certifications, reports and documents required to be filed by it with the SEC under Section 13, 14(a) and 15(d) of the Exchange Act for the one year preceding the date of this Agreement and is in compliance with General Instruction I.A.3 of Form S-3. As of the time it was filed with the SEC (or, if amended or superseded by a filing prior to the date of this Agreement, then on the date of such filing), each of the filed SEC Reports complied in all material respects with the applicable requirements of the Exchange Act, and, as of the time they were filed, none of the filed SEC Reports contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. There are no outstanding or unresolved comments from the SEC staff with respect to the SEC Reports. To the Company’s knowledge, none of the SEC Reports are the subject of an ongoing SEC review. The interactive data in eXtensible Business Reporting Language included in the SEC Reports fairly presents the information called for in all material respects and has been prepared in accordance with the SEC’s rules and guidelines applicable thereto.

(b) The consolidated financial statements of the Company included in the SEC Reports (collectively, the “**Financial Statements**”) comply in all material respects with applicable accounting requirements and the rules and regulations of the SEC with respect thereto as in effect at the time of filing (or to the extent corrected by a subsequent restatement) and fairly present in all material respects the consolidated financial position of the Company and its subsidiaries as of the dates indicated, and the results of its operations and cash flows for the periods therein specified, and have been prepared in accordance with United States generally accepted accounting principles (“**GAAP**”) applied on a consistent basis throughout the periods therein specified (except as otherwise noted therein, and except that any unaudited financial statements may not contain certain footnotes and are subject to normal and recurring year-end adjustments). Except as set forth in the Financial Statements filed prior to the date of this Agreement, the Company has not incurred any liabilities, contingent or otherwise, except (i) those incurred in the ordinary course of business, consistent with past practices since the date of such financial statements or (ii) liabilities not required under GAAP to be reflected in the Financial Statements, in either case, none of which, individually or in the aggregate, have had or would reasonably be expected to have a Material Adverse Effect.

3.9 Absence of Changes. Since December 31, 2024, (a) the Company has conducted its business only in the ordinary course of business and there have been no material transactions entered into by the Company or any of its subsidiaries (except for the execution and performance of this Agreement and the discussions, negotiations and transactions related thereto); (b) no material change to any material contract or arrangement by which the Company or any of its subsidiaries is bound or to which any of its assets or properties is subject has been entered into that has not been disclosed in the SEC Reports; and (c) there has not been any other event or condition of any character that has had or would reasonably be expected to have a Material Adverse Effect; provided, however, that none of the following will be deemed in themselves, either alone or in combination, to constitute, and that none of the following will be taken into account in determining whether there has been or will be, a Material Adverse Effect under this Section 3.9:

(i) any change generally affecting the economy, financial markets or political, economic or regulatory conditions in the United States or any other geographic region in which the Company conducts business, provided that the Company is not disproportionately affected thereby;

(ii) general financial, credit or capital market conditions, including interest rates or exchange rates, or any changes therein, provided that the Company is not disproportionately affected thereby;

(iii) any change that generally affects industries in which the Company and its subsidiaries conduct business, provided that the Company is not disproportionately affected thereby;

(iv) earthquakes, hurricanes, tsunamis, tornadoes, floods, mudslides, fires or other natural disasters, weather conditions, global pandemics, including the COVID-19 pandemic and related strains, epidemic or similar health emergency, and other force majeure events in the United States or any other location, provided that the Company is not disproportionately affected thereby;

(v) national or international political or social conditions (or changes in such conditions), whether or not pursuant to the declaration of a national emergency or war, or the occurrence of any military or terrorist attack, provided that the Company is not disproportionately affected thereby;

(vi) material changes in laws after the date of this Agreement; and

(vii) in and of itself, any material failure by the Company to meet any published or internally prepared estimates of revenues, expenses, earnings or other economic performance for any period ending on or after the date of this Agreement (it being understood that the facts and circumstances giving rise to such failure may be deemed to constitute, and may be taken into account in determining whether there has been, a Material Adverse Effect to the extent that such facts and circumstances are not otherwise described in clauses (i)-(v) of this definition).

3.10 Absence of Litigation. There is no action, suit, proceeding, arbitration, claim, investigation, charge, complaint or inquiry pending or, to the Company's knowledge, threatened against the Company or any of its subsidiaries which, individually or in the aggregate, has had or would reasonably be expected to have a Material Adverse Effect, nor are there any

orders, writs, injunctions, judgments or decrees outstanding of any court or government agency or instrumentality and binding upon the Company or any of its subsidiaries that have had or would reasonably be expected to have a Material Adverse Effect. Neither the Company nor any subsidiary, nor to the knowledge of the Company, any director or officer of the Company or any subsidiary, is, or within the last ten years has been, the subject of any action involving a claim of violation of or liability under federal or state securities laws relating to the Company or such subsidiary or a claim of breach of fiduciary duty relating to the Company or such subsidiary.

3.11 Compliance with Law; Permits. Neither the Company nor any of its subsidiaries is in violation of, or has received any notices of violations with respect to, any laws, statutes, ordinances, rules or regulations of any governmental body, court or government agency or instrumentality, except for violations which, individually or in the aggregate, have not had and would not reasonably be expected to have a Material Adverse Effect. The Company and its subsidiaries have all required licenses, permits, certificates and other authorizations (collectively, “**Governmental Authorizations**”) from such federal, state or local government or governmental agency, department or body that are currently necessary for the operation of the business of the Company and its subsidiaries as currently conducted, except where the failure to possess currently such Governmental Authorizations has not had and is not reasonably expected to have a Material Adverse Effect. Neither the Company nor any subsidiary has received any written (or, to the Company’s knowledge, oral) notice regarding any revocation or material modification of any such Governmental Authorization, which, individually or in the aggregate, if the subject of an unfavorable decision, ruling or finding, has or would reasonably be expected to result in a Material Adverse Effect.

3.12 Intellectual Property. The Company and its subsidiaries own, or have rights to use, all material inventions, patent applications, patents, trademarks, trade names, service names, service marks, copyrights, trade secrets, know how (including unpatented and/or unpatentable proprietary or confidential information, systems or procedures) and other intellectual property as described in the SEC Reports necessary for, or used in the conduct of their respective businesses (including as described in the SEC Reports) (collectively, “**Intellectual Property**”), except where any failure to own, possess or acquire such Intellectual Property has not had, and would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. The Intellectual Property of the Company and its subsidiaries has not been adjudged by a court of competent jurisdiction to be invalid or unenforceable, in whole or in part. To the Company’s knowledge: (i) there are no third parties who have rights to any Intellectual Property, including no liens, security interests, or other encumbrances; and (ii) there is no infringement by third parties of any Intellectual Property, except, in each case, which, individually or in the aggregate, have not had and would not reasonably be expected to have a Material Adverse Effect. No action, suit, or other proceeding is pending, or, to the Company’s knowledge, is threatened: (A) challenging the Company’s or its subsidiaries’ rights in or to any Intellectual Property; (B) challenging the validity, enforceability or scope of any Intellectual Property; or (C) alleging that the Company or any of its subsidiaries infringes, misappropriates, or otherwise violates any patent, trademark, trade name, service name, copyright, trade secret or other proprietary rights of others, except, in each case, which, individually or in the aggregate, have not had and would not reasonably be expected to have a Material Adverse Effect. The Company and its subsidiaries have complied in all material respects with the terms of each agreement pursuant to which Intellectual Property has been licensed to the Company or any of its subsidiaries in all material respects, and

to the Company's knowledge all such agreements are in full force and effect. To the Company's knowledge, there are no material defects in any of the patents or patent applications included in the Intellectual Property. The Company and its subsidiaries have taken all reasonable steps to protect, maintain and safeguard their Intellectual Property.

3.13 Employee Benefits. Except as would not be reasonably likely to result in a Material Adverse Effect, each Benefit Plan has been established and administered in accordance with its terms and in compliance with the applicable provisions of ERISA, the Code, the Patient Protection and Affordable Care Act of 2010, as amended, and other applicable laws, rules and regulations. The Company and its subsidiaries are in compliance with all applicable federal, state and local laws, rules and regulations regarding employment, except for any failures to comply that are not reasonably likely, individually or in the aggregate, to have a Material Adverse Effect. There is no labor dispute, strike or work stoppage against the Company or its subsidiaries pending or, to the knowledge of the Company, threatened which may interfere with the business activities of the Company, except where such dispute, strike or work stoppage is not reasonably likely, individually or in the aggregate, to have a Material Adverse Effect.

3.14 Taxes. The Company and its subsidiaries have filed all federal, state and foreign income Tax Returns and other Tax Returns required to have been filed under applicable law (or extensions have been duly obtained) and have paid all Taxes required to have been paid by them, except for those which are being contested in good faith and except where failure to file such Tax Returns or pay such Taxes would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. No assessment in connection with United States federal tax returns has been made against the Company. The charges, accruals and reserves on the books of the Company in respect of any income and corporation tax liability for any years not finally determined are adequate to meet any assessments or reassessments for additional income tax for any years not finally determined, except to the extent of any inadequacy that would not result in a Material Adverse Effect. No audits, examinations, or other proceedings with respect to any material amounts of Taxes of the Company and its subsidiaries are presently in progress or have been asserted or proposed in writing without subsequently being paid, settled or withdrawn. There are no liens on any of the assets of the Company. At all times since inception, the Company has been and continues to be classified as a corporation for U.S. federal income tax purposes. Neither the Company nor any of its subsidiaries has been a United States real property holding corporation within the meaning of Code Section 897(c)-2 during the period specified in Code Section 897(c)(1)(A)(ii).

3.15 Environmental Laws. The Company and its subsidiaries (i) are in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("**Environmental Laws**"), (ii) have received all permits and other Governmental Authorizations required under applicable Environmental Laws to conduct their business, and (iii) are in compliance with all terms and conditions of any such permit, license or approval, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals or failure to comply with the terms and conditions of such permits, licenses or approvals would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. None of the Company nor any of its subsidiaries has received since January 1, 2024, any written notice or other communication (in

writing or otherwise), whether from a governmental authority or other Person, that alleges that the Company or any subsidiary is not in compliance with any Environmental Law and, to the knowledge of the Company, there are no circumstances that may prevent or interfere with the Company's or any subsidiary's compliance in any material respects with any Environmental Law in the future, except where such failure to comply would not reasonably be expected to have a Material Adverse Effect. To the knowledge of the Company: (A) no current or (during the time a prior property was leased or controlled by the Company) prior property leased or controlled by the Company or any subsidiary has received since January 1, 2024, any written notice or other communication relating to property owned or leased at any time by the Company, whether from a governmental authority, or other Person, that alleges that such current or prior owner or the Company or any subsidiary is not in compliance with or violated any Environmental Law relating to such property, and (B) the Company has no material liability under any Environmental Law.

3.16 Title. Each of the Company and its subsidiaries has good and marketable title to all personal property owned by it that is material to the business of the Company, free and clear of all liens, encumbrances and defects except such as do not materially and adversely affect the value of such property and do not materially and adversely interfere with the use made and proposed to be made of such property by the Company or its subsidiaries, as the case may be. Any real property and buildings held under lease by the Company or its subsidiaries is held under valid, subsisting and enforceable leases with such exceptions as are not material and do not interfere with the use made and proposed to be made of such property and buildings by the Company or its subsidiaries, as the case may be. The Company does not own any real property.

3.17 Insurance. The Company carries or is entitled to the benefits of insurance in such amounts and covering such risks that is customary for comparably situated companies and is adequate for the conduct of its business and the value of its real and personal properties (owned or leased) and tangible assets, and each of such insurance policies is in full force and effect and the Company is in compliance in all material respects with the terms of such insurance policies. Other than customary end-of-policy notifications from insurance carriers, since January 1, 2024, the Company has not received any notice or other communication regarding any actual or possible: (i) cancellation or invalidation of any material insurance policy or (ii) refusal or denial of any coverage, reservation of rights or rejection of any material claim under any insurance policy.

3.18 Nasdaq Stock Market. The issued and outstanding shares of Common Stock are registered pursuant to Section 12(b) of the Exchange Act and are listed for trading on the Nasdaq under the symbol "SABS". The Company is in compliance with all listing requirements of Nasdaq applicable to the Company. As of the date of this Agreement, there is no suit, action, proceeding or investigation pending or, to the knowledge of the Company, threatened against the Company by Nasdaq or the SEC to prohibit or terminate the listing of the Common Stock on Nasdaq or to deregister the Common Stock under the Exchange Act. The Company has taken no action as of the date of this Agreement that is designed to terminate the registration of the Common Stock under the Exchange Act.

3.19 Sarbanes-Oxley Act. The Company is, and since January 1, 2024, has been, in compliance in all material respects with all applicable requirements of the Sarbanes-Oxley Act of 2002 and applicable rules and regulations promulgated by the SEC thereunder.

3.20 Clinical Data and Regulatory Compliance. Except as would not reasonably be expected to result in a Material Adverse Effect: (i) the preclinical tests and clinical trials and other studies used to support regulatory approval (collectively, “**Studies**”) being conducted by or on behalf of, or sponsored by, the Company or its subsidiaries that are described in, or the results of which are referred to in, the SEC Reports were (and, if still pending, are being) conducted in all material respects in accordance with the protocols, procedures and controls designed and approved for such Studies and with standard medical and scientific research procedures; (ii) each description of the results of such Studies is accurate and complete in all material respects and fairly presents the data derived from such Studies, and the Company and its subsidiaries have no knowledge of any other studies the results of which are inconsistent with, or otherwise call into question, the results described or referred to in the SEC Reports; (iii) the Company and its subsidiaries have made all such filings and obtained all such approvals as may be required by the FDA or from any other U.S. federal, state or local government or foreign government or Drug Regulatory Agency, or Institutional Review Board, each having jurisdiction over biopharmaceutical products (collectively, the “**Regulatory Agencies**”) for the conduct of its business as described in the SEC Reports; (iv) neither the Company nor any of its subsidiaries has received any notice of, or correspondence from, any of the Regulatory Agencies requiring the termination or suspension of or imposing any clinical hold on any clinical trials that are described or referred to in the SEC Reports; and (v) the Company and its subsidiaries have each operated and currently are in compliance in all material respects with all applicable rules, regulations and policies of the Regulatory Agencies.

3.21 Compliance with Health Care Laws. The Company and its subsidiaries are in compliance in all material respects with all Health Care Laws to the extent applicable to the current business of the Company and its subsidiaries or any of their respective activities. For purposes of this Agreement, “**Health Care Laws**” means: (i) the Federal Food, Drug, and Cosmetic Act (21 U.S.C. Section 301 et seq.) and the Public Health Service Act (42 U.S.C. Section 201 et seq.), and the regulations promulgated thereunder; (ii) all applicable federal, state, local and foreign health care fraud and abuse laws, including, without limitation, the Anti-Kickback Statute (42 U.S.C. Section 1320a-7b(b)); (iii) HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. Section 17921 et seq.); (iv) the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010; (v) the European Union (“**EU**”) Clinical Trials Regulation (Regulation (EU) No. 536/2014); (vi) the EU Regulation regarding community procedures for authorization and supervision of medicinal products for human and veterinary use and establishing a European Medicines Agency (Regulation (EC) No. 726/2004); (vii) licensure, quality, safety and accreditation requirements under applicable federal, state, local or foreign laws or regulatory bodies; (viii) all other local, state, federal, national, supranational and foreign laws, relating to the regulation of the Company or its subsidiaries, and (ix) the regulations promulgated pursuant to such statutes and any state or non-U.S. counterpart thereof. Neither the Company nor any of its subsidiaries has received written or, to the Company’s knowledge, oral notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any court or arbitrator or governmental or regulatory authority or third party alleging that any product operation or activity is in material violation of any Health Care Laws nor, to the Company’s knowledge, is any such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action threatened. The Company and its subsidiaries have filed, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and

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

3.22 Accounting Controls and Disclosure Controls and Procedures. The Company maintains a system of internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) that is designed to comply with the requirements of the Exchange Act applicable to the Company and provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP, including policies and procedures sufficient to provide reasonable assurance (i) that the Company maintains records that in reasonable detail accurately and fairly reflect the Company's transactions and dispositions of assets, (ii) that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, (iii) that receipts and expenditures are made only in accordance with authorizations of management and the Board of Directors, and (iv) regarding prevention or timely detection of the unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the Company's financial statements. Except as disclosed in the Company's SEC Reports filed prior to the date of this Agreement, the Company has not identified any material weaknesses in the design or operation of the Company's internal control over financial reporting. The Company's "disclosure controls and procedures" (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act) are designed to provide reasonable assurance that all information (both financial and non-financial) required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC, and that all such information is accumulated and communicated to the Company's management as appropriate to allow timely decisions regarding required disclosure.

3.23 Price Stabilization of Common Stock. The Company has not taken, nor will it take, directly or indirectly, any action designed to stabilize or manipulate the price of the Common Stock to facilitate the sale or resale of the Conversion Shares.

3.24 Investment Company Act. The Company is not, and immediately after receipt of payment for the Securities will not be, an "investment company" within the meaning of the U.S. Investment Company Act of 1940, as amended.

3.25 General Solicitation; No Integration or Aggregation. Neither the Company nor any other person or entity authorized by the Company to act on its behalf has engaged in a general solicitation or general advertising (within the meaning of Regulation D of the Securities Act) of investors with respect to offers or sales of Securities pursuant to this Agreement. The

Company has not, directly or indirectly, sold, offered for sale, solicited offers to buy or otherwise negotiated in respect of, any security (as defined in the Securities Act) which, to its knowledge, is or will be (i) integrated with the offer and sale of the Securities pursuant to this Agreement for purposes of the Securities Act or (ii) aggregated with prior offerings by the Company for the purposes of the rules and regulations of Nasdaq. Assuming the accuracy of the representations and warranties of the Investors set forth in Section 4, neither the Company nor any of its Affiliates, its subsidiaries nor any Person acting on their behalf has, directly or indirectly, made any offers or sales of any Company security or solicited any offers to buy any Company security, under circumstances that would adversely affect reliance by the Company on Section 4(a)(2) and/or Rule 506 of Regulation D promulgated thereunder for the exemption from registration for the transactions contemplated hereby.

3.26 Brokers and Finders. Other than the Placement Agent, neither the Company nor any other Person authorized by the Company to act on its behalf has retained, utilized or been represented by any broker or finder in connection with the transactions contemplated by this Agreement.

3.27 Reliance by the Investors. The Company has a reasonable basis for making each of the representations set forth in this Section 3. The Company acknowledges that each of the Investors will rely upon the truth and accuracy of, and the Company's compliance with, the representations, warranties, agreements, acknowledgements and understandings of the Company set forth herein.

3.28 No Disqualification Events. Neither the Company nor any of its (i) predecessors, (ii) Affiliates, (iii) directors, (iv) executive officers, (v) non-executive officers participating in the placement contemplated by this Agreement, (vi) beneficial owners of 20% or more of its outstanding voting equity securities (calculated on the basis of voting power), (vii) promoters or (viii) investment managers (including any of such investment managers' directors, executive officers or officers participating in the placement contemplated by this Agreement) or general partners or managing members of such investment managers (including any of such general partners' or managing members' directors, executive officers or officers participating in the placement contemplated by this Agreement) (each, an "**Issuer Covered Person**") is subject to the disqualification provisions of Rule 506(d)(1)(i-viii) of Regulation D under the Securities Act (a "**Disqualification Event**").

3.29 Other Covered Persons. Other than the Placement Agents, the Company is not aware of any person (other than any Issuer Covered Person) that has been or will be paid (directly or indirectly) remuneration for solicitation of purchasers in connection with the sale of any Securities.

3.30 No Additional Agreements. There are no agreements or understandings between the Company and any Investor with respect to the transactions contemplated by the Transaction Agreements other than (i) as specified in the Transaction Agreements, and (ii) any side letter agreements with any of the Investors, which side letters the Company has shared with all Investors.

3.31 Anti-Bribery and Anti-Money Laundering Laws. Each of the Company, its subsidiaries and, to the knowledge of the Company, any of their respective officers, directors, supervisors, managers, agents, or employees are and have at all times been in compliance with and its participation in the offering will not violate: (A) anti-bribery laws, including but not limited to, any applicable law, rule, or regulation of any locality, including but not limited to any law, rule, or regulation promulgated to implement the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, signed December 17, 1997, including the U.S. Foreign Corrupt Practices Act of 1977, as amended, the U.K. Bribery Act 2010, or any other law, rule or regulation of similar purposes and scope; (B) anti-money laundering laws, including, but not limited to, applicable federal, state, international, foreign or other laws, regulations or government guidance regarding anti-money laundering, including, without limitation, Title 18 US. Code sections 1956 and 1957, the Patriot Act, the Bank Secrecy Act, and international anti-money laundering principles or procedures by an intergovernmental group or organization, such as the Financial Action Task Force on Money Laundering, of which the United States is a member and with which designation the United States representative to the group or organization continues to concur, all as amended, and any executive order, directive, or regulation pursuant to the authority of any of the foregoing, or any orders or licenses issued thereunder; or (C) except as would not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect, any laws with respect to import and export control and economic sanctions, including the U.S. Export Administration Regulations, the U.S. International Traffic in Arms Regulations, and economic sanctions regulations and executive orders administered by the U.S. Department of the Treasury Office of Foreign Asset Control.

3.32 Cybersecurity. The Company and its subsidiaries' information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, and databases (collectively, "**IT Systems**") are adequate for, and operate and perform in all material respects as required in connection with the operation of the business of the Company and its subsidiaries as currently conducted, and are free and clear of all material Trojan horses, time bombs, malware and other malicious code. The Company and its subsidiaries have implemented and maintained commercially reasonable physical, technical and administrative controls designed to maintain and protect the confidentiality, integrity, availability, privacy and security of all sensitive, confidential or regulated data ("**Confidential Data**") used or maintained in connection with their businesses and Personal Data (defined below), and the integrity, availability continuous operation, redundancy and security of all IT Systems. "**Personal Data**" means the following data used in connection with the Company's and its subsidiaries' businesses and in their possession or control: (i) a natural person's name, street address, telephone number, e-mail address, photograph, social security number or other tax identification number, driver's license number, passport number, credit card number or bank information; (ii) information that identifies or may reasonably be used to identify an individual; (iii) any information that would qualify as "protected health information" under the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act (collectively, "**HIPAA**"); and (iv) any information that would qualify as "personal data," "personal information" (or similar term) under the Privacy Laws. To the Company's knowledge, there have been no breaches, outages or unauthorized uses of or accesses to the Company's IT Systems, Confidential Data, or Personal Data that would require notification under Privacy Laws (as defined below).

3.33 Compliance with Data Privacy Laws. The Company and its subsidiaries are, and at all prior times were, in material compliance with all applicable state, federal and foreign data privacy and security laws and regulations regarding the collection, use, storage, retention, disclosure, transfer, disposal, or any other processing (collectively “**Process**” or “**Processing**”) of Personal Data, including without limitation HIPAA, the EU General Data Protection Regulation (“**GDPR**”) (Regulation (EU) No. 2016/679), all other local, state, federal, national, supranational and foreign laws relating to the regulation of the Company or its subsidiaries, and the regulations promulgated pursuant to such statutes and any state or non-U.S. counterpart thereof (collectively, the “**Privacy Laws**”). To ensure material compliance with the Privacy Laws, the Company and its subsidiaries have in place, comply with, and take all appropriate steps necessary to ensure compliance in all material respects with their policies and procedures relating to data privacy and security, and the Processing of Personal Data and Confidential Data (the “**Privacy Statements**”). The Company and its subsidiaries have, except as would not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect, at all times since inception provided accurate notice of their Privacy Statements then in effect to its customers, employees, third party vendors and representatives. None of such disclosures made or contained in any Privacy Statements have been materially inaccurate, misleading, incomplete, or in material violation of any Privacy Laws.

3.34 Transactions with Affiliates and Employees. 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, on the other hand, that is required to be described in the SEC Reports that is not so described.

4. Representations and Warranties of Each Investor. Each Investor, severally for itself and not jointly with any other Investor, represents and warrants to the Company and the Placement Agent that the statements contained in this Section 4 are true and correct as of the date of this Agreement and the Closing Date:

4.1 Organization. The Investor is duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization and has the requisite power and authority to own, lease and operate its properties and to carry on its business as now conducted.

4.2 Authorization. The Investor has all requisite corporate or similar power and authority to enter into this Agreement and the other Transaction Agreements to which it will be a party and to carry out and perform its obligations hereunder and thereunder. All corporate, member or partnership action on the part of such Investor or its stockholders, members or partners necessary for the authorization, execution, delivery and performance of this Agreement and the other Transaction Agreements to which it will be a party and the consummation of the transactions contemplated in the Transaction Agreements has been taken. The execution, delivery and performance by such Investor of the Transaction Agreements to which such Investor is a party has been duly authorized and each has been duly executed. Assuming this Agreement constitutes the legal and binding agreement of the Company, this Agreement constitutes a legal, valid and binding obligation of such Investor, enforceable against such Investor in accordance with its respective terms, except as such enforceability may be limited or otherwise affected by bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and/or similar laws relating to or

affecting the rights of creditors generally or by general equity principles (regardless of whether such enforceability is considered in a proceeding in equity or at law).

4.3 No Conflicts. The execution, delivery and performance of the Transaction Agreements by the Investor, the purchase of the Securities in accordance with their terms and the consummation by the Investor of the other transactions contemplated hereby will not conflict with or result in any violation of, breach or default by such Investor (with or without notice or lapse of time, or both) under, conflict with, or give rise to a right of termination, cancellation or acceleration of any obligation, a change of control right or to a loss of a material benefit under (i) any provision of the organizational documents of the Investor, including, without limitation, its incorporation or formation papers, bylaws, indenture of trust or partnership or operating agreement, as may be applicable or (ii) any agreement or instrument, undertaking, credit facility, franchise, license, judgment, order, ruling, statute, law, ordinance, rule or regulations, applicable to such Investor or its respective properties or assets, except, in the case of clause (ii), as would not, individually or in the aggregate, be reasonably expected to materially delay or hinder the ability of the Investor to perform its obligations under the Transaction Agreements.

4.4 Residency. The Investor's residence (if an individual) or offices in which its investment decision with respect to the Securities was made (if an entity) are located at the address immediately below the Investor's name on the pertinent signature page of this Agreement, except as otherwise communicated by the Investor to the Company.

4.5 Brokers and Finders. The Investor has not retained, utilized or been represented by any broker or finder in connection with the transactions contemplated by this Agreement whose fees the Company would be required to pay.

4.6 Investment Representations and Warranties. The Investor hereby represents and warrants that, it (i) as of the date of this Agreement is, if an entity, a "qualified institutional buyer" (as defined in Rule 144A under the Securities Act) or an institutional "accredited investor" as that term is defined in Rule 501(a) under Regulation D promulgated pursuant to the Securities Act; or (ii) if an individual, is an "accredited investor" as that term is defined in Rule 501(a) of Regulation D of the Securities Act and has such knowledge and experience in financial and business matters as to be able to protect its own interests in connection with an investment in the Securities. The Investor further represents and warrants that (x) it is capable of evaluating the merits and risk of such investment, and (y) that it has not been organized for the purpose of acquiring the Securities and is an "institutional account" as defined by FINRA Rule 4512(c). The Investor understands and agrees that the offering and sale of the Securities has not been registered under the Securities Act or any applicable state securities laws and is being made in reliance upon federal and state exemptions for transactions not involving a public offering which depend upon, among other things, the bona fide nature of the investment intent and the accuracy of the Investor's representations as expressed herein.

4.7 Intent. The Investor is purchasing the Securities solely for the Investor's own account and not for the account of others, and not with a view to the resale or distribution of any part thereof in violation of the Securities Act, and the Investor has no present intention of selling, granting any participation in, or otherwise distributing the same in violation of the Securities Act without prejudice, however, to the Investor's right at all times to sell or otherwise

dispose of all or any part of such Securities in compliance with applicable federal and state securities laws. Notwithstanding the foregoing, if the Investor is purchasing the Securities as a fiduciary or agent for one or more investor accounts, the Investor has full investment discretion with respect to each such account, and the full power and authority to make the acknowledgements, representations and agreements herein on behalf of each owner of each such account. The Investor has no present arrangement to sell the Securities to or through any person or entity. The Investor understands that the Securities must be held indefinitely unless such Securities are resold pursuant to a registration statement under the Securities Act or an exemption from registration is available. Nothing contained herein shall be deemed a representation or warranty by the Investor to hold the Securities for any period of time.

4.8 Investment Experience; Ability to Protect Its Own Interests and Bear Economic Risks. The Investor acknowledges that it can bear the economic risk and complete loss of its investment in the Securities and has knowledge and experience in finance, securities, taxation, investments and other business matters as to be capable of evaluating the merits and risks of investments of the kind described in this Agreement and contemplated hereby, and the Investor has had an opportunity to seek, and has sought, such accounting, legal, business and tax advice as the Investor has considered necessary to make an informed investment decision. The Investor acknowledges that the Investor (i) is a sophisticated investor, experienced in investing in private placements of equity securities and capable of evaluating investment risks independently, both in general and with regard to all transactions and investment strategies involving a security or securities, and (ii) has exercised independent judgment in evaluating its participation in the purchase of the Securities. The Investor acknowledges that the Investor is aware that there are substantial risks incident to the purchase and ownership of the Securities, including those set forth in the Company's filings with the SEC. Alone, or together with any professional advisor(s), the Investor has adequately analyzed and fully considered the risks of an investment in the Securities and determined that the Securities are a suitable investment for the Investor. The Investor is, at this time and in the foreseeable future, able to afford the loss of the Investor's entire investment in the Securities and the Investor acknowledges specifically that a possibility of total loss exists.

4.9 Independent Investment Decision. The Investor understands that nothing in the Transaction Agreements or any other materials presented by or on behalf of the Company to the Investor in connection with the purchase of the Securities constitutes legal, tax or investment advice. The Investor has consulted such legal, tax and investment advisors as it, in such Investor's sole discretion, has deemed necessary or appropriate in connection with its purchase of the Securities.

4.10 Securities Not Registered; Legends. The Investor acknowledges and agrees that the Securities are being offered in a transaction not involving any public offering within the meaning of the Securities Act, and the Investor understands that the Securities have not been registered under the Securities Act, by reason of their issuance by the Company in a transaction exempt from the registration requirements of the Securities Act, and that the Securities must continue to be held and may not be offered, resold, transferred, pledged or otherwise disposed of by the Investor unless a subsequent disposition thereof is registered under the Securities Act or is exempt from such registration and in each case in accordance with any applicable securities laws of any state of the United States. The Investor understands that the exemptions from registration afforded by Rule 144 (the provisions of which are known to it) promulgated under the Securities

Act depend on the satisfaction of various conditions including, but not limited to, the time and manner of sale, the holding period and on requirements relating to the Company which are outside of the Investor's control and which the Company may not be able to satisfy, and that, if applicable, Rule 144 may afford the basis for sales only in limited amounts. The Investor acknowledges and agrees that it has been advised to consult legal counsel prior to making any offer, resale, transfer, pledge or disposition of any of the Securities. The Investor acknowledges that no federal or state agency has passed upon or endorsed the merits of the offering of the Securities or made any findings or determination as to the fairness of this investment.

The Investor understands that any certificates or book entry notations evidencing the Securities may bear one or more legends in substantially the following form and substance:

“THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES. THE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND MAY NOT BE SOLD, TRANSFERRED OR ASSIGNED UNLESS (I) SUCH SECURITIES HAVE BEEN REGISTERED FOR SALE PURSUANT TO THE SECURITIES ACT, (II) SUCH SECURITIES MAY BE SOLD PURSUANT TO RULE 144 UNDER THE SECURITIES ACT, (III) THE COMPANY HAS RECEIVED AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO IT THAT SUCH TRANSFER MAY LAWFULLY BE MADE WITHOUT REGISTRATION UNDER THE SECURITIES ACT, OR (IV) THE SECURITIES ARE TRANSFERRED WITHOUT CONSIDERATION TO AN AFFILIATE OF SUCH HOLDER OR A CUSTODIAL NOMINEE (WHICH FOR THE AVOIDANCE OF DOUBT SHALL REQUIRE NEITHER CONSENT NOR THE DELIVERY OF AN OPINION). NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN FINANCING ARRANGEMENT SECURED BY THE SECURITIES.”

In addition, the Securities may contain a legend regarding affiliate status of the Investor, if applicable.

4.11 No General Solicitation. The Investor acknowledges and agrees that the Investor is purchasing the Securities directly from the Company. Investor became aware of this offering of the Securities solely by means of direct contact from the Placement Agent or directly from the Company as a result of a pre-existing, substantive relationship with the Company or the Placement Agent, and/or their respective advisors (including, without limitation, attorneys, accountants, bankers, consultants and financial advisors), agents, control persons, representatives, Affiliates, directors, officers, managers, members, and/or employees, and/or the representatives of such persons. The Securities were offered to Investor solely by direct contact between Investor and the Company, the Placement Agent and/or their respective representatives. Investor did not become aware of this offering of the Securities, nor were the Securities offered to Investor, by any other means, and none of the Company, the Placement Agent and/or their respective representatives acted as investment advisor, broker or dealer to Investor. The Investor is not purchasing the Securities as a result of any general or public solicitation or general advertising, or publicly disseminated advertisement, article, notice or other communication regarding the

Securities published in any newspaper, magazine or similar media or broadcast over television, radio or the internet or presented at any seminar or any other general solicitation or general advertisement, including any of the methods described in Section 502(c) of Regulation D under the Securities Act.

4.12 Access to Information. In making its decision to purchase the Securities, such Investor has relied solely upon independent investigation made by such Investor, upon the SEC Reports and upon the representations, warranties and covenants set forth herein. Such Investor acknowledges and agrees that such Investor and the Investor's professional advisor(s), if any, have had the opportunity to ask such questions, receive such answers and obtain such information from the Company regarding the Company, its business and the terms and conditions of the offering of the Securities as the Investor and the Investor's professional advisor(s), if any, have deemed necessary to make an investment decision with respect to the Securities and that the Investor has independently made its own analysis and decision to invest in the Company. Neither such inquiries nor any other due diligence investigation conducted by the Investor shall modify, limit or otherwise affect the Investor's right to rely on the Company's representations and warranties contained in this Agreement.

4.13 Certain Trading Activities. Other than consummating the transaction contemplated hereby, the Investor has not, nor has any Person acting on behalf of or pursuant to any understanding with the Investor, directly or indirectly executed any purchases or sales, including Short Sales, of the securities of the Company during the period commencing as of the time that the Investor was first contacted by the Company or any other Person regarding the transaction contemplated hereby and ending immediately prior to the date of this Agreement. Notwithstanding the foregoing, in the case of an Investor that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Investor's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Investor's assets, the representation set forth above shall only apply with respect to the portion of the assets managed by the portfolio manager that made the investment decision to purchase the Securities covered by this Agreement. Furthermore, in the case of an Investor whose investment advisor utilized an information barrier with respect to the information regarding the transactions contemplated hereunder after first being contacted by the Company or its representatives, the representation set forth above shall only apply after the point in time when the portfolio manager who manages such Investor's assets was informed of the information regarding the transactions contemplated hereunder and, with respect to the Investor's investment advisor, the representation set forth above shall only apply with respect to any purchases or sales, including Short Sales, of the securities of the Company on behalf of other funds or investment vehicles for which the Investor's investment advisor is also an investment advisor or sub-advisor after the point in time when the portfolio manager who manages the assets of such other funds or investment vehicles for which the Investor's investment advisor is also an investment advisor or sub-advisor was informed of the information regarding the transactions contemplated hereunder. Other than to other Persons party to this Agreement and to its advisors and agents who had a need to know such information, the Investor has maintained the confidentiality of all disclosures made to it in connection with this transaction (including the existence and terms of this transaction). Notwithstanding the foregoing, for avoidance of doubt, nothing contained herein shall constitute a representation or warranty, or preclude any actions,

with respect to the identification of the availability of, or securing of, available shares to borrow in order to effect Short Sales or similar transactions in the future.

4.14 Disqualification Event. To the extent the Investor is one of the covered persons identified in Rule 506(d) (1), the Investor represents that no Disqualification Event is applicable to the Investor or any of its Rule 506(d) Related Parties (as defined below), except, if applicable, for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable. The Investor hereby agrees that it shall notify the Company promptly in writing in the event a Disqualification Event becomes applicable to the Investor or any of its Rule 506(d) Related Parties, except, if applicable, for a Disqualification Event as to which Rule 506(d)(2)(ii) or (iii) or (d)(3) is applicable. For purposes of this Section, “**Rule 506(d) Related Party**” means a person or entity that is a beneficial owner of the Investor’s securities for purposes of Rule 506(d) of the Securities Act.

5. Covenants.

5.1 Further Assurances. Each party agrees to cooperate with each other and their respective officers, employees, attorneys, accountants and other agents, and, generally, do such other reasonable acts and things in good faith as may be necessary to effectuate the intents and purposes of this Agreement, subject to the terms and conditions of this Agreement and compliance with applicable law, including taking reasonable action to facilitate the filing of any document or the taking of reasonable action to assist the other parties hereto in complying with the terms of this Agreement. The Investor acknowledges that the Company and the Placement Agent will rely on the acknowledgments, understandings, agreements, representations and warranties contained in this Agreement. Prior to the Closing, the Investor agrees to promptly notify the Company if any of the acknowledgments, understandings, agreements, representations and warranties set forth in Section 4 of this Agreement are no longer accurate.

5.2 Listing; Stockholder Approval.

(a) The Company shall use commercially reasonable efforts to maintain the listing and trading of its Common Stock on Nasdaq and, in accordance therewith, will use reasonable best efforts to comply in all material respects with the Company’s reporting, filing and other obligations under the rules and regulations of Nasdaq.

(b) The Company shall, as soon as practicable following the Closing, but not more than thirty (30) days thereafter, file a preliminary proxy statement for a vote of its stockholders at a special meeting (the “**Special Meeting**”) to approve the issuance of all Conversion Shares in compliance with Nasdaq Listing Rule 5635 (the “**Proposal**”). The Company, as soon as practicable following notification from the staff of the SEC that it has completed its review of the preliminary proxy statement or that it will not review the preliminary proxy statement, (i) file and mail a definitive proxy statement for the vote of its stockholders to approve the Proposal (any such proxy statement, as it may be amended or supplemented from time to time, the “**Proxy Statement**”) and (ii) duly call, convene and hold the Special Meeting. The Company covenants and agrees that (A) its Board of Directors shall unanimously recommend that the Proposal be approved by the Company’s stockholders at the Special Meeting and at all meetings in which the Proposal is considered, and (B) that the Company shall use commercially reasonable

efforts to solicit and obtain such approval within the timeframe set forth in this Section 5.2(b). If the Company's stockholders do not approve the Proposal at the first Special Meeting in which it is voted on by stockholders, the Company covenants and agrees that it will submit the Proposal for approval of the Company's stockholders at least semi-annually until such approval is obtained.

(c) The Company hereby represents, warrants and covenants that (i) none of the information to be included or incorporated by reference in the Proxy Statement or any amendment or supplement thereto, or any other document filed with the SEC in connection with the solicitation of stockholder approval of the Proposal at a Special Meeting (all such other documents the "**Other Filings**") shall, in the case of the Proxy Statement, at the date it is first mailed to the Company's stockholders or at the time of the Special Meeting or at the time of any amendment or supplement thereof, or, in the case of any Other Filing, at the date it is first mailed to the Company's stockholders or at the date it is first filed with the SEC, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they are made, not misleading, except that no such representation, warranty or covenant is hereby made by the Company with respect to statements made or incorporated by reference therein based on information supplied by or on behalf of any of the Investors in connection with the preparation of the Proxy Statement or any Other Filing expressly for inclusion or incorporation by reference therein, and (ii) the Proxy Statement and the Other Filings shall comply as to form in all material respects with the requirements of the Exchange Act.

(d) The Company shall pay all fees and expenses in connection with satisfying the obligations under this Section 5.2.

5.3 Disclosure of Transactions. The Company shall, by the Disclosure Time, issue a press release and/or file with the SEC a Current Report on Form 8-K (including, if applicable, all exhibits thereto, the "**Disclosure Document**") disclosing (i) all material terms of the transactions contemplated hereby and by the other Transaction Agreements and, if the Disclosure Document is a Current Report on Form 8-K, attaching this Agreement and the other Transaction Agreements as exhibits to such Disclosure Document, and (ii) all material non-public information concerning the Company disclosed to the Investors. Following the issuance or filing of the Disclosure Document, no Investor shall be in possession of any material non-public information concerning the Company disclosed to the Investors by the Company or its representatives, officers, directors, employees or agents, including the Placement Agents. Upon the earlier of (i) the Disclosure Time, and (ii) the issuance or filing, as applicable, of the Disclosure Document, each Investor shall no longer be subject to any confidentiality or similar obligations under any agreement, whether written or oral, with the Company or any of its officers, directors, affiliates, employees or agents, including the Placement Agents. The Company understands and confirms that the Investors will rely on the foregoing representation in effecting securities transactions. In addition, unless it has already done so by filing the Disclosure Document, on or before the fourth (4th) Business Day following the date of this Agreement, the Company shall file with the SEC a Current Report on Form 8-K disclosing all material terms of the transactions contemplated by this Agreement. Notwithstanding anything in this Agreement to the contrary, the Company shall not publicly disclose the name of any Investor or any of its Affiliates or advisors, or include the name of any Investor or any of its Affiliates or advisors in any press release or filing with the SEC (other than any registration statement contemplated by the Registration Rights

Agreement) or any regulatory agency, without the prior written consent of the Investor, except (i) as required by the federal securities law in connection with (A) any registration statement contemplated by the Registration Rights Agreement, and (B) the filing of final Transaction Agreements with the SEC or pursuant to other routine proceedings of regulatory authorities, or (ii) to the extent such disclosure is required by law, at the request of the staff of the SEC or regulatory agency or under the regulations of Nasdaq.

5.4 Integration. The Company shall not, and shall use its commercially reasonable efforts to ensure that no Affiliate of the Company shall, sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that will be integrated with the offer or sale of the Securities in a manner that would require the registration under the Securities Act of the sale of the Securities to the Investors, or that will be integrated with the offer or sale of the Securities for purposes of the rules and regulations of any National Exchange such that it would require stockholder approval prior to the closing of such other transaction unless stockholder approval is obtained before the closing of such subsequent transaction.

5.5 Removal of Legends.

(a) In connection with any sale, assignment, transfer or other disposition of the Preferred Stock, Warrant Shares or the Conversion Shares by an Investor pursuant to Rule 144 or pursuant to any other exemption under the Securities Act such that the purchaser acquires freely tradable shares and upon compliance by the Investor with the requirements of this Agreement, if requested by the Investor by notice to the Company, the Company shall request the Transfer Agent to remove any restrictive legends related to the book entry account holding such shares and make a new, unlegended entry for such book entry shares sold or disposed of without restrictive legends within the earlier of (i) one business day and (ii) the Standard Settlement Period, in each case, of any such request therefor from the Investor, provided that the Company has timely received from the Investor customary representations and other documentation reasonably acceptable to the Company in connection therewith. The Company shall be responsible for the fees of its Transfer Agent and its legal counsel associated with such legend removal.

(b) Subject to receipt from the Investor by the Company and the Transfer Agent of customary representations and other documentation reasonably acceptable to the Company and the Transfer Agent in connection therewith, upon the earliest of such time as the Preferred Stock or the Conversion Shares (i) have been registered under the Securities Act pursuant to an effective registration statement; (ii) have been sold pursuant to Rule 144, or (iii) are eligible for resale under Rule 144(b)(1) without the requirement for the Company to be in compliance with the current public information requirements under Rule 144(c)(1) (or any successor provision), the Company shall, in accordance with the provisions of this Section 5.5(b) and as soon as reasonably practicable following any request therefor from an Investor accompanied by such customary and reasonably acceptable documentation referred to above, (A) deliver to the Transfer Agent irrevocable instructions that the Transfer Agent shall make a new, unlegended entry for such book entry shares, and (B) cause its counsel to deliver to the Transfer Agent one or more opinions to the effect that the removal of such legends in such circumstances may be effected under the Securities

Act if required by the Transfer Agent to effect the removal of the legend in accordance with the provisions of this Agreement.

5.6 Withholding Taxes. Each Investor agrees to furnish the Company with any information, representations and forms as shall reasonably be requested by the Company from time to time to assist the Company in complying with any applicable tax law (including any withholding obligations).

5.7 Fees and Commissions. The Company shall be solely responsible for the payment of any placement agent's fees, financial advisory fees, or broker's commissions (other than for Persons engaged by an Investor) relating to or arising out of the transactions contemplated hereby, including, without limitation, any fees or commissions payable to the Placement Agent.

5.8 No Conflicting Agreements. The Company will not take any action, enter into any agreement or make any commitment that would conflict or interfere in any material respect with the Company's obligations to the Investors under the Transaction Agreements.

5.9 Indemnification.

(a) The Company agrees to indemnify and hold harmless each Investor and its Affiliates, and their respective directors, officers, trustees, members, managers, employees, investment advisors and agents (collectively, the "**Indemnified Persons**"), from and against any and all losses, claims, damages, liabilities and expenses (including without limitation reasonable and documented attorney fees and disbursements and other documented out-of-pocket expenses reasonably incurred in connection with investigating, preparing or defending any action, claim or proceeding, pending or threatened and the costs of enforcement thereof) to which such Person may become subject as a result of any breach of representation, warranty, covenant or agreement made by or to be performed on the part of the Company under the Transaction Agreements, and will reimburse any such Person for all such amounts as they are incurred by such Person solely to the extent such amounts have been finally judicially determined not to have resulted from such Person's fraud or willful misconduct.

(b) Any person entitled to indemnification hereunder shall (i) give prompt written notice to the indemnifying party of any claim with respect to which it seeks indemnification, and (ii) permit such indemnifying party to assume the defense of such claim with counsel reasonably satisfactory to the indemnified party; provided that any person entitled to indemnification hereunder shall have the right to employ separate counsel and to participate in the defense of such claim, but the fees and expenses of such counsel shall be at the expense of such person unless (a) the indemnifying party has agreed in writing to pay such fees or expenses, (b) the indemnifying party shall have failed to assume the defense of such claim and employ counsel reasonably satisfactory to such person or (c) in the reasonable judgment of any such person, based upon written advice of its counsel, a conflict of interest exists between such person and the indemnifying party with respect to such claims (in which case, if the person notifies the indemnifying party in writing that such person elects to employ separate counsel at the expense of the indemnifying party, the indemnifying party shall not have the right to assume the defense of such claim on behalf of such person); and provided, further, that the failure of any indemnified party to give written notice as provided herein shall not relieve the indemnifying party of its

obligations hereunder, except to the extent that such failure to give notice shall materially adversely affect the indemnifying party in the defense of any such claim or litigation. It is understood that the indemnifying party shall not, in connection with any proceeding in the same jurisdiction, be liable for fees or expenses of more than one separate firm of attorneys at any time for all such indemnified parties. No indemnifying party will, except with the consent of the indemnified party, which consent shall not be unreasonably withheld, conditioned or delayed, consent to entry of any judgment or enter into any settlement unless such judgment or settlement (i) imposes no liability or obligation on, (ii) includes as an unconditional term thereof the giving of a complete, explicit and unconditional release from the party bringing such indemnified claims of all liability of the indemnified party in respect of such claim or litigation in favor of, and (iii) does not include any admission of fault, culpability, wrongdoing, or malfeasance by or on behalf of, the indemnified party. No indemnified party will, except with the consent of the indemnifying party, which consent shall not be unreasonably withheld, conditioned or delayed, consent to entry of any judgment or enter into any settlement.

5.10 Subsequent Equity Sales. From the date of this Agreement until the earlier of (a) ninety (90) days after the Closing Date and (b) the Business Day immediately following the effective date of the registration statement filed pursuant to the Registration Rights Agreement, the Company shall not (A) issue shares of Common Stock or Common Stock Equivalents, (B) effect a reverse stock split, recapitalization, share consolidation, reclassification or similar transaction affecting the outstanding Common Stock or (C) file with the SEC a registration statement under the Securities Act relating to any shares of Common Stock or Common Stock Equivalents, except pursuant to the terms of the Registration Rights Agreement. Notwithstanding the foregoing, the provisions of this Section 5.10 shall not apply to (i) the issuance of the Securities hereunder, (ii) the issuance of Common Stock or Common Stock Equivalents upon the conversion, exercise or vesting of any securities of the Company outstanding on the date of this Agreement, issued pursuant to this Agreement or outstanding pursuant to clause (iii) below (provided that such conversion, exercise or vesting is effected pursuant to the terms of such securities as in effect on the date of this Agreement and without giving effect to any amendments or adjustments thereto after the date hereof), (iii) the issuance of any Common Stock or Common Stock Equivalents pursuant to any Company stock-based compensation plans or in accordance with Nasdaq Stock Market Rule 5635(c)(4), (iv) the filing of a registration statement on Form S-8 under the Securities Act to register the offer and sale of securities on an equity incentive plan or employee stock purchase plan, or (v) the issuance of up to \$30,000,000 of Securities, on the same terms and conditions set forth in this Agreement, to one or more investors reasonably acceptable to RA Capital Healthcare Fund, L.P.; provided that none of such investors shall be entitled to any additional rights that are not provided to all Investors pursuant to the terms of this Agreement and the Company shall not enter into any side letters or similar arrangements to provide such investors with any such rights, including, without limitation, any rights to designate a member to the Company Board of Directors or any rights to receive access to any Company information or data prior to public release.

5.11 Reservation of Common Stock and Preferred Stock. As of the date of this Agreement, the Company has reserved and the Company shall continue to reserve and keep available at all times, free of preemptive rights, (i) a sufficient number of shares of Common Stock for the purpose of enabling the Company to issue the Conversion Shares issuable upon conversion of the Preferred Shares and the Warrant Shares and (ii) a sufficient number of shares of Preferred

Stock for the purpose of enabling the Company to issue the Warrant Shares issuable upon exercise of the Warrants.

6. Conditions of Closing.

6.1 Conditions to the Obligation of the Investors. The several obligations of each Investor to consummate the transactions to be consummated at the Closing, and to purchase and pay for the Securities being purchased by it at the Closing pursuant to this Agreement, are subject to the satisfaction or waiver in writing of the following conditions precedent:

(a) Representations and Warranties. The representations and warranties of the Company contained herein shall be true and correct in all material respects, except for those representation and warranties qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects, as of the date of this Agreement and as of the Closing Date, as though made on and as of such date, except to the extent any such representation or warranty expressly speaks as of an earlier date, in which case such representation or warranty shall be true and correct in all material respects as of such earlier date, except for those representations and warranties qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects as of such earlier date.

(b) Performance. The Company shall have performed in all material respects the obligations and conditions herein required to be performed or observed by the Company on or prior to the Closing Date.

(c) No Injunction. The purchase of and payment for the Securities by each Investor shall not be prohibited or enjoined by any law or governmental or court order or regulation and no such prohibition shall have been threatened in writing.

(d) Consents. The Company shall have obtained any and all consents, permits, approvals, registrations and waivers necessary for the consummation of the purchase and sale of the Securities, all of which shall be in full force and effect.

(e) Transfer Agent. The Company shall have furnished all required materials to the Transfer Agent to reflect the issuance of the Preferred Shares at the Closing.

(f) Adverse Changes. Since the date of this Agreement, no event or series of events shall have occurred that has had or would reasonably be expected to have a Material Adverse Effect.

(g) Opinion of Company Counsel. The Company shall have delivered to the Investors and the Placement Agent the opinion of Dentons US LLP, dated as of the Closing Date, in customary form and substance to be reasonably agreed upon with the Investors and addressing such legal matters as the Investors and the Company reasonably agree.

(h) Compliance Certificate. An authorized officer of the Company shall have delivered to the Investors at the Closing Date a certificate certifying that the conditions specified in Sections 6.1(a) (Representations and Warranties), 6.1(b) (Performance), 6.1(c) (No

Injunction), 6.1(d) (Consents), 6.1(e) (Transfer Agent), 6.1(f) (Adverse Changes), 6.1(m) (Listing Requirements), and 6.1(n) (No Injunction) of this Agreement have been fulfilled.

(i) Secretary's Certificate. The Secretary of the Company shall have delivered to the Investors at the Closing Date a certificate certifying (i) the Amended and Restated Certificate of Incorporation and the Certificate of Designations; (ii) the Amended and Restated Bylaws; and (iii) resolutions of the Company's Board of Directors (or an authorized committee thereof) approving this Agreement, the other Transaction Agreements, the transactions contemplated by this Agreement and the issuance of the Securities and the Warrant Shares.

(j) Registration Rights Agreement. The Company shall have executed and delivered the Registration Rights Agreement in the form attached hereto as Exhibit B (the "**Registration Rights Agreement**") to the Investors.

(k) Support Agreement. The Company and the other parties thereto shall have executed and delivered the Support Agreement to the Investors.

(l) Side Letter. The Company and the Investor(s) party thereto shall have executed the applicable side letter(s).

(m) Listing Requirements. No stop order or suspension of trading shall have been imposed by Nasdaq, the SEC or any other governmental or regulatory body with respect to public trading in the Common Stock. The Common Stock shall be listed on a National Exchange and shall not have been suspended, as of the Closing Date, by the SEC or the National Exchange from trading thereon nor shall suspension by the SEC or the National Exchange have been threatened, as of the Closing Date, in writing by the SEC or the National Exchange; and the Company shall have filed with Nasdaq a Notification Form: Listing of Additional Shares for the listing of the Conversion Shares and Nasdaq shall have raised no objection to such notice and the transactions contemplated hereby.

(n) No Injunction. No judgment, writ, order, injunction, award or decree of or by any court, or judge, justice or magistrate, including any bankruptcy court or judge, or any order of or by any governmental authority, shall have been issued, and no action or proceeding shall have been instituted by any governmental authority, enjoining or preventing the consummation of the transactions contemplated hereby or in the other Transaction Agreements.

(o) Payment. The Company shall have received payment, by wire transfer of immediately available funds, in the full amount of the purchase price for the number of Securities being purchased by each other Investor at the Closing as set forth in Exhibit A.

6.2 Conditions to the Obligation of the Company. The obligation of the Company to consummate the transactions to be consummated at the Closing, and to issue and sell to each Investor the Securities to be purchased by it at the Closing pursuant to this Agreement, is subject to the satisfaction or waiver in writing of the following conditions precedent:

(a) Representations and Warranties. The representations and warranties of each Investor in Section 4 hereto shall be true and correct on and as of the Closing Date, with the same force and effect as though made on and as of the Closing Date and consummation of the

Closing shall constitute a reaffirmation by the Investor of each of the representations, warranties, covenants and agreements of the Investor contained in this Agreement as of the Closing Date.

(b) Performance. Each Investor shall have performed or complied with in all material respects all obligations and conditions herein required to be performed or observed by such Investor on or prior to the Closing Date.

(c) Injunction. The purchase of and payment for the Securities by each Investor shall not be prohibited or enjoined by any law or governmental or court order or regulation.

(d) Registration Rights Agreement. Each Investor shall have executed and delivered the Registration Rights Agreement to the Company in the form attached as Exhibit B.

(e) Support Agreement. The other parties thereto shall have executed and delivered the Support Agreement to the Company.

(f) Payment. Except as may be agreed to among the Company and such Investor in accordance with Section 2.2, the Company shall have received payment, by wire transfer of immediately available funds, in the full amount of the purchase price for the number of Securities being purchased by each Investor at the Closing as set forth in Exhibit A.

7. Termination.

7.1 Termination. The obligations of the Company, on the one hand, and the Investors, on the other hand, to effect the Closing shall terminate as follows:

(i) Upon the mutual written consent of the Company and an Investor (with respect to itself only) prior to the Closing;

(ii) By the Company if any of the conditions set forth in Section 6.2 shall have become incapable of fulfillment, and shall not have been waived by the Company;

(iii) By an Investor (with respect to itself only) if any of the conditions set forth in Section 6.1 shall have become incapable of fulfillment, and shall not have been waived by such Investor; or

(iv) By either the Company or an Investor (with respect to itself only) if the Closing has not occurred on or prior to the fifth Business Day following the date of this Agreement;

provided, however, that, in the case of clauses (ii) and (iii) above, the party seeking to terminate its obligation to effect the Closing shall not then be in breach of any of its representations, warranties, covenants or agreements contained in the Transaction Agreements if such breach has resulted in the circumstances giving rise to such party's seeking to terminate its obligation to effect the Closing.

7.2 Notice. In the event of termination by the Company or the Investor of its obligations to effect the Closing pursuant to Section 7.1, written notice thereof shall be given to the other Investors by the Company. Nothing in this Section 7 shall be deemed to release any party from any liability for any breach by such party of the other terms and provisions of the Transaction Agreements or to impair the right of any party to compel specific performance by any other party of its other obligations under the Transaction Agreements.

8. Miscellaneous Provisions.

8.1 Public Statements or Releases. Except as set forth in Section 5.3, neither the Company nor any Investor shall make any public announcement with respect to the existence or terms of this Agreement or the transactions provided for herein without the prior consent of the other party (which consent shall not be unreasonably withheld). Notwithstanding the foregoing, and subject to compliance with Section 5.3, nothing in this Section 8.1 shall prevent any party from making any public announcement it considers necessary in order to satisfy its obligations under the law, including applicable securities laws, or under the rules of any national securities exchange or securities market, in which case the Company shall allow the Investors reasonable time to comment on such release or announcement in advance of such issuance, and the Company will consider in good faith any Investor comments. The Company shall not include the name of the Investor in any press release or public announcement (which, for the avoidance of doubt, shall not include any filing with the SEC if so required by the applicable rules of the SEC) without the prior written consent of the Investors, except as otherwise required by law or the applicable rules or regulations of any securities exchange or securities market, in which case the Company shall allow the Investors, to the extent reasonably practicable in the circumstances, reasonable time to comment on such release or announcement in advance of such issuance. Notwithstanding anything to the contrary in this Section 8.1, Investor review shall not be required for Company disclosures that are substantially consistent with prior Company disclosures.

8.2 Notices. Any notices or other communications required or permitted to be given hereunder shall be in writing and shall be deemed to be given (a) when delivered if personally delivered to the party for whom it is intended, (b) when delivered, if sent by electronic mail during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next Business Day, (c) three (3) days after having been sent by certified or registered mail, return-receipt requested and postage prepaid, or (d) one (1) Business Day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next Business Day delivery, with written verification of receipt:

(a) If to the Company, addressed as follows:

SAB Biotherapeutics, Inc.
777 W 41st St, Suite 401
Miami Beach, Florida
Attention: Lucy To
Email: lucy@sab.bio

with a copy (which shall not constitute notice):

Dentons US LLP
Ilan Katz
1221 Avenue of the Americas
New York, NY 10020
Attention: Ilan Katz, Brian Lee and Grant Levine
Email: ilan.katz@dentons.com; brian.lee@dentons.com; grant.levine@dentons.com

(b) If to any Investor, at its address or e-mail address set forth on Exhibit A, or such address as subsequently modified by written notice given in accordance with this Section 8.2.

Any Person may change the address to which notices and communications to it are to be addressed by notification as provided for herein.

8.3 Consent to Electronic Notice. Each Investor consents to the delivery of any stockholder notice pursuant to Section 232 of the Delaware General Corporation Law, as amended or superseded from time to time (the "DGCL"), at the e-mail address set forth below the Investor's name on the signature page or Exhibit A, as updated from time to time by notice to the Company. To the extent that any notice given by means of electronic mail is returned or undeliverable for any reason, the foregoing consent shall be deemed to have been revoked until a new or corrected e-mail address has been provided, and such attempted electronic notice shall be ineffective and deemed to not have been given. Each party agrees to promptly notify the other parties of any change in its e-mail address, and that failure to do so shall not affect the foregoing.

8.4 Severability. If any part or provision of this Agreement is held unenforceable or in conflict with the applicable laws or regulations of any jurisdiction, the invalid or unenforceable part or provisions shall be replaced with a provision which accomplishes, to the extent possible, the original business purpose of such part or provision in a valid and enforceable manner, and the remainder of this Agreement shall remain binding upon the parties hereto.

8.5 Governing Law; Submission to Jurisdiction; Venue; Waiver of Trial by Jury.

(a) This Agreement shall be governed by, and construed in accordance with, the laws of the State of New York without regard to choice of laws or conflicts of laws provisions thereof that would require the application of the laws of any other jurisdiction, except to the extent that mandatory principles of Delaware law may apply.

(b) The Company and each of the Investors hereby irrevocably and unconditionally:

(i) submits for itself and its property in any legal action or proceeding relating solely to this Agreement or the transactions contemplated hereby, to the general jurisdiction of the any state court or United States Federal court sitting in the Borough of Manhattan, City of New York in the State of New York;

(ii) consents that any such action or proceeding may be brought in such courts, and waives any objection that it may now or hereafter have to the venue of any such action or proceeding in any such court or that such action or proceeding was brought in an inconvenient court and agrees not to plead or claim the same to the extent permitted by applicable law;

(iii) agrees that service of process in any such action or proceeding may be effected by mailing a copy thereof by registered or certified mail (or any substantially similar form of mail), postage prepaid, to the party, as the case may be, at its address set forth in Section 8.2 or at such other address of which the other party shall have been notified pursuant thereto;

(iv) agrees that nothing herein shall affect the right to effect service of process in any other manner permitted by law or shall limit the right to sue in any other jurisdiction for recognition and enforcement of any judgment or if jurisdiction in the courts referenced in the foregoing clause (i) are not available despite the intentions of the parties hereto;

(v) agrees that final judgment in any such suit, action or proceeding brought in such a court may be enforced in the courts of any jurisdiction to which such party is subject by a suit upon such judgment, provided that service of process is effected upon such party in the manner specified herein or as otherwise permitted by law;

(vi) agrees that to the extent that such party has or hereafter may acquire any immunity from jurisdiction of any court or from any legal process with respect to itself or its property, such party hereby irrevocably waives such immunity in respect of its obligations under this Agreement, to the extent permitted by law; and

(vii) irrevocably and unconditionally waives trial by jury in any legal action or proceeding in relation to this Agreement.

8.6 Waiver. No waiver of any term, provision or condition of this Agreement, whether by conduct or otherwise, in any one or more instances, shall be deemed to be, or be construed as, a further or continuing waiver of any such term, provision or condition or as a waiver of any other term, provision or condition of this Agreement.

8.7 Expenses. Except as expressly set forth in the Transaction Agreements or in any side letter between the Company and an Investor to the contrary, each party shall pay its own out-of-pocket fees and expenses, including the fees and expenses of attorneys, accountants and consultants employed by such party, incurred in connection with the proposed investment in the Securities and the consummation of the transactions contemplated thereby; provided, however, that the Company shall pay all Transfer Agent fees (including, without limitation, any fees required for same-day processing of any instruction letter delivered by the Company), stamp taxes and other taxes (other than income taxes) and duties levied in connection with the delivery of any Securities to the Investors. Notwithstanding the foregoing, the Company shall pay the reasonable fees and expenses of Wilmer Cutler Pickering Hale and Dorr LLP, counsel for RA Capital Healthcare Fund, L.P., in an amount not to exceed \$150,000, and shall pay the reasonable fees and expenses of Schulte Roth & Zabel, LLP, counsel for certain Investors, in an amount not to exceed \$30,000. The Company shall pay all Placement Agent fees relating to or arising out of the transactions contemplated by this Agreement.

8.8 Assignment. None of the parties may assign its rights or obligations under this Agreement or designate another person (i) to perform all or part of its obligations under this Agreement or (ii) to have all or part of its rights and benefits under this Agreement, in each case without the prior written consent of (x) the Company, in the case of an Investor, and (y) the Investors, in the case of the Company, provided that an Investor may, without the prior consent of the Company, assign its rights to purchase the Securities hereunder to any of its Affiliates or to any other investment funds or accounts managed or advised by the investment manager who acts on behalf of such Investor (provided each such assignee agrees to be bound by the terms of this Agreement and makes the same representations and warranties set forth in Section 4). In the event of any assignment in accordance with the terms of this Agreement, the assignee shall specifically assume and be bound by the provisions of this Agreement by executing a writing agreeing to be bound by and subject to the provisions of this Agreement and shall deliver an executed counterpart signature page to this Agreement and, notwithstanding such assumption or agreement to be bound hereby by an assignee, no such assignment shall relieve any party assigning any interest hereunder from its obligations or liability pursuant to this Agreement.

8.9 Confidential Information.

(a) Each Investor covenants that until such time as the transactions contemplated by this Agreement and any material non-public information provided to such Investor are publicly disclosed by the Company, such Investor will maintain the confidentiality of all disclosures made to it in connection with this transaction (including the existence and terms of this transaction), other than to such Investor's affiliates and its and their respective directors, officers, employees, outside attorneys, accountant, auditors or investment advisors, in each case, only to the extent necessary to permit evaluation of the investment, and the performance of the necessary or required tax, accounting, financial, legal, or administrative tasks and services and other than as may be required by law.

(b) The Company may request from the Investors such reasonable and customary additional information as the Company may deem necessary to evaluate the eligibility of the Investor to acquire the Securities, and the Investor shall promptly provide such information as may reasonably be requested to the extent readily available; provided, that the Company agrees to keep any such information provided by the Investor confidential, except (i) as required by the federal securities laws, rules or regulations, and (ii) to the extent such disclosure is required by other laws, rules or regulations, at the request of the staff of the SEC or regulatory agency or under the regulations of Nasdaq. The Investor acknowledges that the Company may file a copy of this Agreement and the Registration Rights Agreement with the SEC as exhibit to a periodic report or a registration statement of the Company.

8.10 Reliance by and Exculpation of Placement Agent.

(a) Each Investor agrees for the express benefit of the Placement Agent, its Affiliates and its representatives that (i) it is not relying upon, and has not relied upon, any statement, representation or warranty made by the Placement Agent, any of its Affiliates or any of its representatives, in making its investment or decision to invest in the Company, (ii) the Placement Agent is acting solely as placement agent in connection with the transactions contemplated hereby and is not acting as an underwriter, initial purchaser, dealer or in any other

such capacity and is not and shall not be construed as a fiduciary for such Investor, (iii) the Placement Agent, its Affiliates and its representatives have not made, and will not make any representations or warranties with respect to the Company or the offer and sale of the Securities or any other matter concerning the Company or the transactions contemplated hereby, and the Investor will not rely on any statements made by the Placement Agent, orally or in writing, to the contrary, (iv) the Investor will be responsible for conducting its own due diligence investigation with respect to the Company and the offer and sale of the Securities, (v) the Investor will be purchasing Securities based on the results of its own due diligence investigation of the Company and the Placement Agent and each of its directors, officers, employees, representatives, and controlling persons have made no independent investigation with respect to the Company, the Securities, or the accuracy, completeness, or adequacy of any information supplied to the Investor by the Company, (vi) the Investor has negotiated the offer and sale of the Securities directly with the Company, and the Placement Agent will not be responsible for the ultimate success of any such investment, and (vii) the decision to invest in the Company will involve a significant degree of risk, including a risk of total loss of such investment. Each Investor further represents and warrants to the Placement Agent that it, including any fund or funds that it manages or advises that participates in the offer and sale of the Securities, is permitted under its constitutive documents (including, without limitation, all limited partnership agreements, charters, bylaws, limited liability company agreements, all applicable side letters with investors, and similar documents) to make investments of the type contemplated by this Agreement. This Section 8.10 shall survive any termination of this Agreement.

(b) The Company agrees and acknowledges that the Placement Agent may rely on its representations, warranties, agreements and covenants contained in this Agreement and each Investor agrees that the Placement Agent may rely on such Investor's representations and warranties contained in this Agreement as if such representations and warranties, as applicable, were made directly to the Placement Agent.

(c) Neither the Placement Agent nor any of its Affiliates or representatives (1) shall be liable for any improper payment made in accordance with the information provided by the Company; (2) makes any representation or warranty, or has any responsibilities as to the validity, enforceability, accuracy, value or genuineness of any information, certificates or documentation delivered by or on behalf of the Company pursuant to the Transaction Agreements or in connection with any of the transactions contemplated therein; or (3) shall be liable (x) for any action taken, suffered or omitted by any of them in good faith and reasonably believed to be authorized or within the discretion or rights or powers conferred upon it by the Transaction Agreements or (y) for anything which any of them may do or refrain from doing in connection with the Transaction Agreements, except in each case for such party's own gross negligence or willful misconduct.

(d) The Company agrees that the Placement Agent, its affiliates and representatives shall be entitled to (1) rely on, and shall be protected in acting upon, any certificate, instrument, notice, letter or any other document or security delivered to any of them by or on behalf of the Company, and (2) be indemnified by the Company for acting as the Placement Agent hereunder pursuant to the indemnification provisions set forth in the applicable letter agreement between the Company and the Placement Agent.

8.11 Third Parties. Nothing in this Agreement, express or implied, is intended to confer on any Person other than the parties to this Agreement any rights, remedies, claims, benefits, obligations or liabilities under or by reason of this Agreement, and no Person that is not a party to this Agreement (including, without limitation, any partner, member, shareholder, director, officer, employee or other beneficial owner of any party to this Agreement, in its own capacity as such or in bringing a derivative action on behalf of a party to this Agreement) shall have any standing as a third party beneficiary with respect to this Agreement or the transactions contemplated hereby. Notwithstanding the foregoing, (i) the Placement Agent is an intended third-party beneficiary of the representations and warranties of the Company and of each Investor set forth in Section 3, Section 4 and Section 6.1(h) and Section 8.10 respectively, of this Agreement, and (ii) the Indemnified Persons are intended third-party beneficiaries of Section 5.9.

8.12 Independent Nature of Investors' Obligations and Right. The obligations of each Investor under this Agreement are several and not joint with the obligations of any other Investor, and no Investor shall be responsible in any way for the performance obligations of any other Investor under this Agreement. Nothing contained herein, and no action taken by any Investor pursuant hereto, shall be deemed to constitute the Investors as, and the Company acknowledges that the Investors do not so constitute, a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Investors are in any way acting in concert or as a group, and the Company will not assert any such claim with respect to such obligations or the transactions contemplated by this Agreement. The Company acknowledges and each Investor confirms that it has independently participated in the negotiation of the transaction contemplated hereby with the advice of its own counsel and advisors. Each Investor also acknowledges that Dentons US LLP has not rendered legal advice to such Investor. Each Investor shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of this Agreement, and it shall not be necessary for any other Investor to be joined as an additional party in any proceeding for such purpose. The Company has elected to provide all Investors with the same terms and Transaction Agreements for the convenience of the Company and not because it was required or requested to do so by any Investor.

8.13 Headings. The titles, subtitles and headings in this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement.

8.14 Counterparts. This Agreement may be executed in two or more identical counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party; provided that a facsimile or pdf signature including any electronic signatures complying with the U.S. federal ESIGN Act of 2000, e.g., www.docuSign.com shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original, not a facsimile or pdf (or other electronic reproduction of a) signature.

8.15 Entire Agreement; Amendments. This Agreement and the other Transaction Agreements (including all schedules and exhibits hereto and thereto), together with any side letter agreements with any of the Investors, constitute the entire agreement between the parties hereto respecting the subject matter of this Agreement and supersede all prior agreements, negotiations, understandings, representations and statements respecting the subject matter of this Agreement, whether written or oral. No amendment, modification, alteration, or change in any of the terms of

this Agreement shall be valid or binding upon the parties hereto unless made in writing and duly executed by the Company and the Investors of at least a majority in interest of the Securities then held by the Investors, provided that prior to the Closing the consent of all Investors shall be required. Notwithstanding the foregoing, this Agreement may not be amended and the observance of any term of this Agreement may not be waived with respect to any Investor without the written consent of such Investor unless such amendment or waiver applies to all Investors in the same fashion. The Company, on the one hand, and each Investor, on the other hand, may by an instrument signed in writing by such parties waive the performance, compliance or satisfaction by such Investor or the Company, respectively, with any term or provision of this Agreement or any condition hereto to be performed, complied with or satisfied by such Investor or the Company, respectively. Notwithstanding the foregoing or anything else herein to the contrary, no amendment, modification, alteration, change or waiver of this Section 8.15 shall be valid without the prior written consent of the Placement Agent, which consent may be granted or withheld in the sole discretion of the Placement Agent.

8.16 Survival. The covenants, representations and warranties made by each party hereto contained in this Agreement shall survive the Closing and the delivery of the Securities in accordance with their respective terms. Each Investor shall be responsible only for its own representations, warranties, agreements and covenants hereunder.

8.17 Contract Interpretation. This Agreement is the joint product of each Investor and the Company and each provision of this Agreement has been subject to the mutual consultation, negotiation and agreement of such parties and shall not be construed for or against any party hereto.

8.18 Arm's Length Negotiations. For the avoidance of doubt, the parties acknowledge and confirm that the terms and conditions of the Securities were determined as a result of arm's-length negotiations.

[Remainder of Page Intentionally Left Blank.]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

COMPANY:

SAB BIOTHERAPEUTICS, INC.

By: _____

Name: Samuel J. Reich

Title: Chief Executive Officer

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

INVESTOR:

[NAME]

By: _

Name:___

Title:_____

Address:

[●]

Email: [●]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

INVESTOR:

[NAME]

By: _

Name:___

Title:_____

Address:

[•]

Email: [•]

EXHIBIT B
FORM OF CERTIFICATE OF DESIGNATIONS

EXHIBIT C-1
FORM OF ENROLLMENT WARRANT

EXHIBIT C-2
FORM OF DATA RELEASE WARRANT

EXHIBIT D
FORM OF REGISTRATION RIGHTS AGREEMENT

EXHIBIT E
FORM OF SUPPORT AGREEMENT

E-1

REGISTRATION RIGHTS AGREEMENT

THIS REGISTRATION RIGHTS AGREEMENT (this “**Agreement**”), dated as of July [●], 2025, is entered into by and among SAB Biotherapeutics, Inc., a Delaware corporation (the “**Company**”), and the several investors signatory hereto (individually as an “**Investor**” and collectively together with their respective permitted assigns, the “**Investors**”). Capitalized terms used herein and not otherwise defined herein shall have the respective meanings set forth in the Securities Purchase Agreement by and among the parties hereto, dated as of the date hereof (as amended, restated, supplemented or otherwise modified from time to time, the “**Purchase Agreement**”).

WHEREAS:

A. Upon the terms and subject to the conditions of the Purchase Agreement, the Company has agreed to issue to the Investors, and the Investors have agreed to purchase, severally and not jointly, an aggregate of up to \$[●] of (i) shares of Series B Convertible Preferred Stock, par value \$0.0001 per share (and including any other class of securities into which the Series B Convertible Preferred Stock may hereafter be reclassified or changed into, the “**Preferred Stock**”) of the Company, (ii) accompanying warrants to purchase shares of Preferred Stock (the “**Enrollment Warrants**”), and (iii) accompanying warrants to purchase shares of Preferred Stock (the “**Data Release Warrants**”, and together with the Enrollment Warrants, the “**Warrants**”), in each case, pursuant to the Purchase Agreement. The shares of the Company’s common stock, par value \$0.0001 per share (the “**Common Stock**”) issuable upon conversion of the Preferred Stock, including upon conversion of shares of Preferred Stock issuable upon exercise of the Warrants, without giving effect to any limitations on conversion of the Preferred Stock or any limitations on exercise of the Warrants, and assuming all of the Warrants are exercised for cash, are collectively referred to herein as the “**Shares**.”

B. To induce the Investors to enter into the Purchase Agreement, the Company has agreed to provide certain registration rights under the U.S. Securities Act of 1933, as amended, and the rules and regulations thereunder, or any similar successor statute (collectively, the “**Securities Act**”), and applicable state securities laws.

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and the Investors hereby agree as follows:

1. DEFINITIONS.

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

(a) “**Definitive Proxy Statement**” means the definitive proxy statement that the Company shall file with the SEC and mail to the Company’s stockholders to approve the Proposal, following notification from the staff of the SEC that the staff has completed its review of the Preliminary Proxy Statement or that it will not review the Preliminary Proxy Statement, in accordance with Section 5.2(b) of the Purchase Agreement.

(b) “**Person**” means an individual, partnership, corporation, limited liability company, business trust, joint stock company, trust, unincorporated association, joint venture or any other entity or organization.

(c) **“Preliminary Proxy Statement”** means the preliminary proxy statement that the Company shall file with the SEC in connection with the Special Meeting to approve the Proposal, not more than thirty (30) days following the Closing, in accordance with Section 5.2(b) of the Purchase Agreement.

(d) **“Prospectus”** means (i) the prospectus included in any Registration Statement, as amended or supplemented by any prospectus supplement, with respect to the terms of the offering of any portion of the Registrable Securities covered by such Registration Statement and by all other amendments and supplements to the prospectus, including post-effective amendments and all material incorporated by reference in such prospectus, and (ii) any “free writing prospectus” as defined in Rule 405 under the 1933 Act, relating to the terms of the offering of any portion of the Registrable Securities.

(e) **“Register,” “Registered,” and “Registration”** refer to a registration effected by preparing and filing one or more registration statements of the Company in compliance with the Securities Act and providing for offering securities on a continuous basis, and the declaration or ordering of effectiveness of such registration statement(s) by the U.S. Securities and Exchange Commission (the “SEC”).

(f) **“Registrable Securities”** means the Shares and any Common Stock issued or issuable with respect to the Shares as a result of any stock split or subdivision, stock dividend, recapitalization, exchange or similar event. Registrable Securities shall cease to be Registrable Securities upon the date on which the Investors shall have resold all the Registrable Securities covered by the Registration Statement.

(g) **“Registration Expenses”** means all registration and filing fee expenses incurred by the Company in effecting any registration pursuant to this Agreement, including (i) all registration, qualification, and filing fees, printing expenses, and any other fees and expenses associated with filings required to be made with the SEC, FINRA or any other regulatory authority, (ii) all fees and expenses in connection with compliance with or clearing the Registrable Securities for sale under any securities or “Blue Sky” laws, (iii) all printing, duplicating, word processing, messenger, telephone, facsimile and delivery expenses, and (iv) all fees and disbursements of counsel for the Company and of all independent certified public accountants of the Company (including the expenses of any special audit and cold comfort letters required by or incident to such performance).

(h) **“Registration Statement”** means any registration statement of the Company filed with, or to be filed with, the SEC under the Securities Act, that Registers Registrable Securities, including the related Prospectus, amendments and supplements to such registration statement, including pre- and post-effective amendments, and all exhibits and all material incorporated by reference in such registration statement as may be necessary to comply with applicable securities laws. “Registration Statement” shall also include a New Registration Statement, as amended when each became effective, including all documents filed as part thereof or incorporated by reference therein, and including any information contained in a Prospectus subsequently filed with the SEC.

(i) **“Required Investors”** means the Investors holding a majority of the Registrable Securities outstanding from time to time.

(j) **“Selling Expenses”** means all underwriting discounts and selling commissions applicable to the sale of Registrable Securities and all similar fees and commissions relating to the Investors’ disposition of the Registrable Securities.

2. REGISTRATION.

(a) Mandatory Registration. The Company shall, as promptly as reasonably practicable and in any event no later than one (1) calendar days following the filing of the Definitive Proxy Statement (the “**Filing Deadline**”), prepare and file with the SEC an initial Registration Statement (the “**Initial Registration Statement**”) covering the resale of all Registrable Securities. Before filing the Registration Statement, the Company shall furnish to the Investors a copy of the Registration Statement. The Investors and their counsel shall have at least three Business Days prior to the anticipated filing date of a Registration Statement to review and comment upon such Registration Statement and any amendment or supplement to such Registration Statement and any related Prospectus, prior to its filing with the SEC. Subject to any SEC comments, such Registration Statement shall include the plan of distribution substantially in the form attached hereto as Exhibit A. Such Registration Statement also shall cover, to the extent allowable under the 1933 Act and the rules promulgated thereunder (including Rule 416), such indeterminate number of additional shares of Common Stock resulting from stock splits, stock dividends or similar transactions with respect to the Registrable Securities. Such Registration Statement shall not include any shares of Common Stock or other securities for the account of any other holder of securities of the Company without the prior written consent of the Required Investors. The Company shall (a) use commercially reasonable efforts to address in each such document prior to being so filed with the SEC such comments as the Investor or its counsel reasonably proposed by the Investor, and (b) not file any Registration Statement or Prospectus or any amendment or supplement thereto containing information regarding the Investor to which Investor reasonably objects, unless such information is required to comply with any applicable law or regulation. The Investors shall furnish all information reasonably requested by the Company and as shall be reasonably required in connection with any registration referred to in this Agreement.

(b) Effectiveness. The Company shall use its reasonable best efforts to have the Initial Registration Statement and any amendment declared effective by the SEC at the earliest possible date following receipt of stockholder approval of the Proposal at the Special Meeting (“**Stockholder Approval**”), which shall be no later than the third Business Day following receipt of Stockholder Approval (the “**Effectiveness Deadline**”). The Company shall notify the Investor by e-mail as promptly as practicable, and in any event, within 24 hours, after the Registration Statement is declared effective or is supplemented and shall provide the Investor with copies of any Prospectus to be used in connection with the sale or other disposition of the securities covered thereby. The Company shall use reasonable best efforts to keep the Initial Registration Statement continuously effective pursuant to Rule 415 promulgated under the Securities Act and available for the resale by the Investors of all of the Registrable Securities covered thereby at all times until the earliest to occur of the following events: (i) the date on which the Investors shall have resold all the Registrable Securities covered thereby; and (ii) the date on which the Registrable Securities may be resold by the Investors without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information requirement under Rule 144 under the Securities Act or any other rule of similar effect (the “**Registration Period**”). The Initial Registration Statement (including any amendments or supplements thereto and prospectuses contained therein) shall not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading.

(c) Sufficient Number of Shares Registered. In the event the number of shares available under the Initial Registration Statement at any time is insufficient to cover the Registrable Securities, the Company shall, to the extent necessary and permissible, amend the Initial Registration Statement or file a new registration statement (together with any prospectuses or prospectus supplements thereunder, a “**New Registration Statement**”), so as to cover all of such Registrable Securities as soon as reasonably practicable, but in any event not later than ten (10) Business Days after the necessity therefor arises (the “**New Registration Filing Deadline**”). The Company shall use its reasonable best efforts to have such amendment and/or New Registration Statement become effective as soon as reasonably practicable

following the filing thereof but no later than the earlier of (a) the 75th calendar day following the initial filing date of the New Registration Statement if the SEC notifies the Company that it will “review” the New Registration Statement and (b) the fifth Business Day after the date the Company is notified (orally or in writing, whichever is earlier) by the SEC that the New Registration Statement will not be “reviewed” or will not be subject to further review (the earlier of such dates, the “**New Registration Effectiveness Deadline**”). The provisions of Section 2(a) and (b) shall apply to the New Registration Statement, except as modified hereby.

(d) Liquidated Damages. If (i) the Initial Registration Statement has not been filed by the Filing Deadline, (ii) the Initial Registration Statement has not been declared effective by the Effectiveness Deadline, (iii) the New Registration Statement has not been filed by the New Registration Filing Deadline, (iv) the New Registration Statement has not been declared effective by the New Registration Effectiveness Deadline or (v) after any Registration Statement has been declared effective by the SEC, sales cannot be made pursuant to such Registration Statement for any reason (including without limitation by reason of a stop order, or the Company’s failure to update such Registration Statement), but excluding any Allowed Delay (as defined below) or, if the Registration Statement is on Form S-1, for a period of 20 days following the date on which the Company files a post-effective amendment to incorporate the Company’s Annual Report on Form 10-K, then the Company will make pro rata payments to each Investor then holding Registrable Securities, as liquidated damages and not as a penalty, in an amount equal to 1.0% of the aggregate amount paid pursuant to the Purchase Agreement by such Investor for such Registrable Securities then held by such Investor for each 30-day period or pro rata for any portion thereof during which the failure continues (the “**Blackout Period**”), provided that no liquidated damages shall be payable if and to the extent to, despite best efforts by the Company to avoid a breach hereof, the Company’s failure was caused by a government shutdown resulting in the SEC’s inability to review or declare effective the Registration Statement. Such payments shall constitute the Investors’ exclusive monetary remedy for such events, but shall not affect the right of the Investors to seek injunctive relief. The amounts payable as liquidated damages pursuant to this paragraph shall be paid in cash no later than five Business Days after each such 30-day period following the commencement of the Blackout Period until the termination of the Blackout Period (the “**Blackout Period Payment Date**”). Interest shall accrue at the rate of 1.0% per month on any such liquidated damages payments that shall not be paid by the Blackout Period Payment Date until such amount is paid in full. Notwithstanding the above, in no event shall the aggregate amount of liquidated damages (or interest thereon) paid under this Agreement to any Investor exceed, in the aggregate, 5.0% of the aggregate purchase price of the Shares purchased by such Investor under the Purchase Agreement. Notwithstanding anything in this Section 2(d) to the contrary, during any periods that the Company is unable to meet its obligations hereunder with respect to the registration of the Registrable Securities because any Investor fails to furnish information required to be provided pursuant to Section 2(a) or Section 4(a) within three Business Days of the Company’s request, any liquidated damages that would otherwise accrue as to such Investor only shall be tolled until such information is delivered to the Company.

(e) Allowable Delays. On no more than two occasions and for not more than 30 consecutive days or for a total of not more than 60 days in any 12 month period, the Company may delay the effectiveness of the Initial Registration Statement or any other Registration Statement, or suspend the use of any Prospectus, in the event that the Company or Board of Directors determines, in good faith and upon advice of legal counsel, that such delay or suspension is necessary to (A) delay the disclosure of material non-public information concerning the Company, the disclosure of which at the time is not, in the good faith opinion of the Company, in the best interests of the Company or (B) amend or supplement the affected Registration Statement or the related Prospectus so that such Registration Statement or Prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the case of the Prospectus in light of the circumstances under which they were made, not misleading (an “**Allowed Delay**”); provided, that the Company shall promptly (a) notify each Investor in writing of the commencement of an Allowed Delay,

but shall not (without the prior written consent of an Investor) disclose to such Investor any material non-public information giving rise to an Allowed Delay, (b) advise the Investors in writing to cease all sales under the applicable Registration Statement until the end of the Allowed Delay and (c) use commercially reasonable efforts to terminate an Allowed Delay as promptly as practicable.

(f) Rule 415; Cutback. If at any time the SEC takes the position that the offering of some or all of the Registrable Securities in any Registration Statement is not eligible to be made on a delayed or continuous basis under the provisions of Rule 415 under the Securities Act (provided, however, the Company shall be obligated to use reasonable best efforts to advocate with the SEC for the registration of all of the Registrable Securities) or requires any Investor to be named as an “underwriter,” the Company shall (i) promptly notify each holder of Registrable Securities thereof and (ii) make commercially reasonable efforts to persuade the SEC that the offering contemplated by such Registration Statement is a valid secondary offering and not an offering “by or on behalf of the issuer” as defined in Rule 415 and that none of the Investors is an “underwriter.” The Investors shall have the right to select one legal counsel, which counsel shall be selected by the Required Investors, to review and oversee any registration or matters pursuant to this Section 2(f), including participation in any meetings or discussions with the SEC regarding the SEC’s position and to comment on any written submission made to the SEC with respect thereto. No such written submission with respect to this matter shall be made to the SEC to which any Investor’s counsel reasonably objects. In the event that, despite the Company’s reasonable best efforts and compliance with the terms of this Section 2(f), the SEC refuses to alter its position, the Company shall (i) remove from such Registration Statement such portion of the Registrable Securities (the “**Cut Back Shares**”), and/or (ii) agree to such restrictions and limitations on the registration and resale of the Registrable Securities as the SEC may require to assure the Company’s compliance with the requirements of Rule 415 (collectively, the “**SEC Restrictions**”); provided, however, that the Company shall not name any Investor as an “underwriter” in such Registration Statement without the prior written consent of such Investor (provided that, in the event an Investor withholds such consent, the Company shall have no obligation hereunder to include any Registrable Securities of such Investor in any Registration Statement covering the resale thereof until such time as the SEC no longer requires such Investor to be named as an “underwriter” in such Registration Statement or such Investor otherwise consents in writing to being so named). Any cut-back imposed on the Investors pursuant to this Section 2(f) shall be allocated among the Investors on a pro rata basis and shall be applied first to any of the Registrable Securities of such Investor as such Investor shall designate, unless the SEC Restrictions otherwise require or provide or the Investors otherwise agree. No liquidated damages shall accrue as to any Cut Back Shares until such date as the Company is able to effect the registration of such Cut Back Shares in accordance with any SEC Restrictions applicable to such Cut Back Shares (such date, the “**Restriction Termination Date**”). From and after the Restriction Termination Date applicable to any Cut Back Shares, all of the provisions of this Section 2 (including the Company’s obligations with respect to the filing of a Registration Statement and its obligations to use reasonable efforts to have such Registration Statement declared effective within the time periods set forth herein and the liquidated damages provisions relating thereto) shall again be applicable to such Cut Back Shares; provided, however, that the date by which the Company is required to file the Registration Statement with respect to such Cut Back Shares shall be the tenth day following the Restriction Termination Date and the date by which the Company is required to have the Registration Statement effective with respect to such Cut Back Shares shall be the 55th day immediately after the Restriction Termination Date.

3. RELATED COMPANY OBLIGATIONS.

With respect to the Registration Statement and whenever any Registrable Securities are to be Registered pursuant to Section 2, including on the Initial Registration Statement or on any New Registration Statement, the Company shall use its reasonable best efforts to effect the registration of the Registrable Securities in accordance with the intended method of disposition thereof and, pursuant thereto, the Company shall have the following obligations:

(a) Notifications. The Company will promptly notify the Investors of the time when any subsequent amendment to the Initial Registration Statement or any New Registration Statement, other than documents incorporated by reference, has been filed with the SEC and/or has become effective or where a receipt has been issued therefor or any subsequent supplement to a Prospectus has been filed and of any request by the SEC for any amendment or supplement to the Registration Statement, any New Registration Statement or any Prospectus or for additional information.

(b) Amendments. The Company will prepare and file with the SEC any amendments, post-effective amendments or supplements to the Initial Registration Statement, any New Registration Statement or any Prospectus, as applicable, that, (a) as may be necessary to keep such Registration Statement effective for the Registration Period and to comply with the provisions of the Securities Act and the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), with respect to the distribution of all of the Registrable Securities covered thereby, or (b) in the reasonable opinion of the Investors and the Company, as may be necessary or advisable in connection with any acquisition or sale of Registrable Securities by the Investors.

(c) Investor Review. The Company will not file any amendment or supplement to the Registration Statement, any New Registration Statement or any Prospectus, other than documents incorporated by reference, relating to the Investors, the Registrable Securities or the transactions contemplated hereby unless (A) the Investors and their counsel shall have been advised and afforded the opportunity to review and comment thereon at least three (3) Business Days prior to filing with the SEC and (B) the Company shall have given reasonable due consideration to any comments thereon received from the Investors or their counsel.

(d) Copies Available. The Company will furnish to any Investor whose Registrable Securities are included in any Registration Statement and its counsel copies of the Initial Registration Statement, any Prospectus thereunder (including all documents incorporated by reference therein), any Prospectus supplement thereunder, any New Registration Statement and all amendments to the Initial Registration Statement or any New Registration Statement that are filed with the SEC during the Registration Period (including all documents filed with or furnished to the SEC during such period that are deemed to be incorporated by reference therein), each letter written by or on behalf of the Company to the SEC or the staff of the SEC, and each item of correspondence from the SEC or the staff of the SEC, in each case relating to such Registration Statement (other than any portion thereof which contains information for which the Company has sought confidential treatment) and such other documents as Investor may reasonably request in order to facilitate the disposition of the Registrable Securities owned by Investor that are covered by such Registration Statement, in each case as soon as reasonably practicable upon such Investor’s request and in such quantities as such Investor may from time to time reasonably request; provided, however, that the Company shall not be required to furnish any document to the Investor to the extent such document is available on EDGAR.

(e) Notification of Stop Orders; Material Changes. The Company shall use commercially reasonable efforts to (i) prevent the issuance of any stop order or other suspension of effectiveness and, (ii) if such order is issued, obtain the withdrawal of any such order as soon as practicable. The Company shall advise the Investors promptly (but in no event later than 24 hours) and shall confirm such advice in writing, in each case: (i) of the Company’s receipt of notice of any request by the SEC or any other federal or state governmental authority for amendment of or a supplement to the Registration Statement or any Prospectus or for any additional information; (ii) of the Company’s receipt of notice of the issuance by the SEC or any other federal or state governmental authority of any stop order suspending the effectiveness of the Initial Registration Statement or prohibiting or suspending the use of any Prospectus or Prospectus supplement, or any New Registration Statement, or of the Company’s receipt of any notification of the suspension of qualification of the Registrable Securities for offering or sale in any

jurisdiction or the initiation or contemplated initiation of any proceeding for such purpose; and (iii) of the Company becoming aware of the happening of any event, which makes any statement of a material fact made in any Registration Statement or any Prospectus untrue or which requires the making of any additions to or changes to the statements then made in any Registration Statement or any Prospectus in order to state a material fact required by the Securities Act to be stated therein or necessary in order to make the statements then made therein (in the case of any Prospectus, in light of the circumstances under which they were made) not misleading, or of the necessity to amend any Registration Statement or any Prospectus to comply with the Securities Act or any other law. The Company shall not be required to disclose to the Investors the substance of specific reasons of any of the events set forth in clause (i) to (iii) of the immediately preceding sentence (each, a “**Suspension Event**”), but rather, shall only be required to disclose that the event has occurred. If at any time the SEC, or any other federal or state governmental authority shall issue any stop order suspending the effectiveness of any Registration Statement or prohibiting or suspending the use of any Prospectus or Prospectus supplement, the Company shall use its reasonable best efforts to obtain the withdrawal of such order at the earliest practicable time. The Company shall furnish to the Investors, without charge, a copy of any correspondence from the SEC or the staff of the SEC, or any other federal or state governmental authority to the Company or its representatives relating to the Initial Registration Statement, any New Registration Statement or any Prospectus, or Prospectus supplement as the case may be. In the event of a Suspension Event set forth in clause (iii) of the first sentence of this Section 3(e), the Company will use its commercially reasonable efforts to publicly disclose such event as soon as reasonably practicable, or otherwise resolve the matter such that sales under Registration Statements may resume; provided, however, that if the Company has a bona fide business purpose for not making such information public, the Company may suspend the use of all Registration Statements for up to 60 consecutive calendar days; provided, further, that the Company may not suspend the use of all Registration Statements more than twice, or for more than 90 total calendar days, in each case during any twelve-month period.

(f) Confirmation of Effectiveness. If reasonably requested by an Investor at any time in respect of any Registration Statement, the Company shall deliver to such Investor a written confirmation (email being sufficient) from Company’s counsel of whether or not the effectiveness of such Registration Statement has lapsed at any time for any reason (including, without limitation, the issuance of a stop order) and whether or not such Registration Statement is currently effective and available to the Company for sale of Registrable Securities.

(g) Listing. The Company shall use best efforts to cause all Registrable Securities covered by a Registration Statement to be listed on The Nasdaq Capital Market.

(h) Compliance. The Company shall otherwise use best efforts to comply with all applicable rules and regulations of the SEC under the Securities Act and the Exchange Act, including, without limitation, Rule 172 under the Securities Act, file any final prospectus, including any supplement or amendment thereof, with the SEC pursuant to Rule 424 under the Securities Act, promptly inform the Investor in writing if, at any time during the Registration Period, the Company does not satisfy the conditions specified in Rule 172 and, as a result thereof, the Investor is required to deliver a prospectus in connection with any disposition of Registrable Securities and take such other actions as may be reasonably necessary to facilitate the registration of the Registrable Securities hereunder, and make available to its security holders, as soon as reasonably practicable, but not later than the Availability Date (as defined below), an earnings statement covering a period of at least 12 months, beginning after the effective date of each Registration Statement, which earnings statement shall satisfy the provisions of Section 11(a) of the Securities Act, including Rule 158 promulgated thereunder (for the purpose of this Section 3(h), “**Availability Date**” means the 45th day following the end of the fourth fiscal quarter that includes the effective date of such Registration Statement, except that, if such fourth fiscal quarter is the last quarter of the Company’s fiscal year, “**Availability Date**” means the 90th day after the end of such fourth fiscal quarter).

(i) Blue-Sky. The Company shall register or qualify or cooperate with the Investor and their counsel in connection with the registration or qualification of such Registrable Securities for the offer and sale under the securities or blue sky laws of such jurisdictions reasonably requested by the Investor; provided, however, that the Company shall not be required in connection therewith or as a condition thereto to (i) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(i), (ii) subject itself to general taxation in any jurisdiction where it would not otherwise be so subject but for this Section 3(i), or (iii) file a general consent to service of process in any such jurisdiction.

(j) Rule 144. With a view to making available to the Investors the benefits of Rule 144 (or its successor rule) and any other rule or regulation of the SEC that may at any time permit the Investors to sell shares of Common Stock to the public without registration, the Company covenants and agrees to: (i) make and keep adequate current public information available, as those terms are understood and defined in Rule 144, until the earlier of (A) six months after such date as all of the Registrable Securities may be sold without restriction by the holders thereof pursuant to Rule 144 or any other rule of similar effect or (B) such date as there are no longer Registrable Securities; and (ii) file with the SEC in a timely manner all reports and other documents required of the Company under the Exchange Act; (iii) furnish electronically to each Investor upon request, as long as such Investor owns any Registrable Securities, (A) a written statement by the Company that it has complied with the reporting requirements of the Exchange Act, (B) a copy of or electronic access to the Company's most recent Annual Report on Form 10-K or Quarterly Report on Form 10-Q, and (C) such other information as may be reasonably requested in order to avail such Investor of any rule or regulation of the SEC that permits the selling of any such Registrable Securities without registration.

(k) Cooperation. The Company shall cooperate with the holders of the Registrable Securities to facilitate the timely preparation and delivery of certificates or uncertificated shares representing the Registrable Securities to be sold pursuant to such Registration Statement or Rule 144 free of any restrictive legends and representing such number of shares of Common Stock and registered in such names as the holders of the Registrable Securities may reasonably request to the extent permitted by such Registration Statement or Rule 144 to effect sales of Registrable Securities; for the avoidance of doubt, the Company may satisfy its obligations hereunder without issuing physical stock certificates through the use of The Depository Trust Company's Direct Registration System.

4. OBLIGATIONS OF THE INVESTORS.

(a) Investor Information. Each Investor has provided a completed Investor Questionnaire in the form attached hereto as Exhibit B in connection with the registration of the Registrable Securities.

(b) Suspension of Sales. Each Investor, severally and not jointly with any other Investor, agrees that, upon receipt of any notice from the Company of the existence of an Allowed Delay or a Suspension Event as set forth in Section 3(e), the Investor will promptly discontinue disposition of Registrable Securities pursuant to any Registration Statement covering such Registrable Securities until the Investor's receipt of a notice from the Company confirming the resolution of such Allowed Delay or Suspension Event and that such dispositions may again be made; provided, for the avoidance of doubt, that the foregoing shall not limit the right of the Investor to sell or otherwise dispose of the Registrable Securities pursuant to Rule 144 or any other exemption from the registration requirements of the Securities Act or to settle a transaction pursuant to a Registration Statement as to which a contract for such sale was entered into prior to such Investor's receipt of the notice from the Company of the existence of the Allowed Delay or Suspension Event. The Company shall cause its transfer agent to deliver unlegended shares of Common Stock to a transferee of an Investor in accordance with any sale of Registrable Securities pursuant to a

Registration Statement with respect to which such Investor has entered into a contract for sale prior to such Investor's receipt of the notice from the Company of the existence of the Allowed Delay or Suspension Event.

(c) Investor Cooperation. Each Investor, severally and not jointly with any other Investor, agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of any amendments and supplements to any Registration Statement or New Registration Statement hereunder, unless such Investor has notified the Company in writing of its election to exclude all of its Registrable Securities from such Registration Statement.

5. EXPENSES OF REGISTRATION.

All Registration Expenses incurred in connection with registrations pursuant to this Agreement shall be borne by the Company. All Selling Expenses relating to securities registered on behalf of the Investors shall be borne by the Investors pro rata on the basis of the number of Registrable Securities so registered.

6. INDEMNIFICATION.

(a) To the fullest extent permitted by law, the Company will, and hereby does, indemnify, hold harmless and defend the Investors, each Person, if any, who controls the Investors, the members, the directors, officers, partners, employees, members, managers, agents, representatives and advisors of the Investors and each Person, if any, who controls the Investors within the meaning of the Securities Act or the Exchange Act (each, an "**Indemnified Person**"), against any losses, obligation, claims, damages, liabilities, contingencies, judgments, fines, penalties, charges, costs (including, without limitation, court costs and costs of preparation), reasonable and documented attorneys' fees, amounts paid in settlement or reasonable and documented expenses (collectively, "**Claims**"), reasonably incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency or body or the SEC, whether pending or threatened, whether or not an indemnified party is or may be a party thereto ("**Indemnified Damages**"), to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement or omission or alleged omission of any material fact contained in any Registration Statement, any preliminary prospectus or final prospectus, or any amendment or supplement thereof, or (ii) any violation or alleged violation by the Company or any of its subsidiaries of the Securities Act, Exchange Act or any other state securities or other "blue sky" laws of any jurisdiction in which Registrable Securities are offered or any rule or regulation promulgated thereunder applicable to the Company or its agents and relating to action or inaction required of the Company in connection with such registration of the Registrable Securities (the matters in the foregoing clauses (i) and (ii) being, collectively, "**Violations**"). The Company shall reimburse each Indemnified Person promptly as such expenses are incurred and are due and payable, for any reasonable out-of-pocket legal fees or other reasonable and documented expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a): (A) shall not apply to a Claim by an Indemnified Person arising out of or based upon a Violation which occurs in reliance upon and in conformity with information furnished in writing to the Company by the Investors or such Indemnified Person specifically for use in such Registration Statement or prospectus and was reviewed and approved in writing by such Investor or such Indemnified Person expressly for use in connection with the preparation of any Registration Statement, any prospectus or any such amendment thereof or supplement thereto, in each case if the foregoing was timely made available by the Company; (B) with respect to any superseded prospectus, shall not inure to the benefit of any such Person from whom the Person asserting any such Claim purchased the Registrable Securities

that are the subject thereof (or to the benefit of any other Indemnified Person) if the untrue statement or omission of material fact contained in the superseded prospectus was corrected in the revised prospectus, as then amended or supplemented, and the Indemnified Person was promptly advised in writing not to use the outdated, defective or incorrect prospectus prior to the use giving rise to a Violation; (C) shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld, conditioned or delayed. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Indemnified Person and shall survive the transfer of the Registrable Securities by the Investor pursuant to Section 8.

(b) In connection with the Initial Registration Statement, any New Registration Statement or any prospectus, the Investors, severally and not jointly, agree to indemnify, hold harmless and defend, the Company, each of its directors, each of its officers who signed the Initial Registration Statement or signs any New Registration Statement, each Person, if any, who controls the Company within the meaning of the Securities Act or the Exchange Act (each, an “**Indemnified Party**”), against any losses, claims, damages, liabilities and expense (including reasonable attorney fees) resulting from any Violation, in each case to the extent, and only to the extent, that such Violation occurs in reliance upon and in conformity with information about an Investor furnished in writing by such Investor to the Company and reviewed and approved in writing by such Investor or such Indemnified Person expressly for use in connection with the preparation of the Registration Statement, any New Registration Statement, any prospectus or any such amendment thereof or supplement thereto. In no event shall the liability of an Investor be greater in amount than the dollar amount of the proceeds (net of all expense paid by such Investor in connection with any claim relating to this Section 6 and the amount of any damages such Investor has otherwise been required to pay by reason of such untrue statement or omission) received by such Investor upon the sale of the Registrable Securities included in such Registration Statement giving rise to such indemnification obligation. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such Indemnified Party and shall survive the transfer of the Registrable Securities by any Investor pursuant to Section 8.

(c) Promptly after receipt by an Indemnified Person or Indemnified Party under this Section 6 of notice of the commencement of any action or proceeding (including any governmental action or proceeding) involving a Claim, such Indemnified Person or Indemnified Party shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Indemnified Person or the Indemnified Party, as the case may be, and upon such notice, the indemnifying party shall not be liable to the Indemnified Person or the Indemnified Party for any legal or other expenses subsequently incurred by the Indemnified Person or the Indemnified Party in connection with the defense thereof; provided, however, that an Indemnified Person or Indemnified Party (together with all other Indemnified Persons and Indemnified Parties that may be represented without conflict by one counsel) shall have the right to retain its own counsel with the reasonable fees and expenses to be paid by the indemnifying party, if, in the reasonable opinion of counsel retained by the indemnifying party, the representation by such counsel of the Indemnified Person or Indemnified Party and the indemnifying party would be inappropriate due to actual or potential differing interests between such Indemnified Person or Indemnified Party and any other party represented by such counsel in such proceeding. The Indemnified Party or Indemnified Person shall cooperate with the indemnifying party in connection with any negotiation or defense of any such action or claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Indemnified Party or Indemnified Person which relates to such action or claim. The indemnifying party shall keep the Indemnified Party or Indemnified Person fully apprised as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its written

consent, provided, however, that the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the consent of the Indemnified Party or Indemnified Person, consent to entry of any judgment or enter into any settlement or other compromise unless such judgment or settlement (i) imposes no liability or obligation on, (ii) includes as an unconditional term thereof the giving of a complete, explicit and unconditional release from the party bringing such indemnified claims of all liability of the Indemnified Party or Indemnified Person in respect to or arising out of such claim or litigation in favor of, and (iii) does not include any admission of fault, culpability, wrongdoing, or malfeasance by or on behalf of, the Indemnified Party or Indemnified Person. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Indemnified Party or Indemnified Person with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Indemnified Person or Indemnified Party under this Section 6, except to the extent that the indemnifying party is prejudiced in its ability to defend such action.

(d) The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or Indemnified Damages are incurred. Any Person receiving a payment pursuant to this Section 6 which person is later determined to not be entitled to such payment shall return such payment (including reimbursement of expenses) to the person making it.

(e) The indemnity agreements contained herein shall be in addition to (i) any cause of action or similar right of the Indemnified Party or Indemnified Person against the indemnifying party or others, and (ii) any liabilities the indemnifying party may be subject to pursuant to the law.

7. CONTRIBUTION.

To the extent any indemnification by an indemnifying party is prohibited or limited by law, the indemnifying party agrees to make the maximum contribution with respect to any amounts for which it would otherwise be liable under Section 6 to the fullest extent permitted by law; provided, however, that: (i) no seller of Registrable Securities guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any seller of Registrable Securities who was not guilty of fraudulent misrepresentation; and (ii) contribution by any seller of Registrable Securities shall be limited in amount to the net amount of proceeds (net of all expenses paid by such holder in connection with any claim relating to this Section 7 and the amount of any damages such holder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission) received by such seller from the sale of such Registrable Securities giving rise to such contribution obligation.

8. ASSIGNMENT OF REGISTRATION RIGHTS.

(a) The Company shall not assign this Agreement or any rights or obligations hereunder (whether by operation of law or otherwise) without the prior written consent of the Required Investors; provided, however, that in any transaction, whether by merger, reorganization, restructuring, consolidation, financing or otherwise, whereby the Company is a party and in which the Registrable Securities are converted into the equity securities of another Person, from and after the effective time of such transaction, such Person shall, by virtue of such transaction, be deemed to have assumed the obligations of the Company hereunder, the term "Company" shall be deemed to refer to such Person and the term "Registrable Securities" shall be deemed to include the securities received by the Investor in connection with such transaction unless such securities are otherwise freely tradable by the Investor after

giving effect to such transaction, and the prior written consent of the Required Investors shall not be required for such transaction.

(b) An Investor may transfer or assign its rights hereunder, in whole or from time to time in part, to one or more Persons in connection with the transfer of not fewer than 1,000,000 (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization) Registrable Securities (including Registrable Securities issuable upon conversion of Preferred Stock) by such Investor to such Person, provided that such Investor complies with all laws applicable thereto, and the provisions of the Purchase Agreement, and provides written notice of assignment to the Company promptly after such assignment is effected, and such Person agrees in writing to be bound by all of the provisions contained herein.

(c) The provisions of this Agreement shall be binding upon and inure to the benefit of the Investor and its successors and permitted assigns.

9. AMENDMENTS AND WAIVERS.

The provisions of this Agreement, including the provisions of this sentence, may be amended, modified, supplemented, or waived only by a written instrument executed by (i) the Company and (ii) the Required Investors, provided that (1) any party may give a waiver as to itself, (2) any amendment, modification, supplement or waiver that disproportionately and adversely affects the rights and obligations of any Investor relative to the comparable rights and obligations of the other Investors shall require the prior written consent of such adversely affected Investor or each Investor, as applicable, and (3) any amendments to Section 6 or to the definitions of "Filing Deadline," "Effectiveness Deadline," or "Registration Period" shall require the written consent of each Investor. Notwithstanding the foregoing, a waiver or consent to depart from the provisions hereof with respect to a matter that relates exclusively to the rights of one or more Investors and that does not adversely directly or indirectly affect the rights of other Investors may be given by Investors holding all of the Registrable Securities to which such waiver or consent relates.

10. MISCELLANEOUS.

(a) Notices. Any notices or other communications required or permitted to be given hereunder shall be in writing and shall be deemed to be given (a) when delivered if personally delivered to the party for whom it is intended, (b) when delivered, if sent by electronic mail during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day, (c) three days after having been sent by certified or registered mail, return-receipt requested and postage prepaid, or (d) one business day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt:

i. If to the Company, addressed as follows:

SAB Biotherapeutics, Inc.
777 W 41st St, Suite 401
Miami Beach, Florida
Attention: Lucy To
Email: lucy@sab.bio

with a copy (which shall not constitute notice):

Dentons US LLP

Ilan Katz
1221 Avenue of the Americas
New York, NY 10020
Attention: Ilan Katz, Brian Lee and Grant Levine
Email: ilan.katz@dentons.com; brian.lee@dentons.com; grant.levine@dentons.com

ii. If to any Investor, at its e-mail address or address set forth on its signature page to the Purchase Agreement or to such e-mail address, or address as subsequently modified by written notice given in accordance with this Section 10.

Any Person may change the address to which notices and communications to it are to be addressed by notification as provided for herein.

(b) Consent to Electronic Notice. Each Investor consents to the delivery of any stockholder notice pursuant to the Delaware General Corporation Law (the “**DGCL**”), as amended or superseded from time to time, by electronic mail pursuant to Section 232 of the DGCL (or any successor thereto) at the e-mail address set forth below the Investor’s name on the signature page or Exhibit A, as updated from time to time by notice to the Company. To the extent that any notice given by means of electronic mail is returned or undeliverable for any reason, the foregoing consent shall be deemed to have been revoked until a new or corrected e-mail address has been provided, and such attempted electronic notice shall be ineffective and deemed to not have been given. Each party agrees to promptly notify the other parties of any change in its e-mail address, and that failure to do so shall not affect the foregoing.

(c) Waiver. No waiver of any term, provision or condition of this Agreement, whether by conduct or otherwise, in any one or more instances, shall be deemed to be, or be construed as, a further or continuing waiver of any such term, provision or condition or as a waiver of any other term, provision or condition of this Agreement.

(d) Governing Law. The provisions of Section 8.5 of the Purchase Agreement are incorporated by reference herein *mutatis mutandis*.

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

(f) Counterparts. This Agreement may be executed in two or more identical counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party; provided that a facsimile or pdf signature including any electronic signatures complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original, not a facsimile or pdf (or other electronic reproduction of a) signature.

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

(h) Contract Interpretation. This Agreement is the joint product of each Investor and the Company and each provision hereof has been subject to the mutual consultation, negotiation and agreement of such parties and shall not be construed for or against any party hereto.

(i) No Third Party Beneficiaries. Nothing in this Agreement, express or implied, is intended to confer on any Person other than the parties to this Agreement any rights, remedies, claims, benefits, obligations or liabilities under or by reason of this Agreement, and no Person that is not a party to this Agreement (including, without limitation, any partner, member, shareholder, director, officer, employee or other beneficial owner of any party to this Agreement, in its own capacity as such or in bringing a derivative action on behalf of a party to this Agreement) shall have any standing as a third party beneficiary with respect to this Agreement or the transactions contemplated hereby.

(j) Severability. If any part or provision of this Agreement is held unenforceable or in conflict with the applicable laws or regulations of any jurisdiction, the invalid or unenforceable part or provisions shall be replaced with a provision which accomplishes, to the extent possible, the original business purpose of such part or provision in a valid and enforceable manner, and the remainder of this Agreement shall remain binding upon the parties hereto.

(k) Non-Recourse. Notwithstanding anything that may be expressed or implied in this Agreement, the Company covenants, agrees and acknowledges that no recourse under this Agreement or any documents or instruments delivered in connection with this Agreement shall be had against any current or future director, officer, employee, stockholder, general or limited partner or member of the Investors or of any affiliates or assignees thereof, whether by the enforcement of any assessment or by any legal or equitable proceeding, or by virtue of any statute, regulation or other applicable law, it being expressly agreed and acknowledged that no personal liability whatsoever shall attach to, be imposed on or otherwise be incurred by any current or future director, officer, employee, stockholder, general or limited partner or member of the Investors or of any affiliates or assignees thereof, as such for any obligation of the Investors under this Agreement or any documents or instruments delivered in connection with this Agreement for any claim based on, in respect of or by reason of such obligations or their creation.

(l) Specific Performance. In addition to any and all other remedies that may be available at law in the event of any breach of this Agreement, each Investor shall be entitled to specific performance of the agreements and obligations of the Company hereunder and to such other injunction or other equitable relief as may be granted by a court of competent jurisdiction.

(m) Cumulative Remedies. The remedies provided herein are cumulative and not exclusive of any remedies provided by law.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties have caused this Registration Rights Agreement to be duly executed as of date first written above.

COMPANY:

SAB BIOTHERAPEUTICS, INC.

By: _____

Name:

Title:

[Signature Page to Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have caused this Registration Rights Agreement to be duly executed as of date first written above.

INVESTOR:

[NAME]

By: _

Name:___

Title:____

[Signature Page to Registration Rights Agreement]

Exhibit A

PLAN OF DISTRIBUTION

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- distributions to members, partners, stockholders or other equityholders of the selling stockholders;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales and settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act, amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling stockholders for purposes of this prospectus.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering. Upon any exercise of the common warrants by payment of cash, however, we will receive the exercise price of the common warrants.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule, or another available exemption from the registration requirements under the Securities Act.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be “underwriters” within the meaning of Section 2(a)(11) of the Securities Act (it being understood that the selling stockholders shall not be deemed to be underwriters solely as a result of their participation in this offering). Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are “underwriters” within the meaning of Section 2(a)(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agent, dealer or underwriter, and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, to the extent applicable, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the selling stockholders to use commercially reasonable efforts to cause the registration statement of which this prospectus constitutes a part to become effective and to remain continuously effective until the earlier of: (i) the date on which the selling stockholders shall have resold or otherwise disposed of all the shares covered by this prospectus and (ii) the date on which the shares covered by this prospectus no longer constitute “Registrable Securities” as such term is defined in the Registration Rights Agreement, such that they may be resold by the selling stockholders without registration and without regard to any volume or manner-of-sale limitations and without current public information pursuant to Rule 144 under the Securities Act or any other rule of similar effect.

Exhibit B

Investor Questionnaire

The undersigned hereby provides the following information to the Company and represents and warrants that such information is accurate:

QUESTIONNAIRE

1. Name.

(a) Full Legal Name of Investor

(b) Full Legal Name of Registered Holder (if not the same as (a) above) through which Registrable Securities are held:

(c) Full Legal Name of Natural Control Person (which means a natural person who directly or indirectly alone or with others has power to vote or dispose of the securities covered by this Questionnaire):

2. Address for Notices to Investor:

Telephone: _____

E-Mail: _____

Contact Person: _____

3. Broker-Dealer Status:

(a) Are you a broker-dealer?

Yes No

(b) If “yes” to Section 3(a), did you receive your Registrable Securities as compensation for investment banking services to the Company?

Yes No

Note: If “no” to Section 3(b), the Commission’s staff has indicated that you should be identified as an underwriter in the Registration Statement.

(c) Are you an affiliate of a broker-dealer?

Yes No

(d) If you are an affiliate of a broker-dealer, do you certify that you purchased the Registrable Securities in the ordinary course of business, and at the time of the purchase of the Registrable Securities to be resold, you had no agreements or understandings, directly or indirectly, with any person to distribute the Registrable Securities?

Yes No

Note: If “no” to Section 3(d), the Commission’s staff has indicated that you should be identified as an underwriter in the Registration Statement.

4. Beneficial Ownership of Securities of the Company Owned by the Investor.

Except as set forth below in this Item 4, the undersigned is not the beneficial or registered owner of any securities of the Company other than the securities issuable pursuant to the Purchase Agreement.

(a) Type and Amount of other securities beneficially owned by the Investor:

5. Relationships with the Company:

Except as set forth below, neither the undersigned nor any of its affiliates, officers, directors or principal equity holders (owners of 5% or more of the equity securities of the undersigned) has held any position or office or has had any other material relationship with the Company (or its predecessors or affiliates) during the past three years.

State any exceptions here:

The undersigned agrees to promptly notify the Company of any material inaccuracies or changes in the information provided herein that may occur subsequent to the date hereof at any time while the Registration Statement remains effective; provided, that the undersigned shall not be required to notify the Company of any changes to the number of securities held or owned by the undersigned or its affiliates.

By signing below, the undersigned consents to the disclosure of the information contained herein in its answers to Items 1 through 5 and the inclusion of such information in the Registration Statement and the related prospectus and any amendments or supplements thereto. The undersigned understands that such information will be relied upon by the Company in connection with the preparation or amendment of the Registration Statement and the related prospectus and any amendments or supplements thereto.

IN WITNESS WHEREOF the undersigned, by authority duly given, has caused this Notice and Questionnaire to be executed and delivered either in person or by its duly authorized agent.

Date: ____ Beneficial Owner: _

By: ____

Name:

Title:

PLEASE EMAIL A .PDF COPY OF THE COMPLETED AND EXECUTED QUESTIONNAIRE TO: lucy@sab.bio

SUPPORT AGREEMENT

This **SUPPORT AGREEMENT** (this “**Agreement**”), dated as of [], 2025, is made by and among SAB Biotherapeutics, Inc., a Delaware corporation (the “**Company**”) and the other persons and entities set forth on the signature pages hereto (the “**Shareholders**”). The Company and the Shareholders shall be referred to herein from time to time collectively as the “**Parties**.” Capitalized terms used but not otherwise defined herein shall have the meanings ascribed to such terms in the Purchase Agreement (as defined below).

WHEREAS, the Company and certain investors (the “**Purchasers**”) entered into that certain Securities Purchase Agreement, dated as of the date hereof (as it may be amended, restated or otherwise modified from time to time in accordance with its terms, the “**Purchase Agreement**”);

WHEREAS, as of the date of this Agreement, each of the Shareholders owns that number of shares of common stock, par value \$0.0001 per share, of the Company, and that number of shares of preferred stock, par value \$0.0001 per share, of the Company (collectively, the “**Voting Securities**”) set forth opposite its name on Exhibit A hereto; and

WHEREAS, the Purchase Agreement contemplates that the Parties will enter into this Agreement concurrently with the entry into the Purchase Agreement by the parties thereto, pursuant to which, among other things, the Shareholders will vote in favor of approval of the Proposal (as defined in the Purchase Agreement).

NOW, THEREFORE, in consideration of the premises and the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties, each intending to be legally bound, hereby agree as follows:

1. *Agreement to Vote.*

(a) For so long as this Agreement is in effect, each Shareholder hereby agrees to appear (in person or by proxy) and vote (in person or by proxy) at any meeting of the stockholders of the Company (including any adjournment or postponement thereof), and in any action by written resolution of the stockholders of the Company (such meeting or written resolution, the “**Meeting**”), all of such Shareholder’s Voting Securities that such Shareholder holds of record or beneficially, as of the date of this Agreement, or of which such Shareholder acquires record or beneficial ownership after the date hereof and before the record date of the Meeting (collectively, the “**Subject Equity Securities**”) in favor of the Proposal, and against any proposal that conflicts or materially impedes or interferes with the approval of the Proposal or that would adversely affect or delay the consummation of the transactions contemplated by the Purchase Agreement. Each Shareholder shall validly execute and deliver to the Company, on (or effective as of) no later than the fifth (5th) Business Day following the date that the Proxy Statement related to the Proposal is disseminated by the Company to the Company’s stockholders, a properly completed voting proxy in the form distributed by or on behalf of the Company in favor of the Proposal. In the event of any equity dividend or distribution, or any change in the equity interests of the Company by reason of any equity dividend or distribution, equity split or reverse split, recapitalization, combination, conversion, exchange of equity interests or the like prior to the Closing, the term “Subject Equity Securities” shall be deemed to refer to and include the Subject Equity Securities as well as all such equity dividends and distributions and any securities into which or for which any or all of the Subject Equity Securities may be changed or exchanged or which are received in such transaction.

2. *Transfer of Shares.*

(a) From the date hereof until the earlier of (i) the Automatic Conversion Date (as defined in the Certificate of Designation) or (ii) the valid termination of this Agreement pursuant to Section 3, each Shareholder hereby agrees that such Shareholder shall not, directly or indirectly, (i) sell, assign, transfer (including by operation of law), place a lien on, pledge, dispose of or otherwise encumber any of his, her or its Subject Equity Securities or otherwise agree to do any of the foregoing (each, a “**Transfer**”), (ii) deposit any of such Shareholder’s Subject Equity Securities into a voting trust or enter into a voting agreement or arrangement or grant any proxy or power of attorney with respect to any of such Shareholder’s Subject Equity Securities that conflicts with any of the covenants or agreements set forth in this Agreement, (iii) enter into any contract, option or other arrangement or undertaking with respect to the direct or indirect sale, assignment, transfer (including by operation of law) or other disposition of any of such Shareholder’s Subject Equity Securities, (iv) engage in any hedging or other transaction which is designed to, or which would (either alone or in connection with one or more events or developments (including the satisfaction or waiver of any conditions precedent)), lead to or result in a sale or disposition of such Shareholder’s Subject Equity Securities or (v) take any action that would have the effect of preventing or materially delaying the performance of such Shareholder’s obligations hereunder, except as affirmatively permitted by the Purchase Agreement; *provided, however*, that the foregoing shall not apply to any Transfer (A) in the case of an individual, by gift to a member of one of the individual’s immediate family or to a trust, the beneficiary of which is a member of the individual’s immediate family, an Affiliate of such person or to a charitable organization; (B) in the case of an individual, by virtue of laws of descent and distribution upon death of the individual; (C) in the case of an individual, pursuant to a qualified domestic relations order; and (D) by virtue of such Shareholder’s organizational documents upon liquidation or dissolution of such Shareholder; *provided*, that any transferee of any Transfer of the type set forth in clauses (A) through (D) must enter into a written agreement in form and substance reasonably satisfactory to the Company agreeing to be bound by this Agreement prior to the occurrence of such Transfer.

(b) In furtherance of the foregoing, the Company hereby agrees to (i) place a revocable stop order on all Subject Equity Securities subject to Section 2(a), including those which may be covered by a registration statement, and (ii) notify the Company’s transfer agent in writing of such stop order and the restrictions on such Subject Equity Securities under Section 2(a) and direct the Company’s transfer agent not to process any attempts by the Shareholders to Transfer any Subject Equity Securities except in compliance with Section 2(a). For the avoidance of doubt, the obligations of the Company under this Section 2(b) shall be deemed to be satisfied by the existence of any similar stop order and restrictions currently existing on the Subject Equity Securities.

3. Termination. This Agreement shall automatically terminate, without any notice or other action by any Party, and be void *ab initio* upon the earlier of (a) the Automatic Conversion Date (as defined in the Certificate of Designation); and (b) three (3) years following the Closing Date (as defined in the Purchase Agreement). Upon termination of this Agreement as provided in the immediately preceding sentence, none of the Parties shall have any further obligations under, or with respect to, this Agreement.

4. Amendments and Waivers. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by (i) the Company, (ii) the Purchasers of at least a majority in interest of the Securities, if prior to the Closing Date, to be purchased by the Purchasers under the Purchase Agreement, or, if after the Closing Date, still held by the Purchasers and (iii) at least a majority in interest of the Voting Securities held by the Shareholders (who are not Purchasers). No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of either party to exercise any right hereunder in any manner impair the exercise of any such right.

5. *Incorporation by Reference.* Sections 8.2 (*Notices*), 8.13 (*Construction*), 8.8 (*Assignment*), 8.11 (*No Third-Party Beneficiaries*), 8.5 (*Governing Law*), 8.4 (*Execution*), 8.4 (*Severability*) and 8.15 (*Amendments*) of the Purchase Agreement are incorporated herein and shall apply to this Agreement *mutatis mutandis*.

[Signature page follows]

IN WITNESS WHEREOF, each of the Parties has caused this Agreement to be duly executed on its behalf as of the day and year first above written.

COMPANY:

SAB Biotherapeutics, Inc.

By: _____
Name:
Title:

SHAREHOLDERS:

By: _____
Name:
Title:

BOARD DESIGNATION SIDE LETTER AGREEMENT

This Board Designation Side Letter Agreement (this “Agreement”) is made as of July 21, 2025, by and between SAB Biotherapeutics, Inc. (the “Company”) and RA Capital Healthcare Fund, L.P. (the “Investor” and together with the Company, the “Parties” and each individually, a “Party”).

Reference is hereby made to that certain Securities Purchase Agreement, dated as of the date hereof by and among the Company, the Investor and other purchasers party thereto (the “Purchase Agreement”). Capitalized terms used but not defined herein shall have the meanings given to them in the Purchase Agreement. Pursuant to the terms of the Purchase Agreement, the Investor is purchasing the Securities set forth opposite the Investor’s name on Exhibit A of the Purchase Agreement. To induce Investor to execute the Purchase Agreement and purchase such Securities pursuant to the Purchase Agreement, the Company has agreed to execute this Agreement to provide the Investor the right to designate up to two directors who will be appointed to the Company’s Board of Directors (the “Board”) and to have the Board consider in good faith whether to appoint one of the Investor’s Designees (as defined below) as Chair of the Board.

Accordingly, the Company and Investor hereby agree as follows:

1. Subject to the terms and conditions of this Agreement and during the RA Director Designation Period (as defined below), the Investor shall have the right to require the Company to nominate and use its reasonable best efforts (subject to applicable Law and the exercise of the fiduciary duties of the Board) to have up to two (2) individuals with industry experience designated by the Investor, in each case, who is reasonably acceptable to the Company (the “Designees”) (such acceptance not to be unreasonably withheld) and who shall at all times satisfy the independence criteria of the U.S. Securities and Exchange Commission and Nasdaq, as applicable, elected to the Board. Following the Closing Date and once identified by the Investor, the Company agrees to appoint such Designees to the Board as soon as practicable by taking all necessary action by the Company or its Board to effect such appointment(s). In the event the Company determines any Designee is not acceptable (such determination not to be unreasonably made), it shall promptly inform the Investor of such determination and the basis for such determination.

2. After a Designee is elected to the Board and during the RA Director Designation Period, the Company shall, subject to applicable Law and the exercise of the fiduciary duties of the Board, use its reasonable best efforts to nominate for re-election and include in any proxy statement prepared, used, delivered or publicly filed by the Company to solicit the vote of its stockholders in connection with any meeting of Company stockholders to elect the class of directors that includes a Designee the recommendation of the Board that stockholders of the Company vote in favor of the applicable Designee. The Company shall use substantially the same level of effort and provide substantially the same level of support as is used and/or provided for the other director nominees of the Company with respect to the applicable meeting of stockholders to cause the Designees to be elected or re-elected, as the case may be. In the event any Designee is not elected or re-elected, as the case may be, by stockholders of the Company or ceases to serve as a director (whether due to death, resignation or otherwise) during the RA Director Designation Period, the Investor may designate on each such occasion a substitute Designee and the same Company obligations set forth in Section 1 with respect to such substitute Designee shall apply.

3. The Company's obligations to have any Designee elected to the Board or nominate any Designee for election as a director at any meeting of the Company's stockholders, as applicable, shall in each case be subject to such Designee's satisfaction of all requirements regarding service as a director of the Company under applicable Law, stock exchange rules regarding service as a director of the Company, and the Company's corporate governance or other guidelines and director onboarding and membership requirements, in each case, that are generally applicable to all non-employee directors of the Company. The Investor will cause each Designee to make himself or herself reasonably available for interviews and to consent to such reference and background checks or other investigations and provide such information as the Board may reasonably request to determine the applicable Designee's eligibility and qualification to serve as a director of the Board and otherwise comply with the corporate governance or other guidelines and director onboarding and membership requirements of the Company that are generally applicable to all non-employee directors of the Company.

4. During the RA Director Designation Period, the Board shall undertake in good faith to consider whether to appoint a Designee as Chair of the Board. Upon the request of Investor to appoint a Designee as Chair of the Board, the Company will take all actions necessary or appropriate to as promptly as practicable call a special meeting of the Board to consider and vote upon such request.

5. The Company will take all actions necessary or appropriate to cause the number of directors constituting the Board to be reduced to nine members (which would include the two Designees upon their election to the Board as set forth above) by September 30, 2025.

6. The rights of the Investor to nominate any Designee to the Board pursuant to Section 1 and to have the Board consider in good faith whether to appoint a Designee to serve as Chair of the Board pursuant to Section 4 shall terminate when the Investor, together with its Affiliates, ceases to beneficially own, in the aggregate, shares of Common Stock (including shares of Common Stock issued or issuable upon conversion or exercise of the Securities without regard to any limitation on conversion or exercise therein) that represent at least fifty percent (50%) of the shares of Common Stock (including shares of Common Stock issued or issuable upon conversion or exercise of the Securities without regard to any limitation on conversion or exercise therein) purchased by the Investor pursuant to the Purchase Agreement (as adjusted for stock splits, recapitalizations and other similar events) (such period, the "RA Director Designation Period").

7. This Letter and the obligations hereunder shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of Delaware. Any provision of this Agreement may be amended if, and only if, such amendment is in writing and signed by the Company and the Investor. This Agreement shall not be assigned by operation of law or otherwise without the prior written consent of the other Party, and any assignment without such consent shall be null and void.

8. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Delivery of an executed Agreement by one party to the other may be made by facsimile, electronic

mail (including any electronic signature covered by the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

*** SIGNATURE PAGE FOLLOWS ***

IN WITNESS WHEREOF, the parties hereto have caused this Board Designation Side Letter Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

SAB BIOTHERAPEUTICS, INC.

By: /s/ Samuel J. Reich
Name: Samuel J. Reich
Title: Chief Executive Officer

RA CAPITAL HEALTHCARE FUND L.P.

By: RA Capital Healthcare Fund GP, LLC
Its General Partner

By: /s/ Rajeev Shah
Name: Rajeev Shah
Title: Manager

SAB BIO Announces Oversubscribed \$175 Million Private Placement

Participation from strategic investor Sanofi, along with new investors RA Capital Management, Commodore Capital, Vivo Capital, Blackstone Multi-Asset Investing, Spruce Street Capital, Forge Life Science Partners and Woodline Partners LP, and existing investors Sessa Capital, the T1D Fund, and ATW Partners

Proceeds expected to fully fund completion of pivotal Phase 2b SAFEGUARD study evaluating SAB-142 for delaying progression of autoimmune T1D in newly diagnosed T1D patients (Stage 3)

Company expects proceeds to extend cash runway into the middle of 2028

Potential for up to an additional \$284 million of gross proceeds if milestone-based warrants exercised in full

MIAMI, July 21, 2025 – SAB BIO (Nasdaq: SABS), (“SAB BIO” or the “Company”), a clinical-stage biopharmaceutical company with a novel immunotherapy platform that is developing human anti-thymocyte immunoglobulin (hlgG) for delaying progression of autoimmune type 1 diabetes (T1D) in newly diagnosed autoimmune T1D patients, today announced that it has entered into a securities purchase agreement (the “Agreement”) with certain accredited and institutional investors to raise \$175 million upfront in gross proceeds in an oversubscribed private placement financing.

The private placement included participation from strategic investor Sanofi, along with new investors RA Capital Management, Commodore Capital, Vivo Capital, Blackstone Multi-Asset Investing, Spruce Street Capital, Forge Life Science Partners and Woodline Partners LP, and existing investors Sessa Capital, the T1D Fund, and ATW Partners.

Pursuant to the terms of the Agreement, SAB BIO will issue an aggregate of up to 1,000,000 shares of the Company’s Series B nonvoting convertible preferred stock, which are convertible into up to an aggregate of 100,000,000 shares of the Company’s common stock at a conversion price of \$1.75 per share. In addition, the Company will issue warrants to purchase up to an aggregate of 1,500,000 shares of the Company’s Series B preferred stock, for up to an additional \$284 million of gross proceeds if exercised in full. The private placement is expected to close on or about July 22, 2025 subject to customary closing conditions. Further information regarding the private placement can be found in the Company’s filings with the Securities and Exchange Commission, including a current report on Form 8-K which is expected to be filed on or about July 21, 2025.

SAB BIO intends to use the net proceeds from the private placement to fully fund the Phase 2b SAFEGUARD study of SAB-142 in Stage 3 autoimmune T1D, and for working capital and general corporate purposes. The proceeds from the private placement combined with the Company's current cash and cash equivalents are expected to extend its cash runway into the middle of 2028.

Leerink Partners is acting as lead placement agent for the private placement. UBS Investment Bank, Chardan and Oppenheimer & Co. are acting as joint placement agents.

The securities to be issued in the financing described above are being offered in a transaction not involving a public offering and have not been registered under the Securities Act of 1933, as amended, and may not be offered or sold in the United States except pursuant to an effective registration statement or an applicable exemption from the registration requirements. This press release shall not constitute an offer to sell or the solicitation of an offer to buy the common shares, nor shall there be any sale of the common shares in any state or other jurisdiction in which such offer, solicitation, or sale would be unlawful prior to the registration or qualification under the securities laws of any such state or other jurisdiction.

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

About SAB BIO

SAB BIO is a clinical-stage biopharmaceutical company focused on developing human, multi-specific, high-potency immunoglobulins (IgGs), without the need for human donors or convalescent plasma, to treat and prevent immune and autoimmune disorders. The Company's lead asset, SAB-142, targets autoimmune T1D with a disease-modifying therapeutic approach that aims to change the T1D treatment paradigm by delaying onset and potentially preventing disease progression. Using advanced genetic engineering and antibody science to develop Transchromosomal (Tc) Bovine™, the only transgenic animal with a human artificial chromosome, SAB BIO's drug development production system is able to generate a diverse repertoire of specifically targeted, high-potency, human IgGs that can address a wide range of serious unmet needs in human diseases without the need for convalescent plasma or human donors.

Forward-Looking Statements

Certain statements made in this current report that are not historical facts are forward-looking statements for purposes of the safe harbor provisions under The Private Securities Litigation Reform Act of 1995. Forward-looking statements generally are accompanied by words such as “believe,” “may,” “will,” “to be,” “estimate,” “continue,” “anticipate,” “intend,” “expect,” “should,” “would,” “plan,” “predict,” “potential,” “seem,” “seek,” “future,” “outlook,” and similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements include, but are not limited to, statements regarding future events, including statements about the Company’s expectations regarding the completion, timing and size of the private placement, the potential exercise of warrants in the private placement, the Company’s expected cash runway, the intended use of the net proceeds, and the development and clinical trial results of the Company’s T1D program and other discovery programs.

These statements are based on the current expectations of SAB BIO and are not predictions of actual performance, and are not intended to serve as, and must not be relied on, by any investor as a guarantee, prediction, definitive statement, or an assurance, of fact or probability. These statements are only current predictions or expectations, and are subject to known and unknown risks, uncertainties and other factors which may be beyond our control. Actual events and circumstances are difficult or impossible to predict, and these risks and uncertainties may cause our or our industry’s results, performance, or achievements to be materially different from those anticipated by these forward-looking statements. A further description of risks and uncertainties can be found in the sections captioned “Risk Factors” in our most recent annual report on Form 10-K, subsequent quarterly reports on Form 10-Q, as may be amended or supplemented from time to time, and other filings with or submissions to, the U.S. Securities and Exchange Commission, which are available at <https://www.sec.gov/>. Except as otherwise required by law, SAB BIO disclaims any intention or obligation to update or revise any forward-looking statements, which speak only as of the date they were made, whether as a result of new information, future events, or circumstances or otherwise.

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