

**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**

**April 5, 2024  
Date of Report (Date of earliest event reported)**

**Biodesix, Inc.**  
(Exact Name of Registrant as Specified in Charter)

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

**001-39659**  
(Commission  
File Number)

**20-3986492**  
(I.R.S. Employer  
Identification No.)

**919 West Dillon Rd.,  
Louisville, Colorado**  
(Address of Principal Executive Office)

**80027**  
(Zip Code)

**Registrant's telephone number, including area code: (303) 417-0500**

**Not Applicable**  
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communication 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 communication pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communication 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:

<b>Title of each class</b>	<b>Trading Symbol(s)</b>	<b>Name of each exchange on which registered</b>
Common Stock, par value of \$0.001 per share	BDSX	The Nasdaq Stock Market LLC

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

Emerging growth company

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

## **Item 1.01. Entry into a Material Definitive Agreement.**

### *Summary*

On April 9, 2024, Biodesix, Inc. (the “Company”) closed a follow on equity offering of Common Stock and a concurrent private placement. Collectively, the Company raised net proceeds of approximately \$51.6 million. Net proceeds will be used for commercial expansion of sales, supporting its product pipeline, research and development and for general corporate purposes. The following sections will provide a more detailed description of each of the transactions described above.

### *Underwritten Offering*

On April 9, 2024, the Company closed an underwritten offering (the “Offering”) of 17,391,832 shares of its Common Stock, par value \$0.001 per share (the “Common Stock”). The Common Stock was issued and sold pursuant to an underwriting agreement (the “Underwriting Agreement”), dated April 5, 2024, by and between the Company and TD Securities (USA) LLC, William Blair & Company, L.L.C., and Canaccord Genuity LLC as representatives of the underwriters, at a price to the public of \$1.15 per share. The Company will receive estimated net proceeds of approximately \$18.4 million from the Offering after deducting underwriting discounts and commissions and estimated offering expenses payable by the Company. The Company expects to use the net proceeds from the Offering for commercial expansion of sales, supporting its product pipeline, research and development and for general corporate purposes.

The Underwriting Agreement contains customary representations, warranties and agreements by the Company, customary conditions to closing, indemnification obligations of the Company and the Underwriters, including for liabilities under the Securities Act, other obligations of the parties and termination provisions. The Underwriting Agreement also includes lock up restrictions that will be in effect during the period ending 90 days subsequent to April 5, 2024. The representations, warranties, and agreements contained in the Underwriting Agreement were made only for purposes of such agreement and as of specific dates, were solely for the benefit of the parties to such agreement, and may be subject to limitations agreed upon by the contracting parties.

The Offering was made pursuant to the Company’s effective Registration Statement on Form S-3 (File No. 333-261095) previously filed with the Securities and Exchange Commission on November 29, 2021 and a prospectus supplement, dated April 5, 2024 relating to the Offering. The foregoing is only a brief description of the terms of the Underwriting Agreement, does not purport to be a complete statement of the rights and obligations of the parties under the Underwriting Agreement and the transactions contemplated thereby, and is qualified in its entirety by reference to the Underwriting Agreement that is attached hereto as Exhibit 1.1. A copy of the opinion of Sidley Austin LLP relating to the legality of the issuance and sale of the Common Stock is attached hereto as Exhibit 5.1.

### *Concurrent Private Placement*

On April 5, 2024, the Company entered into securities purchase agreements (the “Securities Purchase Agreements”) with various investors, including certain members of management, certain of its directors and funds affiliated with those directors (the “Investors”) for the issuance and sale by the Company of an aggregate of 760,857 shares of Series A Non-Voting Convertible Preferred Stock, par value \$0.001 per share (the “Series A Preferred Stock”) in an offering (the “Concurrent Private Placement”). The Preferred Stock is being issued to the Investors pursuant to an exemption from the registration requirements of the Securities Act of 1933, as amended (the “Securities Act”) afforded by Section 4(a)(2) of the Securities Act. Pursuant to the terms of the Securities Purchase Agreements, the Company has agreed to submit to its stockholders the approval of the (i) conversion of the Preferred Stock into shares of Common Stock in accordance with Nasdaq Stock Market Rules (the “Conversion Proposal”) and (ii) the issuance of Series A Preferred Stock to certain members of management, certain of its directors and funds affiliated with those directors (the “Issuance Proposal”) at its 2024 annual meeting of stockholders. The Securities Purchase Agreements include customary representations, warranties and covenants by the parties to the agreement.

Pursuant to the Securities Purchase Agreements, the Investors purchased the Preferred Stock at a purchase price of \$46.00 per share for an aggregate purchase price of approximately \$35.0 million. The Company expects to use the net proceeds from the Concurrent Private Placement for commercial expansion of sales, supporting its product pipeline, research and development and for general corporate purposes.

The foregoing description of the Securities Purchase Agreements is not complete and is qualified in its entirety by reference to the full text of the Securities Purchase Agreements, the forms of which are filed herewith as Exhibits 10.1 and 10.2 and incorporated herein by reference in its entirety.

#### *Registration Rights Agreement*

In connection with the Concurrent Private Placement, the Company also entered into a Registration Rights Agreement, dated April 5, 2024 (the "Registration Rights Agreement"), with the Investors, which provides that the Company will register the resale of the shares of Common Stock issuable upon conversion of the Preferred Stock. The Company is required to prepare and file an initial registration statement with the SEC as soon as reasonably practicable, but in no event later than April 23, 2024 (the "Filing Deadline"), and to use reasonable best efforts to have the registration statement declared effective within 50 days after the closing of the Concurrent Private Placement, subject to the approval of the conversion of the Private Placement Shares being received at the Company's 2024 annual meeting of stockholders.

The foregoing description of the Registration Rights Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of the form of such agreement, which is filed as Exhibit 10.3 to this Current Report on Form 8-K and is incorporated by reference herein.

Following the closing of the Offering, the Company expects to have 113,627,715 shares of Common Stock issued and outstanding. Subject to the receipt of stockholder approval for the Conversion Proposal and the Issuance Proposal at the 2024 annual meeting of stockholders, up to 760,857 shares of the Series A Preferred Stock will be issued. 30,434,280 shares of our common stock may be issued upon the conversion of the Series A Preferred Stock, subject to beneficial ownership limitations that may limit the ability of certain holders of Series A Preferred Stock to convert such shares to Common Stock at such time.

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

The information set forth in Item 1.01 of this Current Report on Form 8-K is incorporated by reference into this Item 3.02.

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

On April 8, 2024, the Company filed a Certificate of Designations of Preferences, Rights and Limitations of the Series A Non-Voting Convertible Preferred Stock with the Secretary of State of the State of Delaware (the "Certificate of Designations") in connection with the Concurrent Private Placement. The Certificate of Designations provides for the issuance of up to 760,857 shares of the Series A Preferred Stock.

Holders of shares of Series A Preferred Stock are entitled to receive dividends on shares of Series A Preferred Stock equal to, on an as-if-converted-to-Common Stock basis, and in the same form as dividends if such dividends were to be paid on shares of the Common Stock. Except as otherwise required by law, the Series A Preferred Stock does not have voting rights. However, as long as any shares of Series A Preferred Stock are outstanding, the Company will not, without the affirmative vote of the holders of a majority of the then outstanding shares of the Series A Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Series A Preferred Stock, (b) alter or amend the Certificate of Designations, or (c) amend its certificate of incorporation or other charter documents in any manner that adversely affects any rights of the holders of Series A Preferred Stock. The Series A Preferred Stock does not have a preference upon any liquidation, dissolution or winding-up of the Company.

Following stockholder approval of the Conversion Proposal, each share of Series A Preferred Stock will automatically convert into 40 shares of Common Stock, subject to certain limitations, including that a holder of Series A Preferred Stock is prohibited from converting shares of Series A Preferred Stock into shares of Common Stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than a specified percentage (to be established by the holder between 0% and 19.9%) of the total number of shares of Common Stock issued and outstanding immediately after giving effect to such conversion.

The foregoing description of the Series A Preferred Stock does not purport to be complete and is qualified in its entirety by reference to the Certificate of Designations, a copy of which is filed as Exhibit 3.1 to this Current Report on Form 8-K and is incorporated herein by reference.

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

On April 5, 2024, the Company issued a press release announcing the pricing of the Offering. A copy of the Company's press release is attached as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference in its entirety.

In accordance with General Instruction B.2 of Form 8-K, the information included in this Item 8.01, including Exhibit 99.1. hereto, shall not be deemed "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference into any filing made by the Company under the Exchange Act or Securities Act, except as shall be expressly set forth by specific reference in such a filing.

#### **Item 9.01. Financial Statements and Exhibits.**

*(d) Exhibits:*

<u>No.</u>	<u>Exhibit</u>
1.1	<a href="#"><u>Underwriting Agreement, dated April 5, 2024, by and among Biodesix, Inc. and TD Securities (USA) LLC, William Blair &amp; Company, L.L.C. and Canaccord Genuity LLC</u></a>
3.1	<a href="#"><u>Certificate of Designations of Series A Non-Voting Convertible Preferred Stock</u></a>
5.1	<a href="#"><u>Opinion of Sidley Austin LLP</u></a>
10.1	<a href="#"><u>Securities Purchase Agreement, dated as of April 5, 2024 between Biodesix, Inc. and certain of the Investors</u></a>
10.2	<a href="#"><u>Securities Purchase Agreement, dated as of April 5, 2024 between Biodesix, Inc. and certain members of management, certain of its directors and funds affiliated with those directors</u></a>
10.3	<a href="#"><u>Registration Rights Agreement, dated as of April 5, 2024 between Biodesix, Inc. and the Investors</u></a>
23.1	<a href="#"><u>Consent of Sidley Austin LLP (included in Exhibit 5.1)</u></a>
99.1	<a href="#"><u>Pricing Press Release issued by Biodesix, Inc. dated April 5, 2024</u></a>
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURE

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

Dated: April 9, 2024

BIODESIX, INC.

By: /s/ Robin Harper Cowie

Name: Robin Harper Cowie

Title: Chief Financial Officer

17,391,832 Shares

BIODESIX, INC.

COMMON STOCK (PAR VALUE \$0.001 PER SHARE)

UNDERWRITING AGREEMENT

April 5, 2024

TD Securities (USA) LLC  
William Blair & Company, L.L.C.  
Canaccord Genuity LLC

As Representatives of the several Underwriters named in Schedule I hereto

c/o TD Securities (USA) LLC  
1 Vanderbilt Avenue  
New York, New York 10017

c/o William Blair & Company, L.L.C.  
150 N. Riverside Plaza  
Chicago, Illinois 60606

c/o Canaccord Genuity LLC  
One Post Office Square, Suite 3000  
Boston, Massachusetts 02109

Ladies and Gentlemen:

Biodesix, Inc., a Delaware corporation (the “**Company**”), proposes to issue and sell to the several Underwriters named in Schedule I hereto (the “**Underwriters**”), for whom TD Securities (USA) LLC, William Blair & Company, L.L.C. and Canaccord Genuity LLC are acting as representatives (the “**Representatives**”), 17,391,832 shares of its Common Stock, \$0.001 par value per share (the “**Shares**”). The shares of Common Stock, \$0.001 par value per share, of the Company to be outstanding after giving effect to the sales contemplated hereby are hereinafter referred to as the “**Common Stock**.”

Concurrently with the sale of the Shares, the Company will sell 760,857 of Series A convertible non-voting preferred stock (the “**Series A Preferred Stock**”) convertible into 40 shares of Common Stock for each share of Series A Preferred Stock in a private placement at a price per share of Series A Preferred Stock of \$46.00 (the “**Concurrent Private Placement**”).

The Company has filed with the Securities and Exchange Commission (the “**Commission**”) a registration statement on Form S-3 (File No. 333-261095), including a preliminary prospectus, relating to the Shares. The registration statement as amended at the time it becomes effective, including the information (if any) deemed to be part of the registration statement at the time of effectiveness pursuant to Rule 430A under the Securities Act of 1933, as amended (the “**Securities Act**”), is hereinafter referred to as the “**Registration Statement**”; the prospectus in the form first used to confirm sales of Shares (or in the form first made available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act) is hereinafter referred to as the “**Prospectus**.” If the Company has filed an abbreviated registration statement to register additional shares of Common Stock pursuant to Rule 462(b) under the Securities Act (a “**Rule 462 Registration Statement**”), then any reference herein to the term “**Registration Statement**” shall be deemed to include such Rule 462 Registration Statement.

For purposes of this Agreement, “**free writing prospectus**” has the meaning set forth in Rule 405 under the Securities Act, “**preliminary prospectus**” shall mean each prospectus used prior to the effectiveness of the Registration Statement, and each prospectus that omitted information pursuant to Rule 430A under the Securities Act that was used after such effectiveness and prior to the execution and delivery of this Agreement, “**Time of Sale Prospectus**” means the preliminary prospectus contained in the Registration Statement at the time of its effectiveness together with the documents and pricing information set forth in Schedule II hereto, and “**broadly available road show**” means a “bona fide electronic road show” as defined in Rule 433(h)(5) under the Securities Act that has been made available without restriction to any person. As used herein, the terms “Registration Statement,” “preliminary prospectus,” “Time of Sale Prospectus” and “Prospectus” shall include the documents, if any, incorporated by reference therein as of the date hereof. The terms “**supplement**,” “**amendment**” and “**amend**” as used herein with respect to the Registration Statement, the Prospectus, the Time of Sale Prospectus or the Prospectus shall include all documents subsequently filed by the Company with the Commission pursuant to the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), that are deemed to be incorporated by reference therein.

1. *Representations and Warranties.* The Company represents and warrants to and agrees with each of the Underwriters that:
  - (a) The Registration Statement has become effective; no stop order suspending the effectiveness of the Registration Statement is in effect, and no proceedings for such purpose or pursuant to Section 8A under the Securities Act are pending before or, to the Company’s knowledge, threatened by the Commission.
  - (b) (i) Each document filed pursuant to the Exchange Act and incorporated by reference in the Time of Sale Prospectus or the Prospectus complied when so filed in all material respects with the Exchange Act and the applicable rules and regulations of the Commission thereunder, (ii) the Registration Statement, when it became effective, did not contain and, as amended or supplemented, if applicable, as of the date of such amendment or supplement, will 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 not misleading, (iii) the Registration Statement and the Prospectus comply and, as amended or supplemented, if applicable, as of the date of such amendment or supplement, will comply in all material respects with the Securities Act and the applicable rules and regulations of the Commission thereunder, (iv) the Time of Sale Prospectus does not, and at the time of each sale of the Shares in connection with the offering when the Prospectus is not yet available to prospective purchasers and at the Closing Date (as defined in Section 4), the Time of Sale Prospectus, as then amended or supplemented by the Company, if applicable, as of the date of such amendment or supplement, will not, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not



misleading, (v) each broadly available road show, if any, when considered together with the Time of Sale Prospectus, does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading and (vi) the Prospectus, as of its date, does not contain and, as amended or supplemented, if applicable, as of the date of such amendment or supplement, will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, except that the representations and warranties set forth in this paragraph do not apply to statements or omissions in the Registration Statement, the Time of Sale Prospectus or the Prospectus based upon information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use therein.

- (c) The Company is not an “ineligible issuer” in connection with the offering pursuant to Rules 164, 405 and 433 under the Securities Act. Any free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. Each free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act or that was prepared by or on behalf of or used or referred to by the Company complies or will comply, as of the date of such filing, in all material respects with the applicable requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. Except for the free writing prospectuses, if any, identified in Schedule II hereto, and electronic road shows, if any, each furnished to the Underwriters before first use, the Company has not prepared, used or referred to, and will not, without the Representatives’ prior consent, prepare, use or refer to, any free writing prospectus.
- (d) The Company has been duly incorporated, is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation, has the corporate power and authority to own or lease its property and to conduct its business as described in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which the conduct of its business or its ownership or leasing of property requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not reasonably be expected to singly or in the aggregate, have a material adverse effect on the Company; and the Company does not have any subsidiaries.
- (e) This Agreement has been duly authorized, executed and delivered by the Company.
- (f) The authorized capital stock of the Company conforms as to legal matters, in all material respects, to the description thereof contained in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus.
- (g) The shares of Common Stock outstanding prior to the issuance of the Shares have been duly authorized and are validly issued, fully paid and non-assessable.

- (h) The Shares have been duly authorized and, when issued, delivered and paid for in accordance with the terms of this Agreement, will be validly issued, fully paid and non-assessable, and the issuance of the Shares will not be subject to any preemptive or similar rights that have not been validly waived.
- (i) The execution and delivery by the Company of, and the performance by the Company of its obligations under, this Agreement will not contravene (i) any provision of applicable law, (ii) or the certificate of incorporation or by-laws of the Company, (iii) or any agreement or other material instrument binding upon the Company, or (iv) any judgment, order or decree of any governmental body, agency or court having jurisdiction over the Company, except in the case of clauses (i), (iii) and (iv), where such contravention would not reasonably be expected to have a material adverse effect on the Company, and no consent, approval, authorization or order of, or qualification with, any governmental body, agency or court is required for the performance by the Company of its obligations under this Agreement, except such as have been obtained or waived or as may be required by the securities or Blue Sky laws of the various states in connection with the offer and sale of the Shares.
- (j) There has not occurred any material adverse change, or any development involving a prospective material adverse change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company, from that set forth in the Time of Sale Prospectus.
- (k) There are no legal or governmental proceedings pending or, to the Company's knowledge, threatened to which the Company is a party or to which any of the properties of the Company is subject (i) other than proceedings accurately described in all material respects in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus and proceedings that would not reasonably be expected to, singly or in the aggregate, have a material adverse effect on the Company or on the power or ability of the Company to perform its obligations under this Agreement or to consummate the transactions contemplated by each of the Registration Statement, the Time of Sale Prospectus and the Prospectus or (ii) that are required to be described in the Registration Statement, the Time of Sale Prospectus or the Prospectus and are not so described in all material respects; and there are no statutes, regulations, contracts or other documents that are required to be described in the Registration Statement, the Time of Sale Prospectus or the Prospectus or to be filed as exhibits to the Registration Statement that are not described in all material respects or filed as required.
- (l) Each preliminary prospectus filed as part of the Registration Statement as originally filed or as part of any amendment thereto, or filed pursuant to Rule 424 under the Securities Act, complied when so filed in all material respects with the applicable requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder.
- (m) The Company is not, and after giving effect to the offering and sale of the Shares and the application of the proceeds thereof as described in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus will not be, required to register as an "investment company" as such term is defined in the Investment Company Act of 1940, as amended.

- (n) (i) The Company (w) is, and has been, in compliance with any and all applicable foreign, federal, state and local laws, rules, orders, consents and regulations relating to the protection of health and human safety, the environment, natural resources, and hazardous or toxic substances, wastes, chemicals, pollutants or contaminants (“**Environmental Laws**”), (x) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses, (y) are in compliance with all terms and conditions of any such permit, license or approval and (z) have not received notices of, and have no knowledge of any event or condition that would reasonably be expected to result in, any actual or potential liability or violation, and is not subject to any pending or to the Company’s knowledge, threatened action, suit, proceeding, investigation or claim, arising under or relating to any Environmental Law, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals, failure to comply with the terms and conditions of such permits, licenses or approvals, or notice, action, suit, proceeding, investigation or claim would not, singularly or in the aggregate, reasonably be expected to have a material adverse effect on the Company, (ii) there are no costs (including anticipated capital expenditures), obligations or liabilities associated with or arising under Environmental Laws of or relating to the Company and (iii) except as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, (y) there are no proceedings pending, or to the Company’s knowledge, contemplated, against the Company under Environmental Laws in which a government authority is also a party, other than such proceedings which it is reasonably believed no monetary sanctions of \$300,000 or more will be imposed and (z) the Company is not aware of any facts or issues regarding compliance with Environmental Laws that could reasonably be expected to have a material effect on the capital expenditures, earnings or competitive position of the Company.
- (o) There are no contracts, agreements or understandings between the Company and any person granting such person the right to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company or to require the Company to include such securities with the Shares registered pursuant to the Registration Statement, except as has been validly waived or complied with in connection with the issuance and sale of the Shares contemplated hereby.
- (p) (i) None of the Company, or any director, officer, or employee thereof, or, to the Company’s knowledge, any affiliate, agent or representative of the Company, has taken or will take any action in furtherance of an offer, payment, promise to pay, or authorization or approval of the payment, giving or receipt of money, property, gifts or anything else of value, directly or indirectly, to any government official (including any officer or employee of a government or government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office) (“**Government Official**”) in order to influence official action, or to any person in violation of any applicable anti-corruption laws; (ii) the Company has conducted its business in compliance with applicable anti-corruption laws and has instituted and maintained and will continue to maintain policies and procedures reasonably designed to promote and achieve compliance with such laws and with the representations and warranties contained herein; and (iii) the Company will not use, directly or indirectly, the proceeds of the offering in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any person in violation of any applicable anti-corruption laws.

- (q) The operations of the Company are and have been conducted at all times in material compliance with all applicable financial recordkeeping and reporting requirements, including those of the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act), and the applicable anti-money laundering statutes of jurisdictions where the Company conducts business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the “**Anti-Money Laundering Laws**”), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company with respect to the Anti-Money Laundering Laws is pending or, to the knowledge of the Company, threatened.
- (r) (i) None of the Company, or any director, officer, or employee thereof, or, to the Company’s knowledge, any agent, affiliate or representative of the Company, is an individual or entity (“**Person**”) that is, or is owned or controlled by one or more Persons that are:
- (A) the subject of any sanctions administered or enforced by the U.S. Department of the Treasury’s Office of Foreign Assets Control, the United Nations Security Council, the European Union, His Majesty’s Treasury (“**HMT**”), or other relevant sanctions authority (collectively, “**Sanctions**”), or
- (B) located, organized or resident in a country or territory that is the subject of Sanctions (including, without limitation, Cuba, Iran, North Korea, Syria, the so-called Donetsk People’s Republic, the so-called Luhansk People’s Republic, any other Covered Region of Ukraine identified pursuant to Executive Order 14065 and the Crimea Region).
- (ii) The Company will not, directly or indirectly, use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any joint venture partner or other Person:
- (A) to fund or facilitate any activities or business of or with any Person or in any country or territory that, at the time of such funding or facilitation, is the subject of Sanctions; or
- (B) in any other manner that will result in a violation of Sanctions by any Person (including any Person participating in the offering, whether as underwriter, advisor, investor or otherwise).
- (iii) For the past 5 years, the Company has not knowingly engaged in, is not now knowingly engaged in, and will not engage in, any dealings or transactions with any Person, or in any country or territory, that at the time of the dealing or transaction is or was the subject of Sanctions.
- (s) Subsequent to the respective dates as of which information is given in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, (i) the Company has not incurred any material liability or obligation, direct or contingent, nor entered into any material transaction; (ii) the Company has not purchased any of its outstanding capital stock, nor declared, paid or otherwise made any dividend or distribution of any kind on its capital stock other than ordinary and customary dividends; and (iii) there has not been any material change in the capital stock, short-term debt or long-term debt of the Company.

- (t) The Company has good and marketable title to all real property and good and marketable title to all personal property owned by them which is material to the business of the Company, free and clear of all liens, encumbrances and defects except such as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company; and any real property and buildings held under lease by the Company is held under valid, subsisting and enforceable leases with such exceptions as are not material and would not reasonably be expected to materially interfere with the use made and proposed to be made of such property and buildings by the Company.
- (u) (i) The Company solely and exclusively owns or has a valid and enforceable license or right to use all patents, inventions, copyrights, know how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, service marks, trade names and all other intellectual property and similar proprietary rights (including all registrations and applications for registration of, and all goodwill associated with, any of the foregoing, as applicable) (collectively, "**Intellectual Property Rights**") used in or reasonably necessary to conduct its business; (ii) the Intellectual Property Rights owned by the Company and, to the Company's knowledge, the Intellectual Property Rights licensed to the Company, are valid, subsisting and enforceable, and there is no material pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others challenging the validity, scope or enforceability of any such Intellectual Property Rights; (iii) the Company has not received any written notice alleging any material infringement, misappropriation or other violation of Intellectual Property Rights; (iv) to the Company's knowledge, no third party is infringing, misappropriating or otherwise violating, or has infringed, misappropriated or otherwise violated, any Intellectual Property Rights owned or licensed by the Company; (v) the Company does not infringe, misappropriate or otherwise violate, nor has infringed, misappropriated or otherwise violated, any Intellectual Property Rights; (vi) all employees or contractors engaged in the development of Intellectual Property Rights on behalf of the Company have executed an invention assignment agreement whereby such employees or contractors presently assign all of their right, title and interest in and to such Intellectual Property Rights to the Company, and to the Company's knowledge no such agreement has been breached or violated; and (vii) the Company uses, and has used, commercially reasonable efforts to appropriately maintain all information intended to be maintained as a trade secret.
- (v) (i) The Company uses and has used any and all software and other materials distributed under a "free," "open source," or similar licensing model (including but not limited to the MIT License, Apache License, GNU General Public License, GNU Lesser General Public License and GNU Affero General Public License) ("**Open Source Software**") in compliance with all license terms applicable to such Open Source Software; and (ii) the Company does not use or distribute nor has used or distributed any Open Source Software in any manner that requires or has required (A) the Company to permit reverse engineering of any software code or other technology owned by the Company or (B) any software code or other technology owned by the Company to be (1) disclosed or distributed in source code form, (2) licensed for the purpose of making derivative works or (3) redistributed at no charge.

- (w) (i) The Company has complied in all material respects and is presently in compliance with all internal and external privacy policies, contractual obligations, industry standards, applicable laws, statutes, judgments, orders, rules and regulations of any court or arbitrator or other governmental or regulatory authority and any other legal obligations, in each case, relating to the collection, use, transfer, import, export, storage, protection, disposal and disclosure by the Company of personally identifiable or other regulated data (“**Data Security Obligations**”, and such data, “**Data**”); (ii) the Company has not received any written notification of or complaint regarding material non-compliance with any Data Security Obligation; and (iii) there is no action, suit, investigation or proceeding by or before any court or governmental agency, authority or body pending or, to the Company’s knowledge, threatened alleging non-compliance with any Data Security Obligation.
- (x) The Company’s information technology assets and equipment, computers, systems, networks, hardware, software, internet websites, applications and data and databases (including the data of their respective customers, employees, suppliers, vendors and any third-party data maintained by or on behalf of the Company) (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, free and clear of all bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants. The Company has implemented reasonable controls, policies, procedures and technical safeguards to protect the IT Systems and Data used in connection with the operation of the Company’s business. Without limiting the foregoing, the Company has used reasonable efforts to implement appropriate controls, policies, procedures and technical safeguards to establish and maintain, and have implemented, maintained and complied with, reasonable data protection controls, policies and procedures that are designed to protect against and prevent breach, destruction, loss, unauthorized distribution, use, access, disablement, misappropriation or modification, or other compromise or misuse of any IT Systems or Data used in connection with the operation of the Company’s business (“**Breach**”). To the Company’s knowledge, there has been no material Breach, and the Company has not been notified of and has no knowledge of any event or condition that would reasonably be expected to result in, any such material Breach.
- (y) No material labor dispute with the employees of the Company exists, or, to the knowledge of the Company, is imminent; and the Company is not aware of any existing, threatened or imminent labor disturbance by the employees of any of its principal suppliers, manufacturers or contractors that would, singly or in the aggregate, have a material adverse effect on the Company.
- (z) The Company is insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as in the Company’s reasonable judgment are prudent and customary in the businesses in which they are engaged; the Company has not been refused any insurance coverage sought or applied for; and the Company does not have any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not reasonably be expected to have a material adverse effect on the Company.
- (aa) The Company possesses all certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct their respective businesses, and the Company has not received any written notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a material adverse effect on the Company.

- (bb) Any statistical and market-related data included in the Registration Statement, the Time of Sale Prospectus or the Prospectus are based on or derived from sources that the Company believes, after reasonable inquiry, to be reliable and accurate in all material respects and, to the extent required, the Company has obtained the written consent to the use of such data from such sources.
- (cc) The Company has operated at all times and is currently in compliance in all material respects with all applicable statutes, rules and regulations of the U.S. Food and Drug Administration (the “**FDA**”) and applicable foreign regulatory authorities, including the European Medicines Agency and the UK Medicines & Healthcare products Regulatory Agency (collectively, the “**Regulatory Authorities**”), including, without limitation:
- (i) the Federal Food, Drug, and Cosmetic Act and the regulations promulgated thereunder;
  - (ii) applicable federal, state, local and foreign health care laws, including the U.S. Anti-Kickback Statute (42 U.S.C. Section 1320a-7b(b)), the Civil Monetary Penalties Law (42 U.S.C. § 1320a-7a), the U.S. Civil False Claims Act (31 U.S.C. Section 3729 et seq.), all applicable federal, state, local and all foreign criminal laws relating to health care fraud and abuse, including but not limited to false statements relating to health care matters (42 U.S.C. Section 1320a-7b(a)), 18 U.S.C. Sections 286 and 287, and the health care fraud criminal provisions under the U.S. Health Insurance Portability and Accountability Act of 1996 (“**HIPAA**”) (42 U.S.C. Section 1320d et seq.), the exclusion laws, the statutes, regulations and directives of applicable government funded or sponsored healthcare programs, and the regulations promulgated pursuant to such statutes;
  - (iii) the Standards for Privacy of Individually Identifiable Health Information, the Security Standards, and the Standards for Electronic Transactions and Code Sets promulgated under HIPAA, the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. Section 17921 et seq.), and the regulations promulgated thereunder and any state or non-U.S. counterpart thereof or any other law or regulation the purpose of which is to protect the privacy of individuals or prescribers;
  - (iv) the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, the regulations promulgated thereunder;
  - (v) the U.S. Controlled Substances Act (21 U.S.C. Section 801 et seq.);
  - (vi) the Clinical Laboratories Improvement Act of 1967, as amended (“**CLIA**”);
  - (vii) licensure, quality, safety and accreditation requirements under applicable federal, state, local or foreign laws or regulatory bodies; and
  - (viii) all other local, state, federal, national, supranational and foreign laws, relating to the regulation of the Company and the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product under development, manufactured or distributed by the Company; (clauses (i) through (viii), collectively, “**Health Care Laws**”).

- (dd) (i) the studies, tests and preclinical and clinical trials conducted by or, to the Company's knowledge, on behalf of or sponsored by the Company or in which the Company has participated, were, and if still pending are being conducted in all material respects in accordance with standard medical and experimental protocols, procedures and controls pursuant to accepted professional scientific research standards and procedures, and all applicable Health Care Laws, the rules and regulations of the Regulatory Authorities and, to the extent required, current Good Clinical Practices and Good Laboratory Practices; (ii) the descriptions of the results of such studies and trials contained in the Registration Statement, the Time of Sale Prospectus or the Prospectus are accurate and complete in all material respects and fairly present the data derived from such trials and studies; (iii) the Company has no knowledge of any other studies or trials not described in the Registration Statement, the Time of Sale Prospectus and the Prospectus, the results of which are materially inconsistent with or call into question the results described or referred to in the Registration Statement, the Time of Sale Prospectus and the Prospectus; has provided the Underwriters with all substantive written notices, correspondence and summaries of all other communications provided to the Company from the Regulatory Authorities; and (iv) the Company has not received any written notices or correspondence from any Regulatory Authority or any other governmental entity requiring the termination, material modification or suspension of any studies or trials that are described in the Registration Statement, the Time of Sale Prospectus and the Prospectus or the results of which are referred to in the Registration Statement, the Time of Sale Prospectus and the Prospectus.
- (ee) (i) The Company has filed, obtained, maintained or submitted all reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Health Care Laws, and, all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were timely, complete, accurate and not misleading on the date filed (or were corrected or supplemented by a subsequent submission); (ii) the Company has not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any court or arbitrator or Regulatory Authority, other governmental entity or third party alleging that any Company or product operation or activity is in violation of any Health Care Laws, including, without limitation, any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the FDA or any other Regulatory Authority or governmental entity, nor, to the Company's knowledge, is any such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action threatened; (iii) the Company is not party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any Regulatory Authority or other governmental entity; and (iv) neither the Company nor its employees, officers or directors 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 an inquiry, investigation, proceeding or other similar action by a Regulatory Authority or other governmental entity that could reasonably be expected to result in debarment, suspension, or exclusion.
- (ff) The Company's clinical laboratory tests are conducted in compliance with all applicable Health Care Laws, and, to the extent applicable, the respective counterparts thereof promulgated by governmental authorities in countries outside the United States. The Company has not received notice from the FDA, HHS or other governmental authority alleging or asserting noncompliance with any applicable Health Care Law. To the Company's knowledge, neither the FDA nor any other governmental authority is considering such action.



- (gg) The financial statements included or incorporated by reference in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, together with the related schedules and notes thereto, comply as to form in all material respects with the applicable accounting requirements of the Securities Act and present fairly, in all material respects, the consolidated financial position of the Company as of the dates shown and its results of operations and cash flows for the periods shown, and such financial statements have been prepared in conformity with generally accepted accounting principles in the United States (“U.S. GAAP”) applied on a consistent basis throughout the periods covered thereby except for any normal year-end adjustments in the Company’s quarterly financial statements. The other financial information included in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus has been derived from the accounting records of the Company and presents fairly in all material respects the information shown thereby.
- (hh) KPMG LLP, who have certified certain financial statements of the Company and delivered its report with respect to the audited consolidated financial statements and schedules filed with the Commission as part of the Registration Statement and included in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, is an independent registered public accounting firm with respect to the Company within the meaning of the Securities Act and the applicable rules and regulations thereunder adopted by the Commission and the Public Company Accounting Oversight Board (United States).
- (ii) The Company maintains a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management’s general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with U.S. GAAP and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management’s general or specific authorization; (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences and (v) the interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement is accurate. Since the end of the Company’s most recent audited fiscal year, there has been (i) no material weakness in the Company’s internal control over financial reporting (whether or not remediated) and (ii) no change in the Company’s internal control over financial reporting that has materially and adversely affected, or is reasonably likely to materially and adversely affect, the Company’s internal control over financial reporting.
- (jj) The Company has filed all federal, state, local and foreign tax returns required to be filed through the date of this Agreement or have requested extensions thereof (except where the failure to file would not, singly or in the aggregate, reasonably be expected to have a material adverse effect on the Company) and have paid all taxes required to be paid thereon (except for cases in which the failure to file or pay would not, singly or in the aggregate, reasonably be expected to have a material adverse effect on the Company, or, except as currently being contested in good faith and for which reserves required by U.S. GAAP have been created in the financial statements of the Company), and no tax deficiency has been determined adversely to the Company which, singly or in the aggregate, has had (nor does the Company have any notice or knowledge of any tax deficiency which could reasonably be expected to be determined adversely to the Company and which could reasonably be expected to have) a material adverse effect on the Company.

- (kk) The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto.
- (ll) From the time of initial confidential submission of the Registration Statement to the Commission through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the Securities Act (an "**Emerging Growth Company**").
- (mm) The Company (i) has not alone engaged in any Testing-the-Waters Communication with any person other than Testing-the-Waters Communications with the consent of the Representatives with entities that are reasonably believed to be qualified institutional buyers within the meaning of Rule 144A under the Securities Act or institutions that are reasonably believed to be accredited investors within the meaning of Rule 501 under the Securities Act and (ii) has not authorized anyone other than the Representatives to engage in Testing-the-Waters Communications. The Company reconfirms that the Representatives have been authorized to act on its behalf in undertaking Testing-the-Waters Communications. The Company has not distributed any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Securities Act other than those listed on Schedule III hereto. "**Testing-the-Waters Communication**" means any communication with potential investors undertaken in reliance on Section 5(d) or Rule 163B of the Securities Act.
- (nn) The Company does not have any securities rated by any "nationally recognized statistical rating organization," as such term is defined in Section 3(a)(62) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**").
- (oo) As of the time of each sale of the Shares in connection with the offering when the Prospectus is not yet available to prospective purchasers, none of (A) the Time of Sale Prospectus, (B) any free writing prospectus, when considered together with the Time of Sale Prospectus, and (C) any individual Testing-the-Waters Communication, when considered together with the Time of Sale Prospectus, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.
2. *Agreements to Sell and Purchase.* The Company hereby agrees to sell to the several Underwriters, and each Underwriter, upon the basis of the representations and warranties herein contained, but subject to the terms and conditions hereinafter stated, agrees, severally and not jointly, to purchase from the Company the respective numbers of Shares set forth in Schedule I hereto opposite its name at \$1.081 a share (the "**Purchase Price**").
3. *Terms of Public Offering.* The Company is advised by the Representatives that the Underwriters propose to make a public offering of their respective portions of the Shares as soon after the Registration Statement and this Agreement have become effective as in the Representatives' judgment is advisable. The Company is further advised by the Representatives that the Shares are to be offered to the public initially at \$1.15 a share (the "**Public Offering Price**") and to certain dealers selected by the Representatives at a price that represents a concession not in excess of \$0.0414 a share under the Public Offering Price. The Company acknowledges and agrees that the Underwriters may offer and sell Shares to or through any affiliate of an Underwriter.

4. *Payment and Delivery.* Payment for the Shares shall be made to the Company in Federal or other funds immediately available in New York City against delivery of such Shares for the respective accounts of the several Underwriters at 10:00 a.m., New York City time, on April 9, 2024, or at such other time on the same or such other date as shall be designated in writing by the Representatives. The time and date of such payment are hereinafter referred to as the “**Closing Date.**”

The Shares shall be registered in such names and in such denominations as the Representatives shall request in writing not later than one full business day prior to the Closing Date. The Shares shall be delivered to the Representatives on the Closing Date for the respective accounts of the several Underwriters, with any transfer and similar taxes payable in connection with the transfer of the Shares to the Underwriters duly paid, against payment of the Purchase Price therefor.

5. *Conditions to the Underwriters’ Obligations.* The several obligations of the Underwriters are subject to the following further conditions:
- (a) Subsequent to the execution and delivery of this Agreement and prior to the Closing Date:
- (i) no order suspending the effectiveness of the Registration Statement shall be in effect, and no proceeding for such purpose or pursuant to Section 8A under the Securities Act shall be pending before or, to the knowledge of the Company, threatened by the Commission; and
- (ii) there shall not have occurred any change, or any development involving a prospective change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company, from that set forth in the Time of Sale Prospectus that, in the Representatives’ judgment, is material and adverse and that makes it, in the Representatives’ judgment, impracticable to market the Shares on the terms and in the manner contemplated in the Time of Sale Prospectus.
- (b) The Underwriters shall have received on the Closing Date a certificate, dated the Closing Date and signed by an executive officer of the Company, to the effect set forth in Sections 5(a)(i) and 5(a)(ii) above and to the effect that the representations and warranties of the Company contained in this Agreement are true and correct as of the Closing Date and that the Company has complied with all of the agreements and satisfied all of the conditions on its part to be performed or satisfied hereunder on or before the Closing Date.

The officer signing and delivering such certificate may rely upon the best of his or her knowledge as to proceedings threatened.

- (c) The Underwriters shall have received on the Closing Date an opinion letter (including certain negative assurance statements) of Sidley Austin LLP, dated the Closing Date, in substantially the form as set forth on Exhibit B.

- (d) The Underwriters shall have received on the Closing Date opinions of (i) Foley Hoag LLP, (ii) Sheridan Ross P.C., (iii) Lathrop GPM LLP and (iv) Parker Highlander PLLC, each acting as outside intellectual property counsel for the Company, dated the Closing Date, in substantially the forms as set forth on Exhibits C-1, C-2, C-3 and C-4, respectively.
- (e) The Underwriters shall have received on the Closing Date an opinion of Foley Hoag LLP, outside regulatory counsel for the Company, dated the Closing Date, in substantially the form as set forth on Exhibit D.
- (f) The Underwriters shall have received on the Closing Date (i) an opinion and (ii) negative assurance letter of Davis Polk & Wardwell LLP, counsel for the Underwriters, dated the Closing Date, in form and substance reasonably satisfactory to the Representatives.

With respect to Sections 5(c) and 5(f) above, Sidley Austin LLP and Davis Polk & Wardwell LLP may state that their opinions and beliefs are based upon their participation in the preparation of the Registration Statement, the Time of Sale Prospectus and the Prospectus and any amendments or supplements thereto and review and discussion of the contents thereof, but are without independent check or verification, except as specified.

The opinion (including certain negative assurance statements) of Sidley Austin LLP described in Section 5(c) above shall be rendered to the Underwriters at the request of the Company and shall so state therein.

- (g) The Underwriters shall have received, on each of the date hereof and the Closing Date, a letter dated the date hereof or the Closing Date, as the case may be, in form and substance reasonably satisfactory to the Underwriters, from KPMG LLP, independent public accountants, containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus; *provided* that the letter delivered on the Closing Date shall use a "cut-off date" not earlier than the date hereof.
- (h) The "lock-up" agreements, each substantially in the form of Exhibit A hereto, between the Representatives and certain shareholders, officers and directors of the Company relating to sales and certain other dispositions of shares of Common Stock or certain other securities, delivered to the Representatives on or before the date hereof, shall be in full force and effect on the Closing Date.

6. *Covenants of the Company.* The Company covenants with each Underwriter as follows:

- (a) To furnish to the Representatives, upon written request, without charge, two signed copies of the Registration Statement (including exhibits thereto and documents incorporated by reference) and for delivery to each other Underwriter a conformed copy of the Registration Statement (without exhibits thereto but including documents incorporated by reference) and to furnish to the Representatives in New York City, without charge, prior to 10:00 a.m. New York City time on the business day next succeeding the date of this Agreement and during the period mentioned in Section 6(e) or 6(f) below, as many copies of the Time of Sale Prospectus, the Prospectus, any documents incorporated by reference therein and any supplements and amendments thereto or to the Registration Statement as the Representatives may reasonably request.

- (b) Before amending or supplementing the Registration Statement, the Time of Sale Prospectus or the Prospectus, to furnish to the Representatives a copy of each such proposed amendment or supplement and not to file any such proposed amendment or supplement to which the Representatives reasonably object, in writing, and to file with the Commission within the applicable period specified in Rule 424(b) under the Securities Act any prospectus required to be filed pursuant to such Rule.
- (c) To furnish to the Representatives a copy of each proposed free writing prospectus to be prepared by or on behalf of, used by, or referred to by the Company and not to use or refer to any proposed free writing prospectus to which the Representatives reasonably object.
- (d) Not to take any action that would result in an Underwriter or the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of the Underwriter that the Underwriter otherwise would not have been required to file thereunder.
- (e) If the Time of Sale Prospectus is being used to solicit offers to buy the Shares at a time when the Prospectus is not yet available to prospective purchasers and any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Time of Sale Prospectus in order to make the statements therein, in the light of the circumstances, not misleading, or if any event shall occur or condition exist as a result of which the Time of Sale Prospectus conflicts with the information contained in the Registration Statement then on file, or if, in the reasonable opinion of counsel for the Underwriters, it is necessary to amend or supplement the Time of Sale Prospectus to comply with applicable law, forthwith to prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, either amendments or supplements to the Time of Sale Prospectus so that the statements in the Time of Sale Prospectus as so amended or supplemented will not, in the light of the circumstances when the Time of Sale Prospectus is delivered to a prospective purchaser, be misleading or so that the Time of Sale Prospectus, as amended or supplemented, will no longer conflict with the Registration Statement, or so that the Time of Sale Prospectus, as amended or supplemented, will comply with applicable law.
- (f) If, during such period after the first date of the public offering of the Shares as in the opinion of counsel for the Underwriters the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is required by law to be delivered in connection with sales by an Underwriter or dealer, any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Prospectus in order to make the statements therein, in the light of the circumstances when the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is delivered to a purchaser, not misleading, or if, in the opinion of counsel for the Underwriters, it is necessary to amend or supplement the Prospectus to comply with applicable law, forthwith to prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to the dealers (whose names and addresses the Representatives will furnish to the Company) to which Shares may have been sold by the Representatives on behalf of the Underwriters and to any other dealers upon request, either amendments or supplements to the Prospectus so that the statements in the Prospectus as so amended or supplemented will not, in the light of the circumstances when the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is delivered to a purchaser, be misleading or so that the Prospectus, as amended or supplemented, will comply with applicable law.

- (g) To endeavor to qualify the Shares for offer and sale under the securities or Blue Sky laws of such jurisdictions as the Representatives shall reasonably request.
- (h) To make generally available (which may be satisfied by filing with the Commission on its Electronic Data Gathering, Analysis and Retrieval System) to the Company's security holders and to the Underwriters as soon as practicable an earnings statement covering a period of at least twelve months beginning with the first fiscal quarter of the Company occurring after the date of this Agreement which shall satisfy the provisions of Section 11(a) of the Securities Act and the rules and regulations of the Commission thereunder.
- (i) Whether or not the transactions contemplated in this Agreement are consummated or this Agreement is terminated, to pay or cause to be paid all expenses incident to the performance of its obligations under this Agreement, including: (i) the fees, disbursements and expenses of the Company's counsel and the Company's accountants in connection with the registration and delivery of the Shares under the Securities Act and all other fees or expenses in connection with the preparation and filing of the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company and amendments and supplements to any of the foregoing, including all printing costs associated therewith, and the mailing and delivering of copies thereof to the Underwriters and dealers, in the quantities hereinabove specified, (ii) all costs and expenses related to the transfer and delivery of the Shares to the Underwriters, including any transfer or other taxes payable thereon, (iii) the cost of printing or producing any Blue Sky or Legal Investment memorandum in connection with the offer and sale of the Shares under state securities laws and all expenses in connection with the qualification of the Shares for offer and sale under state securities laws as provided in Section 6(g) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Underwriters in connection with such qualification and in connection with the Blue Sky or Legal Investment memorandum (such fees and expenses of counsel in aggregate not to exceed \$10,000), (iv) all filing fees and the reasonable fees and disbursements of counsel to the Underwriters incurred in connection with the review and qualification of the offering of the Shares by the Financial Industry Regulatory Authority ("**FINRA**") (such fees and expenses of counsel in aggregate not to exceed \$40,000), (v) all fees and expenses in connection with the preparation and filing of the registration statement on Form 8-A relating to the Common Stock and all costs and expenses incident to listing the Shares on the NASDAQ Global Market, (vi) the cost of printing certificates representing the Shares, (vii) the costs and charges of any transfer agent, registrar or depositary, (viii) the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in connection with the marketing of the offering of the Shares, including, without limitation, expenses associated with the preparation or dissemination of any electronic road show, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations with the prior approval of the Company, travel and lodging expenses of the representatives and officers of the Company and any such consultants, and 50% of the cost of any aircraft or other transportation chartered in connection with the road show (with the remaining 50% of such costs to be paid by the Underwriters), (ix) the document production charges and expenses associated

with printing this Agreement and (x) all other costs and expenses incident to the performance of the obligations of the Company hereunder for which provision is not otherwise made in this Section. It is understood, however, that except as provided in this Section, Section 8 entitled "Indemnity and Contribution" and the last paragraph of Section 10 below, the Underwriters will pay all of their costs and expenses, including fees and disbursements of their counsel, stock transfer taxes payable on resale of any of the Shares by them and any advertising expenses connected with any offers they may make.

- (j) The Company will promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (i) completion of the distribution of the Shares within the meaning of the Securities Act and (ii) completion of the Restricted Period (as defined in this Section 6).
- (k) If at any time following the distribution of any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Securities Act there occurred or occurs an event or development as a result of which such Testing-the-Waters Communication included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representatives and will promptly amend or supplement, at its own expense, such Testing-the-Waters Communication to eliminate or correct such untrue statement or omission.
- (l) The Company will deliver to each Underwriter (or its agent), on the date of execution of this Agreement, a properly completed and executed Certification Regarding Beneficial Owners of Legal Entity Customers, together with copies of identifying documentation, and the Company undertakes to provide such additional supporting documentation as each Underwriter may reasonably request in connection with the verification of the foregoing Certification.

The Company also covenants with each Underwriter that, without the prior written consent of TD Securities (USA) LLC and William Blair & Company, L.L.C. on behalf of the Underwriters, it will not, and will not publicly disclose an intention to, during the period ending 90 days after the date of the Prospectus (the "**Restricted Period**"), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise or (3) file any registration statement with the Commission relating to the offering of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock.

The restrictions contained in the preceding paragraph shall not apply to (A) (i) the Shares to be sold hereunder, (ii) shares of Series A Preferred Stock to be sold in the Concurrent Private Placement and (iii) shares of Common Stock to be issued upon conversion of the Series A Preferred Stock to be sold in the Concurrent Private Placement, (B) the issuance by the Company of shares of Common Stock upon the exercise of an option or warrant or the conversion of a

security outstanding on the date hereof as described in each of the Time of Sale Prospectus and Prospectus, (C) the issuance by the Company of shares of Common Stock or options to purchase shares of, Common Stock to employees, officers, directors, advisors or consultants of the Company pursuant to employee benefit plans as described in each of the Time of Sale Prospectus and Prospectus, provided that, prior to the issuance of any such shares or the grant of any such options, the Company shall cause each recipient of such grant or issuance to execute and deliver a “lock-up” agreement, substantially in the form of Exhibit A hereto, (D) the filing by the Company of registration statements on Form S-8 with respect to the employee benefit plans described in the Time of Sale Prospectus and Prospectus, (E) the sale or issuance of or entry into an agreement to sell or issue shares of Common Stock in connection with the Company’s acquisition of one or more businesses, products, assets or technologies (whether by means of merger, stock purchase, asset purchase or otherwise) or in connection with joint ventures, collaboration or licensing agreements, marketing or distribution arrangements, commercial relationships or other strategic transactions; provided, that, the aggregate number of shares of Common Stock that the Company may sell or issue or agree to sell or issue pursuant to this clause (F) shall not exceed 5% of the total number of shares of Common Stock issued and outstanding immediately following the completion of the transactions contemplated by this Agreement and provided further that the Company shall cause each recipient of such shares to execute and deliver to you, on or prior to such issuance, a “lock up” agreement, substantially in the form of Exhibit A hereto, or (G) facilitating the establishment of a trading plan on behalf of a shareholder, officer or director of the Company pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock, *provided* that (i) such plan does not provide for the transfer of Common Stock during the Restricted Period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by the Company regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of Common Stock may be made under such plan during the Restricted Period.

7. *Covenants of the Underwriters.* Each Underwriter, severally and not jointly, covenants with the Company not to take any action that would result in the Company being required to file with the Commission under Rule 433(d) a free writing prospectus prepared by or on behalf of such Underwriter that otherwise would not be required to be filed by the Company thereunder, but for the action of the Underwriter.
8. *Indemnity and Contribution.* (a) The Company agrees to indemnify and hold harmless each Underwriter, each person, if any, who controls any Underwriter within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act and each director, officer and affiliate of any Underwriter within the meaning of Rule 405 under the Securities Act from and against any and all losses, claims, damages and liabilities (including, without limitation, any legal or other expenses reasonably incurred in connection with defending or investigating any such action or claim) that arise out of, or are based upon, any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or any amendment thereof, any preliminary prospectus, the Time of Sale Prospectus or any amendment or supplement thereto, any issuer free writing prospectus as defined in Rule 433(h) under the Securities Act, any Company information that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act, any road show as defined in Rule 433(h) under the Securities Act (a “road show”), the Prospectus or any amendment or supplement thereto, or any Testing-



the-Waters Communication, or arise out of, or are based upon, any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as such losses, claims, damages or liabilities arise out of, or are based upon, any such untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with any information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use therein, it being understood and agreed that the only such information furnished by the Underwriters through the Representatives consists of the information described as such in paragraph (b) below.

- (b) Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, its directors, its officers who sign the Registration Statement and each person, if any, who controls the Company within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act to the same extent as the foregoing indemnity from the Company to such Underwriter, but only with reference to information relating to such Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use in the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, any issuer free writing prospectus, road show or the Prospectus or any amendment or supplement thereto, it being understood and agreed that the only such information furnished by any Underwriter consists of the following: the concession figures appearing in the third paragraph under the caption "Underwriters," the information relating to stabilizing transactions contained in the twelfth paragraph under the caption "Underwriters" and the information regarding internet distribution appearing in the fourteenth paragraph under the caption "Underwriters."
- (c) In case any proceeding (including any governmental investigation) shall be instituted involving any person in respect of which indemnity may be sought pursuant to Section 8(a) or 8(b), such person (the "**indemnified party**") shall promptly notify the person against whom such indemnity may be sought (the "**indemnifying party**") in writing and the indemnifying party, upon request of the indemnified party, shall retain counsel reasonably satisfactory to the indemnified party to represent the indemnified party and any others the indemnifying party may designate in such proceeding and shall pay the reasonably incurred and documented fees and disbursements of such counsel related to such proceeding. In any such proceeding, any indemnified party shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such indemnified party unless (i) the indemnifying party and the indemnified party shall have mutually agreed to the retention of such counsel, (ii) the representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them, (iii) the indemnifying person has failed within a reasonable time to retain counsel satisfactory to the indemnified party, or (iv) the actual or potential defendants in, or targets of, any such proceeding include both of the indemnifying party and the indemnified party, and the indemnified party shall have concluded that there may be legal defenses available to the indemnified party that are different from or additional to those available to the indemnifying party (in which case the indemnifying party shall not have the right to assume the defense of such proceeding on behalf of the indemnified party). It is understood that the indemnifying party shall not, in respect of the legal expenses of any indemnified party in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the fees and expenses of more than one separate firm (in addition to any local counsel) for all such indemnified parties and that all such fees and expenses shall be reimbursed as they are incurred. Such firm shall be

designated in writing by the Representatives, in the case of parties indemnified pursuant to Section 8(a), and by the Company, in the case of parties indemnified pursuant to Section 8(b). The indemnifying party shall not be liable for any settlement of any proceeding effected without its written consent (which shall not be unreasonably withheld or delayed), but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party from and against any loss or liability by reason of such settlement or judgment. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel as contemplated by the second and third sentences of this paragraph, the indemnifying party agrees that it shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than 30 days after receipt by such indemnifying party of the aforesaid request and (ii) such indemnifying party shall not have reimbursed the indemnified party in accordance with such request prior to the date of such settlement. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened proceeding in respect of which any indemnified party is or could have been a party and indemnity could have been sought hereunder by such indemnified party, unless such settlement includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such proceeding and does not include any statement as to or any admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

- (d) To the extent the indemnification provided for in Section 8(a) or 8(b) is unavailable to an indemnified party or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each indemnifying party under such paragraph, in lieu of indemnifying such indemnified party thereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other hand from the offering of the Shares or (ii) if the allocation provided by clause 8(d)(i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause 8(d)(i) above but also the relative fault of the Company on the one hand and of the Underwriters on the other hand in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other hand in connection with the offering of the Shares shall be deemed to be in the same respective proportions as the net proceeds from the offering of the Shares (before deducting expenses) received by the Company and the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover of the Prospectus, bear to the aggregate Public Offering Price of the Shares. The relative fault of the Company on the one hand and the Underwriters on the other hand shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Underwriters' respective obligations to contribute pursuant to this Section 8 are several in proportion to the respective number of Shares they have purchased hereunder, and not joint.

- (e) The Company and the Underwriters agree that it would not be just or equitable if contribution pursuant to this Section 8 were determined by *pro rata* allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take account of the equitable considerations referred to in Section 8(d). The amount paid or payable by an indemnified party as a result of the losses, claims, damages and liabilities referred to in Section 8(d) shall be deemed to include, subject to the limitations set forth above, any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 8, no Underwriter shall be required to contribute any amount in excess of the amount by which the total price at which the Shares underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The remedies provided for in this Section 8 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any indemnified party at law or in equity.
- (f) The indemnity and contribution provisions contained in this Section 8 and the representations, warranties and other statements of the Company contained in this Agreement shall remain operative and in full force and effect regardless of (i) any termination of this Agreement, (ii) any investigation made by or on behalf of any Underwriter, any person controlling any Underwriter or any affiliate of any Underwriter or by or on behalf of the Company, its officers or directors or any person controlling the Company and (iii) acceptance of and payment for any of the Shares.
9. *Termination.* The Underwriters may terminate this Agreement by notice given by the Representatives to the Company, if after the execution and delivery of this Agreement and prior to or on the Closing Date (i) trading generally shall have been suspended or materially limited on, or by, as the case may be, any of the New York Stock Exchange, the NYSE American, the NASDAQ Global Market or other relevant exchanges, (ii) trading of any securities of the Company shall have been suspended on any exchange or in any over-the-counter market, (iii) a material disruption in securities settlement, payment or clearance services in the United States shall have occurred, (iv) any moratorium on commercial banking activities shall have been declared by Federal or New York State authorities or (v) there shall have occurred any outbreak or escalation of hostilities, or any change in financial markets or any calamity or crisis that, in the Representatives' judgment, is material and adverse and which, singly or together with any other event specified in this clause (v), makes it, in the Representatives' judgment, impracticable or inadvisable to proceed with the offer, sale or delivery of the Shares on the terms and in the manner contemplated in the Time of Sale Prospectus or the Prospectus.
10. *Effectiveness; Defaulting Underwriters.* This Agreement shall become effective upon the execution and delivery hereof by the parties hereto.
- If, on the Closing Date any one or more of the Underwriters shall fail or refuse to purchase Shares that it has or they have agreed to purchase hereunder on such date, and the aggregate number of Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase is not more than one-tenth of the aggregate number of the Shares to be

purchased on such date, the other Underwriters shall be obligated severally in the proportions that the number of Shares set forth opposite their respective names in Schedule I bears to the aggregate number of Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as the Representatives may specify, to purchase the Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase on such date; *provided* that in no event shall the number of Shares that any Underwriter has agreed to purchase pursuant to this Agreement be increased pursuant to this Section 10 by an amount in excess of one-ninth of such number of Shares without the written consent of such Underwriter. If, on the Closing Date, any Underwriter or Underwriters shall fail or refuse to purchase Shares and the aggregate number of Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Shares to be purchased on such date, and arrangements satisfactory to the Representatives and the Company for the purchase of such Shares are not made within 36 hours after such default, this Agreement shall terminate without liability on the part of any non-defaulting Underwriter or the Company. In any such case either the Representatives or the Company shall have the right to postpone the Closing Date, but in no event for longer than seven days, in order that the required changes, if any, in the Registration Statement, in the Time of Sale Prospectus, in the Prospectus or in any other documents or arrangements may be effected. Any action taken under this paragraph shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

If this Agreement shall be terminated by the Underwriters, or any of them, because of any failure or refusal on the part of the Company to comply with the terms or to fulfill any of the conditions of this Agreement, or if for any reason the Company shall be unable to perform its obligations under this Agreement, the Company will reimburse the Underwriters or such Underwriters as have so terminated this Agreement with respect to themselves, severally, for all out-of-pocket expenses (including the reasonably incurred and documented fees and disbursements of their counsel) reasonably incurred by such Underwriters in connection with this Agreement or the offering contemplated hereunder; *provided* that the foregoing obligation to reimburse the Underwriters shall not apply to any defaulting Underwriter that shall have failed or refused to purchase Shares for reasons other than as permitted under this Agreement.

11. *Entire Agreement.* (a) This Agreement, together with any contemporaneous written agreements and any prior written agreements (to the extent not superseded by this Agreement) that relate to the offering of the Shares, represents the entire agreement between the Company and the Underwriters with respect to the preparation of any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, the conduct of the offering, and the purchase and sale of the Shares.
- (b) The Company acknowledges that in connection with the offering of the Shares: (i) the Underwriters have acted at arm's length, are not agents of, and owe no fiduciary duties to, the Company or any other person, (ii) the Underwriters owe the Company only those duties and obligations set forth in this Agreement, any contemporaneous written agreements and prior written agreements (to the extent not superseded by this Agreement), if any, (iii) the Underwriters may have interests that differ from those of the Company, and (iv) none of the activities of the Underwriters in connection with the transactions contemplated herein constitutes a recommendation, investment advice, or solicitation of any action by the Underwriters with respect to any entity or natural person. The Company waives to the full extent permitted by applicable law any claims it may have against the Underwriters arising from an alleged breach of fiduciary duty in connection with the offering of the Shares.

12. *Recognition of the U.S. Special Resolution Regimes.* (a) In the event that any Underwriter that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from such Underwriter of this Agreement, and any interest and obligation in or under this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.
- (b) In the event that any Underwriter that is a Covered Entity or a BHC Act Affiliate of such Underwriter becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Underwriter are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States.

For purposes of this Section a “**BHC Act Affiliate**” has the meaning assigned to the term “affiliate” in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k). “**Covered Entity**” means any of the following: (i) a “covered entity” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b); (ii) a “covered bank” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or (iii) a “covered FSI” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b). “**Default Right**” has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable. “**U.S. Special Resolution Regime**” means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

13. *Counterparts.* This Agreement may be signed in two or more counterparts, which may be delivered via facsimile, electronic mail (including any electronic signature covered by the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., [www.docuSign.com](http://www.docuSign.com)), each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.
14. *Applicable Law.* This Agreement shall be governed by and construed in accordance with the internal laws of the State of New York.
15. *Headings.* The headings of the sections of this Agreement have been inserted for convenience of reference only and shall not be deemed a part of this Agreement.

16. *Notices.* All communications hereunder shall be in writing and effective only upon receipt and if to the Underwriters shall be delivered, mailed or sent to each of TD Securities (USA) LLC, 1 Vanderbilt Avenue, New York, New York 10017, Facsimile: (646) 562-1124, Attention: Head of Equity Capital Markets; William Blair & Company, L.L.C., 150 N. Riverside Plaza, Chicago, Illinois 60606, Attention: Equity Capital Markets, Facsimile: (312) 551-4646; and Canaccord Genuity LLC, One Post Office Square, Suite 3000 Boston, MA 02109, Attention: ECM, General Counsel, Email: aviles@cgf.com; and if to the Company shall be delivered, mailed or sent to 919 West Dillon Rd., Louisville, CO 80027.

*[Signature Page Follows]*

---

Very truly yours,

BIODESIX, INC.

By: /s/ Robin Harper Cowie

Name: Robin Harper Cowie

Title: Chief Financial Officer

*[Signature Page to Underwriting Agreement]*

---

Accepted as of the date hereof

By: TD Securities (USA) LLC

By: /s/ Michael Campbell

Name: Michael Campbell  
Title: Managing Director

By: William Blair & Company, L.L.C.

By: /s/ Steve Maletzky

Name: Steve Maletzky  
Title: Head of Capital Markets

By: Canaccord Genuity LLC

By: /s/ Jeff Barlow

Name: Jeff Barlow  
Title: CEO, Canaccord U.S.



**SCHEDULE I**

<u>Underwriter</u>	<u>Number of Shares To Be Purchased</u>
TD Securities (USA) LLC	7,826,325
William Blair & Company, L.L.C.	5,043,631
Canaccord Genuity LLC	3,217,489
Lake Street Capital Markets LLC	1,304,387
Total:	<u>17,391,832</u>

## Time of Sale Prospectus

1. Prospectus issued April 5, 2024
2. Pricing Information:

Shares:	17,391,832
Public Offering Price:	\$ 1.15

II-1

---

**SCHEDULE III**

**Written Testing-the-Waters Communication**

None

II-2

## FORM OF LOCK-UP LETTER

## LOCK-UP AGREEMENT

\_\_\_\_\_, 2024

TD Securities (USA) LLC  
William Blair & Company, L.L.C.  
Canaccord Genuity LLC

c/o TD Securities (USA) LLC  
1 Vanderbilt Avenue  
New York, New York 10017

c/o William Blair & Company, L.L.C.  
150 N. Riverside Plaza  
Chicago, Illinois 60606

c/o Canaccord Genuity LLC  
One Post Office Square, Suite 3000  
Boston, Massachusetts 02109

Ladies and Gentlemen:

The undersigned understands that TD Securities (USA) LLC, LLC, William Blair & Company, L.L.C. and Canaccord Genuity LLC (the “**Representatives**”) propose to enter into an Underwriting Agreement (the “**Underwriting Agreement**”) with Biodesix, Inc., a Delaware corporation (the “**Company**”), providing for the public offering (the “**Public Offering**”) by the several Underwriters listed on Schedule I to the Underwriting Agreement, including the Representatives (the “**Underwriters**”), of shares of the common stock, par value \$0.001 per share, of the Company (the “**Common Stock**”).

To induce the Underwriters that may participate in the Public Offering to continue their efforts in connection with the Public Offering, the undersigned hereby agrees that, without the prior written consent of TD Securities (USA) LLC and William Blair & Company, L.L.C. on behalf of the Underwriters, it will not, and will not publicly disclose an intention to, during the period commencing on the date hereof and ending 90 days after the date of the final prospectus (the “**Restricted Period**”) relating to the Public Offering (the “**Prospectus**”), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock beneficially owned (as such term is used in Rule 13d-3 of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), by the undersigned or any other securities so owned convertible into or exercisable or exchangeable for Common Stock, or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise.

The foregoing sentence shall not apply to:

(a) transactions relating to shares of Common Stock or other securities acquired in (x) open market transactions after the completion of the Public Offering or (y) as part of the Public Offering (other than issuer-directed shares purchased in the Public Offering, which shall be subject to the foregoing sentence) of Common Stock, *provided* that no filing under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of the Common Stock shall be required or shall be voluntarily made in connection with subsequent sales of Common Stock or other securities acquired in such open market transactions, and *provided, further*, that all filings on Form 13F and all initial filings under Schedule 13G or 13D regarding beneficial ownership shall be permitted;

(b) transfers of shares of Common Stock or any other securities convertible into or exercisable or exchangeable for Common Stock as a bona fide gift;

(c) transfers of shares of Common Stock or any other securities convertible into or exercisable or exchangeable for Common Stock to any trust or similar entity for the direct or indirect benefit of the undersigned or the immediate family of the undersigned (for purposes of this lock-up agreement, “immediate family” shall mean any relationship by blood, marriage or adoption, not more remote than first cousin) or if the undersigned is a trust, to any beneficiary of the undersigned (including such beneficiary’s estate);

(d) distributions of shares of Common Stock or any other securities convertible into or exercisable or exchangeable for Common Stock to limited partners, general partners, members, stockholders or other equityholders of the undersigned;

(e) transfers of shares of Common Stock or any other securities convertible into or exercisable or exchangeable for Common Stock to the undersigned’s affiliates or to any investment fund or other entity that, directly or indirectly, controls or manages, is controlled or managed by, or is under common control or management with the undersigned;

(f) transfers of shares of Common Stock or any other securities convertible into or exercisable or exchangeable for Common Stock to any nominee or custodian of a person or entity to whom a transfer or disposition would be permissible under clauses (b) through (e) above;

(g) transfers of shares of Common Stock or any other securities convertible into or exercisable or exchangeable for Common Stock by will or intestate succession (including to the transferee’s nominee or custodian);

(h) transfers of shares of Common Stock or any other securities convertible into or exercisable or exchangeable for Common Stock to the Company in connection with the exercise of options, warrants or other rights to acquire shares of Common Stock or any security convertible into or exercisable for shares of Common Stock of the Company by way of net exercise and/or to cover withholding tax obligations in connection with such exercise pursuant to an employee benefit plan, option, warrant or other right disclosed in the Prospectus for the Public Offering, *provided* that any such shares of the Common Stock issued upon exercise of such option, warrant or other right shall be subject to the restrictions set forth herein;

(i) transfers of shares of Common Stock or any other securities convertible into or exercisable or exchangeable for Common Stock pursuant to the automatic conversion of outstanding preferred stock or convertible notes of the Company into shares of Common Stock as described in the Prospectus;

(j) transfers of shares of Common Stock or any other securities convertible into or exercisable or exchangeable for Common Stock by operation of law, including pursuant to a court or regulatory agency order, a settlement agreement, a qualified domestic order or in connection with a divorce settlement (including to any nominee or custodian of a person or entity to whom a transfer or disposition would be permissible);

(k) transfers of shares of Common Stock or any other securities convertible into or exercisable or exchangeable for Common Stock to the Company pursuant to agreements described in the Prospectus under which the Company has the option to repurchase such shares or a right of first refusal with respect to transfers of such shares upon termination of service of the undersigned;

(l) transfers of shares of Common Stock or any other securities convertible into or exercisable or exchangeable for Common Stock to a third party pursuant to a merger, consolidation, *bona fide* tender offer or other similar transaction made to all holders of shares of the Common Stock involving a change of control and approved by the Company's board of directors, *provided* that if such merger, consolidation, tender offer or other transaction is not completed, such shares of Common Stock owned by the undersigned shall remain subject to the provisions of this lock-up agreement; or

(m) facilitating the establishment of a trading plan on behalf of a shareholder, officer or director of the Company pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock, *provided* that (i) such plan does not provide for the transfer of Common Stock during the Restricted Period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required or voluntarily made by or on behalf of the undersigned or the Company regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of Common Stock may be made under such plan during the Restricted Period;

*provided that*, with respect to each donee, trustee, distributee, or transferee, as applicable, (x) in the case of any transfer, disposition or distribution pursuant to clauses (b) to (g) above, such donee, trustee, distributee or transferee, as applicable, shall sign and deliver a lock-up agreement substantially in the form of this agreement, (y) (A) in the case of clauses (b) to (f) above, such transfer shall not involve a disposition for value and no filing under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of the Common Stock shall be required or shall be voluntarily made (other than with respect to any filing required to be made under Section 16(a) of the Exchange Act in connection with a transfer under clause (b)); *provided* that any such filing shall clearly indicate in the footnotes thereto the nature and conditions of

such transfer) and (B) in the case of clauses (g) to (l) above, any required filing under Section 16(a) of the Exchange Act shall state the reason for such transfer in the footnotes thereto and (z) the undersigned shall not otherwise voluntarily effect any public filing or report regarding such transfers during the Restricted Period. As used in this lock-up agreement, “change of control” shall mean the consummation of any *bona fide* third-party tender offer, merger, consolidation or other similar transaction the result of which is that any “person” (as defined in Section 13(d)(3) of the Exchange Act), or group of persons, other than the Company, becomes the beneficial owner (as defined in Rules 13d-3 and 13d-5 of the Exchange Act) of more than 50% of total voting power of the voting stock of the Company.

In addition, the undersigned agrees that, without the prior written consent of TD Securities (USA) LLC and William Blair & Company, L.L.C. on behalf of the Underwriters, it will not, during the Restricted Period, make any demand for or exercise any right with respect to, the registration of any shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock.

The undersigned also agrees and consents to the entry of stop transfer instructions with the Company’s transfer agent and registrar against the transfer of the undersigned’s shares of Common Stock except in compliance with the foregoing restrictions.

The undersigned further agrees that the foregoing restrictions shall be equally applicable to any issuer-directed Shares the undersigned may purchase in the Public Offering.

The undersigned understands that the Company and the Underwriters are relying upon this agreement in proceeding toward consummation of the Public Offering. The undersigned further understands that this agreement is irrevocable and shall be binding upon the undersigned’s heirs, legal representatives, successors and assigns.

The undersigned understand that TD Securities (USA) LLC may assign its rights under this agreement to any registered broker dealer affiliate of TD Securities (USA) LLC.

The undersigned acknowledges and agrees that the Underwriters have not provided any recommendation or investment advice, nor have the Underwriters solicited any action from the undersigned with respect to the Public Offering of the shares of Common Stock, and the undersigned has consulted their own legal, accounting, financial, regulatory and tax advisors to the extent deemed appropriate. The undersigned further acknowledges and agrees that, although the Underwriters may provide certain Regulation Best Interest and Form CRS disclosures or other related documentation to you in connection with the Public Offering, the Underwriters are not making a recommendation to you to participate in the Public Offering or sell any Shares at the price determined in the Public Offering, and nothing set forth in such disclosures or documentation is intended to suggest that any Underwriter is making such a recommendation.

Whether or not the Public Offering actually occurs depends on a number of factors, including market conditions. Any Public Offering will only be made pursuant to an Underwriting Agreement, the terms of which are subject to negotiation between the Company and the Underwriters.

The undersigned understands that, if (i) either the Representatives, on the one hand, or the Company, on the other hand, informs the other, prior to the execution of the Underwriting Agreement, that they have determined not to proceed with the Public Offering, (ii) the registration statement furnished to or filed with the Commission with respect to the Public Offering is withdrawn prior to the execution of the Underwriting Agreement, (iii) the Underwriting Agreement is not duly executed by April 30, 2024 (provided that the Company may, by written notice to the undersigned prior to such date, extend such date for a period of an additional six months), or (iv) the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Common Stock to be sold thereunder, the undersigned shall be released from all obligations under this lock-up agreement.

This agreement and any claim, controversy or dispute arising under or related to this agreement shall be governed by and construed in accordance with the laws of the State of New York.

This agreement may be signed and delivered via facsimile, electronic mail (including any electronic signature covered by the U.S. federal E-SIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., [www.docusign.com](http://www.docusign.com)), each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.



Very truly yours,

**IF AN INDIVIDUAL:**

\_\_\_\_\_  
*(duly authorized signature)*

Name: \_\_\_\_\_  
*(please print full name)*

Address:

\_\_\_\_\_  
\_\_\_\_\_

E-mail: \_\_\_\_\_

**IF AN ENTITY:**

\_\_\_\_\_  
*(please print complete name of entity)*

By: \_\_\_\_\_  
*(duly authorized signature)*

Name: \_\_\_\_\_  
*(please print full name)*

Title: \_\_\_\_\_  
*(please print full title)*

Address:

\_\_\_\_\_  
\_\_\_\_\_

E-mail:

FORM OF COMPANY COUNSEL OPINION

**FORM OF COMPANY INTELLECTUAL PROPERTY**

**COUNSEL OPINION**

**FORM OF COMPANY INTELLECTUAL PROPERTY**

**COUNSEL OPINION**

**FORM OF COMPANY INTELLECTUAL PROPERTY**

**COUNSEL OPINION**

**FORM OF COMPANY INTELLECTUAL PROPERTY**

**COUNSEL OPINION**

FORM OF COMPANY REGULATORY COUNSEL OPINION

## BIODESIX, INC.

**CERTIFICATE OF DESIGNATION OF PREFERENCES,  
RIGHTS AND LIMITATIONS  
OF  
SERIES A NON-VOTING CONVERTIBLE PREFERRED STOCK**

Pursuant to Section 151 of the  
General Corporation Law of the State of Delaware

THE UNDERSIGNED DOES HEREBY CERTIFY, on behalf of Biodesix, Inc., a Delaware corporation (the "*Corporation*"), that the following resolution was duly adopted by the Board of Directors of the Corporation (the "*Board of Directors*"), in accordance with the provisions of Section 151 of the General Corporation Law of the State of Delaware (the "*DGCL*"), by unanimous written consent on April 3, 2024, which resolution provides for the creation of a series of the Corporation's Preferred Stock, par value \$0.001 per share, which is designated as "Series A Non-Voting Convertible Preferred Stock," with the preferences, rights and limitations set forth therein relating to dividends, conversion, redemption, dissolution and distribution of assets of the Corporation.

**WHEREAS:** the Amended and Restated Certificate of Incorporation of the Corporation (the "*Certificate of Incorporation*"), provides for a class of its authorized stock known as Preferred Stock, consisting of 5,000,000 shares, \$0.001 par value per share (the "*Preferred Stock*"), issuable from time to time in one or more series.

**RESOLVED:** that, pursuant to authority conferred upon the Board of Directors by the Certificate of Incorporation, (i) a series of Preferred Stock of the Corporation be, and hereby is authorized by the Board of Directors, (ii) the Board of Directors hereby authorizes the issuance of 760,857 shares of "Series A Non-Voting Convertible Preferred Stock" pursuant to the terms of the Securities Purchase Agreement, dated as of April 5, 2024, by and among the Corporation and the initial Holders (as defined below) (the "*Securities Purchase Agreement*"), and (iii) the Board of Directors hereby fixes the designations, powers, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, of such shares of Preferred Stock, in addition to any provisions set forth in the Certificate of Incorporation that are applicable to the Preferred Stock of all classes and series, as follows:

**TERMS OF SERIES A NON-VOTING CONVERTIBLE PREFERRED STOCK**

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

"*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.

"*Buy-In*" shall have the meaning set forth in Section 6.5.4.

"*Closing Sale Price*" means, for any security as of any date, the last closing trade price for such security immediately prior to 4:00 p.m., New York City time, on the principal Trading Market where such security is listed or traded, as reported by Bloomberg, L.P. (or an equivalent, reliable reporting service), or if the foregoing do not apply, the last trade price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, L.P., or, if no last trade price is reported for such security by Bloomberg, L.P., the average of the bid prices of any market makers for such security as reported on the OTC Pink Market by OTC Markets Group, Inc. If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market value as determined in good faith by the Board of Directors of the Corporation.

"*Common Stock*" means the Corporation's common stock, par value \$0.001 per share, and stock of any other class of securities into which such securities may hereafter be reclassified or changed.



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

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

“**Holder**” means a holder of shares of Series A Non-Voting Convertible Preferred Stock.

“**Person**” means an individual or entity including but not limited to any corporation, limited liability company, association, partnership, organization, business, individual, governmental or political subdivision thereof or a government agency.

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

“**Trading Day**” means a day on which the Nasdaq Global Select Market is open for business.

“**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).

2. Designation, Amount and Par Value. The series of Preferred Stock shall be designated as the Corporation’s Series A Non-Voting Convertible Preferred Stock (the “**Series A Non-Voting Convertible Preferred Stock**”) and the number of shares so designated shall be 760,857. Each share of Series A Non-Voting Convertible Preferred Stock shall have a par value of \$0.001 per share.

3. Dividends. Holders shall be entitled to receive, and the Corporation shall pay, dividends on shares of the Series A Non-Voting Convertible Preferred Stock (on an as-if-converted-to-Common-Stock basis, without regard to the Beneficial Ownership Limitation (as defined below)) equal to and in the same form, and in the same manner, as dividends (other than dividends on shares of the Common Stock payable in the form of Common Stock) actually paid on shares of the Common Stock when, as and if such dividends (other than dividends payable in the form of Common Stock) are paid on shares of the Common Stock. No other dividends shall be paid on shares of Series A Non-Voting Convertible Preferred Stock, and the Corporation shall pay no dividends (other than dividends payable in the form of Common Stock) on shares of the Common Stock unless it simultaneously complies with the previous sentence.

#### 4. Voting Rights.

4.1. Except as otherwise provided herein or as otherwise required by the DGCL, the Series A Non-Voting Convertible Preferred Stock shall have no voting rights. However, as long as any shares of Series A Non-Voting Convertible Preferred Stock are outstanding, the Corporation shall not, without the affirmative vote of the holders of a majority of the then outstanding shares of the Series A Non-Voting Convertible Preferred Stock: (i) alter or change adversely the powers, preferences or rights given to the Series A Non-Voting Convertible Preferred Stock or alter or amend this Certificate of Designation, amend or repeal any provision of, or add any provision to, the Certificate of Incorporation or Amended and Restated Bylaws of the Corporation, or file any articles of amendment, certificate of designations, preferences, limitations and relative rights of any series of Preferred Stock, if such action would adversely alter or change the preferences, rights, privileges or powers of, or restrictions provided for the benefit of the Series A Non-Voting Convertible Preferred Stock, regardless of whether any of the foregoing actions shall be by means of amendment to the Certificate of Incorporation or by merger, consolidation, recapitalization, reclassification, conversion or otherwise, (ii) issue further shares of Series A Non-Voting Convertible Preferred Stock or increase or decrease (other than by conversion) the number of authorized shares of Series A Non-Voting Convertible Preferred Stock, (iii) prior to the Stockholder Approval (as defined below) or at any time while at least 30% of the originally issued Series A Non-Voting Convertible Preferred Stock remains issued and outstanding, consummate either: (A) any Fundamental Transaction (as defined below) or (B) any merger or consolidation of the Corporation with or into another entity or any stock sale to, or other business combination in which the stockholders of the Corporation immediately

before such transaction do not hold at least a majority of the capital stock of the Corporation immediately after such transaction or (iv) enter into any agreement with respect to any of the foregoing. Holders of shares of Common Stock acquired upon the conversion of shares of Series A Non-Voting Convertible Preferred Stock shall be entitled to the same voting rights as each other holder of Common Stock, except that such holders may not vote such shares upon the proposal for Stockholder Approval in accordance with Rule 5635 of the listing rules of The Nasdaq Stock Market LLC.

4.2. Any vote required or permitted under Section 4.1 may be taken at a meeting of the Holders or through the execution of an action by written consent in lieu of such meeting, provided that the consent is executed by Holders representing a majority of the outstanding shares of Series A Non-Voting Convertible Preferred Stock.

#### 5. Rank; Liquidation.

5.1. The Series A Non-Voting Convertible Preferred Stock shall rank on parity with the Common Stock as to distributions of assets upon liquidation, dissolution or winding up of the Corporation, whether voluntarily or involuntarily.

5.2. Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary (a “**Liquidation**”), each Holder shall be entitled to receive out of the assets, whether capital or surplus, of the Corporation the same amount that a holder of Common Stock would receive if the Series A Non-Voting Convertible Preferred Stock were fully converted (disregarding for such purpose any Beneficial Ownership Limitations) to Common Stock which amounts shall be paid pari passu with all holders of Common Stock, plus an additional amount equal to any dividends declared on but unpaid to such shares. If, upon any such Liquidation, the assets of the Corporation shall be insufficient to pay the Holders of shares of the Series A Non-Voting Convertible Preferred Stock the amount required under the preceding sentence, then all remaining assets of the Corporation shall be distributed ratably to the Holders and the holders of Common Stock in accordance with the respective amounts that would be payable on all such securities if all amounts payable thereon were paid in full. For the avoidance of any doubt, a Fundamental Transaction shall not be deemed a Liquidation unless the Corporation expressly declares that such Fundamental Transaction shall be treated as if it were a Liquidation.

#### 6. Conversion.

6.1. Automatic Conversion on Stockholder Approval. Effective as of 5:00 p.m. Eastern time on the third Business Day after the date that the Corporation’s stockholders approve the conversion of the Series A Non-Voting Convertible Preferred Stock into shares of Common Stock in accordance with the listing rules of the Nasdaq Stock Market, as set forth in Section 4.1 of the Securities Purchase Agreement (the “**Stockholder Approval**”), each share of Series A Non-Voting Convertible Preferred Stock then outstanding shall automatically convert into a number of shares of Common Stock equal to the Conversion Ratio (as defined below), subject to the Beneficial Ownership Limitation (the “**Automatic Conversion**”). The Corporation shall inform each Holder of the occurrence of the Stockholder Approval within one Business Day of such Stockholder Approval. In determining the application of the Beneficial Ownership Limitations solely with respect to the Automatic Conversion, the Corporation shall calculate beneficial ownership for each Holder assuming beneficial ownership by such Holder of: (x) the number of shares of Common Stock issuable to such Holder in such Automatic Conversion, plus (y) any additional shares of Common Stock for which a Holder has provided the Corporation with prior written notice of beneficial ownership within 30 days prior to the date of Stockholder Approval (a “**Beneficial Ownership Statement**”) and assuming the conversion of all shares of Series A Non-Voting Convertible Preferred Stock held by all other Holders less the aggregate number of shares of Series A Non-Voting Convertible Preferred Stock held by all other Holders that will not convert into shares of Common Stock on account of the application of any Beneficial Ownership Limitations applicable to any such other Holders. If a Holder fails to provide the Corporation with a Beneficial Ownership Statement within 30 days prior to the date of Stockholder Approval, then the Corporation shall presume the Holder’s beneficial ownership of Common Stock (excluding the Conversion Shares) to be zero. The shares of Series A Non-Voting Convertible Preferred Stock that are converted in the Automatic Conversion are referred to as the “**Converted Stock**”. The Conversion Shares shall be issued as follows:

6.1.1. Converted Stock that is registered in book entry form shall be automatically cancelled upon the Automatic Conversion and converted into the corresponding Conversion Shares, which shares shall be issued in book entry form and without any action on the part of the Holders and shall be delivered to the Holders within one Business Day of the effectiveness of the Automatic Conversion.

6.1.2. Converted Stock that is issued in certificated form shall be deemed converted into the corresponding Conversion Shares on the date of Automatic Conversion and the Holder's rights as a holder of such shares of Converted Stock shall cease and terminate on such date, excepting only the right to receive the Conversion Shares upon the Holder tendering to the Corporation (or its designated agent) the stock certificate(s) (duly endorsed) representing such certificated Converted Stock.

6.1.3. Notwithstanding the cancellation of the Converted Stock upon the Automatic Conversion, Holders of Converted Stock shall continue to have 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 the Converted Stock.

6.2. Conversion at Option of Holder. Subject to Section 6.1, Section 6.4 and Section 6.5.3, each share of Series A Non-Voting Convertible Preferred Stock then outstanding shall be convertible, at any time and from time to time following 5:00 p.m. Eastern time on the third Business Day after the date that the Stockholder Approval is obtained by the Corporation, at the option of the Holder thereof, into a number of shares of Common Stock equal to the Conversion Ratio, subject to the Beneficial Ownership Limitation (each, an "**Optional Conversion**"). Holders shall effect conversions by providing the Corporation with the form of conversion notice attached hereto as Annex A (a "**Notice of Conversion**"), duly completed and executed. 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 account of the Holder's prime broker with DTC through its Deposit Withdrawal Agent Commission system (a "**DWAC Delivery**"). The date on which an Optional Conversion shall be deemed effective (the "**Conversion Date**") shall be the Trading Day that the Notice of Conversion, completed and executed, is sent via email to, and received during regular business hours by, the Corporation; provided, that the original certificate(s) (if any) representing such shares of Series A Non-Voting Convertible Preferred Stock being converted, duly endorsed, and the accompanying Notice of Conversion, are received by the Corporation within two (2) Trading Days thereafter. In all other cases, the Conversion Date shall be defined as the Trading Day on which the original certificate(s) (if any) representing such shares of Series A Non-Voting Convertible Preferred Stock being converted, duly endorsed, and the accompanying Notice of Conversion, are received by the Corporation. The calculations set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error.

6.3. Conversion Ratio. The "**Conversion Ratio**" for each share of Series A Non-Voting Convertible Preferred Stock shall be forty (40) shares of Common Stock issuable upon the Conversion (the "**Conversion**") of each share of Series A Non-Voting Convertible Preferred Stock (Corresponding to a ratio of 40:1), subject to adjustment as provided herein.

6.4. Beneficial Ownership Limitation. Notwithstanding anything herein to the contrary, the corporation shall not effect any conversion of any share of Series A Non-Voting Convertible Preferred Stock, including pursuant to Section 6.1, and a Holder shall not have the right to convert any portion of the Series A Non-Voting Convertible Preferred Stock pursuant to Section 6.2, to the extent that, after giving effect to such attempted conversion set forth on an applicable Notice of Conversion (as defined in the Certificate of Designation) with respect to the Series A Non-Voting Convertible Preferred Stock, such Holder (or any of such Holder's Affiliates or any other Person who would be a beneficial owner of Common Stock beneficially owned by the Holder for purposes of Section 13(d) or Section 16 of the Exchange Act and the applicable rules and regulations of the SEC, including any "group" of which the Holder is a member (the foregoing, "**Attribution Parties**")) would beneficially own a number of shares of Common Stock in excess of the Beneficial Ownership Limitation. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by such Holder and its Attribution Parties shall include the number of shares of Common Stock issuable upon

conversion of the Series A Non-Voting Convertible Preferred Stock subject to the Notice of Conversion or the Automatic Conversion, as applicable, with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (A) conversion of the remaining, unconverted Series A Non-Voting Convertible Preferred Stock beneficially owned by such Holder or any of its Attribution Parties, and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation (including any warrants) beneficially owned by such Holder or any of its Attribution Parties that are subject to and would exceed a limitation on conversion or exercise similar to the limitation contained herein. Except as set forth in the preceding sentence, for purposes of this Section 6.4, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the applicable rules and regulations of the SEC, and the terms “beneficial ownership” and “beneficially own” have the meanings ascribed to such terms therein. In addition, for purposes hereof, “group” has the meaning set forth in Section 13(d) of the Exchange Act and the applicable rules and regulations of the SEC. For purposes of this Section 6.4, in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as stated in the most recent of the following: (A) the Corporation’s most recent periodic or annual filing with the SEC, as the case may be, (B) a more recent public announcement by the Corporation that is filed with the SEC, or (C) a more recent notice by the Corporation or the Corporation’s transfer agent to the Holder setting forth the number of shares of Common Stock then outstanding. Upon the written request of a Holder (which may be by email), the Corporation shall, within two (2) Trading Days thereof, confirm in writing to such Holder (which may be via email) the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to any actual conversion or exercise of securities of the Corporation, including shares of Series A Non-Voting Convertible Preferred Stock, by such Holder or its Attribution Parties since the date as of which such number of outstanding shares of Common Stock was last publicly reported or confirmed to the Holder. The “**Beneficial Ownership Limitation**” shall initially be set at the discretion of each Holder to a percentage designated by such Holder on its signature page to the Purchase Agreement between 0% and 19.9% of the number of shares of the Common Stock outstanding or deemed to be outstanding as of the applicable measurement date, and such percentage shall be set at 19.9% for any Holder that does not make such designation in the Purchase Agreement. The Corporation shall be entitled to rely on representations made to it by the Holder in any Notice of Conversion regarding its Beneficial Ownership Limitation. Notwithstanding the foregoing, by written notice to the Corporation, (i) the Holder may reset the Beneficial Ownership Limitation percentage to a higher percentage, not to exceed 19.9%, which increase will not be effective until the sixty-first (61st) day after such written notice is delivered to the Corporation, and (ii) the Holder may reset the Beneficial Ownership Limitation percentage to a lower percentage provided that such decrease shall not become effective until the later of (x) 5:00 p.m. Eastern time on the third Business Day after the date of the Stockholder Approval and (y) if Stockholder Approval is not obtained within six months after the initial issuance of the Series A Non-Voting Convertible Preferred Stock, the date that is three Business Days after the date that is six months after the initial issuance of the Series A Non-Voting Convertible Preferred Stock. Upon such a change by a Holder of the Beneficial Ownership Limitation, not to exceed 19.9%, the Beneficial Ownership Limitation may not be further amended by such Holder without first providing the minimum notice required by this Section 6.4. Notwithstanding the foregoing, at any time following notice of a Fundamental Transaction, the Holder may waive and/or change the Beneficial Ownership Limitation effective immediately upon written notice to the Corporation and may reinstitute a Beneficial Ownership Limitation at any time thereafter effective immediately upon written notice to the Corporation. The provisions of this Section 6.4 shall be construed, corrected and implemented in a manner so as to effectuate the intended Beneficial Ownership Limitation herein contained and the shares of Common Stock underlying the Securities in excess of the Beneficial Ownership Limitation shall not be deemed to be beneficially owned by the Holder for any purpose, including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the Exchange Act.

#### 6.5. Mechanics of Conversion.

6.5.1. Delivery of Certificate or Electronic Issuance. Upon Conversion not later than two (2) Trading Days after the applicable Conversion Date, or if the Holder requests the issuance of physical certificate(s), two (2) Trading Days after receipt by the Corporation of the original certificate(s) representing such shares of Series A Non-Voting Convertible Preferred Stock being converted, duly endorsed, and the accompanying Notice of

Conversion (the “*Share Delivery Date*”), the Corporation shall either: (a) deliver, or cause to be delivered, to the converting Holder a physical certificate or certificates representing the number of Conversion Shares being acquired upon the conversion of shares of Series A Non-Voting Convertible Preferred Stock, or (b) in the case of a DWAC Delivery (if so requested by the Holder), electronically transfer such Conversion Shares by crediting the account of the Holder’s prime broker with DTC through its DWAC system. If in the case of any Notice of Conversion such certificate or certificates for the Conversion Shares are not delivered to or as directed by or, 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 at any time on or before its receipt of such certificate or certificates for Conversion Shares or electronic receipt of such shares, as applicable, in which event the Corporation shall promptly return to such Holder any original Series A Non-Voting Convertible Preferred Stock certificate delivered to the Corporation and such Holder shall promptly return to the Corporation any Common Stock certificates or otherwise direct the return of any shares of Common Stock delivered to the Holder through the DWAC system, representing the shares of Series A Non-Voting Convertible Preferred Stock unsuccessfully tendered for conversion to the Corporation.

6.5.2. Obligation Absolute. Subject to Section 6.4 and subject to Holder’s right to rescind a Notice of Conversion pursuant to Section 6.5.1, the Corporation’s obligation to issue and deliver the Conversion Shares upon conversion of Series A Non-Voting Convertible 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. Subject to Section 6.4 and subject to Holder’s right to rescind a Notice of Conversion pursuant to Section 6.5.1, in the event a Holder shall elect to convert any or all of its Series A Non-Voting Convertible Preferred Stock, the Corporation may not refuse conversion based on any claim that such Holder or anyone associated or affiliated with such Holder has been engaged in any violation of law, agreement or for any other reason, unless an injunction from a court, on notice to Holder, restraining and/or enjoining conversion of all or part of the Series A Non-Voting Convertible Preferred Stock of such Holder shall have been sought and obtained by the Corporation, and the Corporation posts a surety bond for the benefit of such Holder in the amount of 150% of the value of the Conversion Shares into which would be converted the Series A Non-Voting Convertible Preferred Stock which is subject to such injunction, which bond shall remain in effect until the completion of arbitration/litigation of the underlying dispute and the proceeds of which shall be payable to such Holder to the extent it obtains judgment. In the absence of such injunction, the Corporation shall, subject to Section 6.4 and subject to Holder’s right to rescind a Notice of Conversion pursuant to Section 6.5.1, issue Conversion Shares upon a properly noticed conversion.

6.5.3. Cash Settlement. If, at any time after the earlier of Stockholder Approval or six months after the initial issuance of the Series A Non-Voting Convertible Preferred Stock, the Corporation fails to deliver to a Holder such certificate or certificates, or electronically deliver (or cause its transfer agent to electronically deliver) such shares in the case of a DWAC Delivery, pursuant to Section 6.5.1 on or prior to the third Trading Day after the Share Delivery Date applicable to such conversion (other than a failure caused by (i) materially incorrect or incomplete information provided by Holder to the Corporation or (ii) the application of the Beneficial Ownership Limitation after Stockholder Approval (but, prior to the Stockholder Approval, disregarding for such purpose any Beneficial Ownership Limitation)), then, unless the Holder has rescinded the applicable Notice of Conversion pursuant to Section 6.5.1, the Corporation shall, at the request of the Holder, pay an amount equal to the Fair Value (as defined below) of such undelivered shares, with such payment to be made within two (2) Business Days from the date of request by the Holder, whereupon the Corporation’s obligations to deliver such shares underlying the Notice of Conversion shall be extinguished upon payment in full of the Fair Value of such undelivered shares; provided, however that such request shall be presumed to have been made by such Holder if Stockholder Approval shall not have been obtained prior to the date on which the Notice of Conversion is delivered to the Corporation. For purposes of this Section 6.5.3, the “Fair Value” of shares shall be fixed with reference to the last reported Closing

Sale Price on the principal Trading Market on which the Common Stock is listed as of the Trading Day immediately prior to the date on which the Notice of Conversion is delivered to the Corporation. For the avoidance of doubt, the cash settlement provisions set forth in this Section 6.5.3 shall be available irrespective of the reason for the Corporation's failure to timely deliver Conversion Shares (other than a failure caused by (i) materially incorrect or incomplete information provided by Holder to the Corporation or (ii) the application of the Beneficial Ownership Limitation after Stockholder Approval (but, prior to the Stockholder Approval, disregarding for such purpose any Beneficial Ownership Limitation)), including due to limitations set forth in Section 6.5.6, the lack of obtaining Stockholder Approval, or due to applicable Trading Market rules.

6.5.4. Buy-In on Failure to Timely Deliver Certificates. If the Corporation fails to deliver to a Holder the applicable certificate or certificates or to effect a DWAC Delivery, as applicable, by the Share Delivery Date pursuant to Section 6.5.1 (other than a failure caused by materially incorrect or incomplete information provided by Holder to the Corporation or the application of the Beneficial Ownership Limitation), and if after such Share Delivery Date such Holder is required by its brokerage firm to purchase (in an open market transaction or otherwise), or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by 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 (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) or (B) at the option of such Holder, either reissue (if surrendered) the shares of Series A Non-Voting Convertible Preferred Stock equal to the number of shares of Series A Non-Voting Convertible 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 6.5.1. 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 A Non-Voting Convertible 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 certificates representing shares of Common Stock upon conversion of the shares of Series A Non-Voting Convertible Preferred Stock as required pursuant to the terms hereof or the cash settlement remedy set forth in Section 6.5.3; provided, however, that the Holder shall not be entitled to both (i) require the reissuance of the shares of Series A Non-Voting Convertible 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 6.5.1.

6.5.5. Reservation of Shares Issuable Upon Conversion. The Corporation covenants that at all times it will 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 A Non-Voting Convertible Preferred Stock, free from preemptive rights or any other actual contingent purchase rights of Persons other than the Holders of the Series A Non-Voting Convertible 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 A Non-Voting Convertible Preferred Stock. The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid and non-assessable.

6.5.6. Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Series A Non-Voting Convertible Preferred Stock, no certificates or scrip for any such fractional shares shall be issued and no cash shall be paid for any such fractional shares. Any fractional shares of Common Stock that a Holder of Series A Non-Voting Convertible Preferred Stock would otherwise be entitled to receive shall be aggregated with all fractional shares of Common Stock issuable to such Holder and any remaining fractional shares shall be rounded up to the nearest whole share. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Series A Non-Voting Convertible Preferred Stock the Holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

6.5.7. Transfer Taxes. The issuance of certificates for shares of the Common Stock upon conversion of the Series A Non-Voting Convertible Preferred Stock 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 certificates, 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 certificate upon conversion in a name other than that of the registered Holder(s) of such shares of Series A Non-Voting Convertible Preferred Stock and the Corporation shall not be required to issue or deliver such certificates 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.

6.6. Status as Stockholder. Upon each Conversion Date, (i) the shares of Series A Non-Voting Convertible 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 A Non-Voting Convertible Preferred Stock shall cease and terminate, excepting only the right to receive certificates 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 A Non-Voting Convertible Preferred Stock. In no event shall the Series A Non-Voting Convertible Preferred Stock convert into shares of Common Stock prior to the Stockholder Approval.

## 7. Certain Adjustments.

7.1. Stock Dividends and Stock Splits. If the Corporation, at any time while this Series A Non-Voting Convertible Preferred Stock is outstanding: (A) pays a stock dividend or otherwise makes a distribution or distributions payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Corporation upon conversion of this Series A Non-Voting Convertible Preferred Stock) with respect to the then outstanding shares of Common Stock; (B) subdivides outstanding shares of Common Stock into a larger number of shares; or (C) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares, then the Conversion Ratio 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 after such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately before such event (excluding any treasury shares of the Corporation). Any adjustment made pursuant to this Section 7.1 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.

7.2. Fundamental Transaction. If, at any time while this Series A Non-Voting Convertible Preferred Stock is outstanding, (A) the Corporation effects any merger or consolidation of the Corporation with or into another Person or any stock sale to, or other business combination (including, without limitation, a reorganization, recapitalization, spin-off, share exchange or scheme of arrangement) with or into another Person (other than such a transaction in which the Corporation is the surviving or continuing entity and its Common Stock is not exchanged for or converted into other securities, cash or property), (B) the Corporation effects any sale, lease, transfer or exclusive license of all or substantially all of its assets in one transaction or a series of related transactions, (C) any tender offer or exchange offer (whether by the Corporation or another Person) is completed pursuant to which more than 50% of the Common Stock not held by the Corporation or such Person is exchanged for or converted into other securities, cash or property, or (D) the Corporation effects any reclassification of the

Common Stock or any compulsory share exchange pursuant (other than as a result of a dividend, subdivision or combination covered by Section 7.1) to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (in any such case, a “**Fundamental Transaction**”), then, upon any subsequent conversion of this Series A Non-Voting Convertible Preferred Stock the Holders shall have the right to receive, in lieu of the right to receive Conversion Shares, for each Conversion Share that would have been issuable upon such conversion immediately prior to the occurrence of such Fundamental Transaction, the same kind and amount 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 one share of Common Stock (the “**Alternate Consideration**”). For purposes of any such subsequent conversion, the determination of the Conversion Ratio shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Corporation shall adjust the Conversion Ratio in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holders shall be given the same choice as to the Alternate Consideration it receives upon any conversion of this Series A Non-Voting Convertible Preferred Stock following such Fundamental Transaction. To the extent necessary to effectuate the foregoing provisions, any successor to the Corporation or surviving entity in such Fundamental Transaction shall file a new certificate of designations with the same terms and conditions and issue to the Holders new preferred stock consistent with the foregoing provisions and evidencing the Holders’ right to convert such preferred stock into Alternate Consideration. The terms of any agreement to which the Corporation is a party and 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 7.2 and insuring that this Series A Non-Voting Convertible Preferred Stock (or any such replacement security) will be similarly adjusted upon any subsequent transaction analogous to a Fundamental Transaction. The Corporation shall cause to be delivered to each Holder, at its last address as it shall appear upon the stock books of the Corporation, written notice of any Fundamental Transaction at least 20 calendar days prior to the date on which such Fundamental Transaction is expected to become effective or close.

7.3. 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.

8. Redemption. The shares of Series A Non-Voting Convertible Preferred Stock shall not be redeemable; provided, however, that the foregoing shall not limit the ability of the Corporation to purchase or otherwise deal in such shares to the extent otherwise permitted hereby and by law, nor shall the foregoing limit the Holder’s rights under Section 6.5.3.

9. Transfer. A Holder may transfer any shares of Series A Non-Voting Convertible Preferred Stock together with the accompanying rights set forth herein, held by such holder without the consent of the Corporation; provided that such transfer is in compliance with applicable securities laws. The Corporation shall in good faith (i) do and perform, or cause to be done and performed, all such further acts and things, and (ii) execute and deliver all such other agreements, certificates, instruments and documents, in each case, as any holder of Series A Non-Voting Convertible Preferred Stock may reasonably request in order to carry out the intent and accomplish the purposes of this Section 9. The transferee of any shares of Series A Non-Voting Convertible Preferred Stock shall be subject to the Beneficial Ownership Limitation applicable to the transferor as of the time of such transfer.

10. Series A Non-Voting Convertible Preferred Stock Register. The Corporation shall maintain at its principal executive offices (or such other office or agency of the Corporation as it may designate by notice to the Holders in accordance with Section 11), a register for the Series A Non-Voting Convertible Preferred Stock, in which the Corporation shall record (i) the name, address, and electronic mail address of each holder in whose name the shares of Series A Non-Voting Convertible Preferred Stock have been issued and (ii) the name, address, and electronic mail address of each transferee of any shares of Series A Non-Voting Convertible Preferred Stock. The Corporation may deem and treat the registered Holder of shares of Series A Non-Voting Convertible Preferred Stock as the absolute owner thereof for the purpose of any conversion thereof and for all other purposes. The Corporation shall keep the register open and available at all times during business hours for inspection by any holder of Series A Non-Voting Convertible Preferred Stock or his, her or its legal representatives.



11. Notices. Any notice required or permitted by the provisions of this Certificate of Designation to be given to a Holder of shares of Series A Non-Voting Convertible Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the Delaware General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

12. Book-Entry; Certificates. The Series A Non-Voting Convertible Preferred Stock will be issued in book-entry form; provided that, if a Holder requests that such Holder's shares of Series A Non-Voting Convertible Preferred Stock be issued in certificated form, the Corporation will instead issue a stock certificate to such Holder representing such Holder's shares of Series A Non-Voting Convertible Preferred Stock. To the extent that any shares of Series A Non-Voting Convertible Preferred Stock are issued in book-entry form, references herein to "certificates" shall instead refer to the book-entry notation relating to such shares.

13. 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 A Non-Voting Convertible Preferred Stock granted hereunder may be waived as to all shares of Series A Non-Voting Convertible Preferred Stock (and the Holders thereof) upon the written consent of the Holders of not less than a majority of the shares of Series A Non-Voting Convertible Preferred Stock then outstanding, provided, however, that the Beneficial Ownership Limitation applicable to a Holder, and any provisions contained herein that are related to such Beneficial Ownership Limitation, cannot be modified, waived or terminated without the consent of such Holder, provided further, that any proposed waiver that would, by its terms, have a disproportionate and materially adverse effect on any Holder shall require the consent of such Holder(s).

14. Severability. Whenever possible, each provision hereof shall be interpreted in a manner as to be effective and valid under applicable law, but if any provision hereof is held to be prohibited by or invalid under applicable law, then such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating or otherwise adversely affecting the remaining provisions hereof.

15. Status of Converted Series A Non-Voting Convertible Preferred Stock. If any shares of Series A Non-Voting Convertible Preferred Stock shall be converted or redeemed by the Corporation, such shares shall, to the fullest extent permitted by applicable law, be retired and cancelled upon such acquisition, and shall not be reissued as a share of Series A Non-Voting Convertible Preferred Stock. Any share of Series A Non-Voting Convertible Preferred Stock so acquired shall, upon its retirement and cancellation, and upon the taking of any action required by applicable law, resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series A Non-Voting Convertible Preferred Stock.

*[Remainder of Page Intentionally Left Blank]*

IN WITNESS WHEREOF, Biodesix, Inc. has caused this Certificate of Designation of Preferences, Rights and Limitations of Series A Non-Voting Convertible Preferred Stock to be duly executed by its Chief Financial Officer on April 8, 2024.

**BIODESIX, INC.**

By: /s/ Robin Harper Cowie

Name: Robin Harper Cowie

Title: Chief Financial Officer

ANNEX A

NOTICE OF CONVERSION

(TO BE EXECUTED BY THE REGISTERED HOLDER IN ORDER TO CONVERT SHARES OF SERIES A NON-VOTING CONVERTIBLE PREFERRED STOCK)

The undersigned Holder hereby irrevocably elects to convert the number of shares of Series A Non-Voting Convertible Preferred Stock indicated below, represented in book-entry form, into shares of common stock, par value \$0.001 per share (the "Common Stock"), of Biodesix, Inc., a Delaware corporation (the "Corporation"), as of the date written below. 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 A Non-Voting Convertible Preferred Stock (the "Certificate of Designation") filed by the Corporation with the Secretary of State of the State of Delaware on April 8, 2024.

As of the date hereof, the number of shares of Common Stock beneficially owned by the undersigned Holder (together with such Holder's Attribution Parties), including the number of shares of Common Stock issuable upon conversion of the Series A Non-Voting Convertible Preferred Stock subject to this Notice of Conversion, but excluding the number of shares of Common Stock which are issuable upon (A) conversion of the remaining, unconverted Series A Non-Voting Convertible Preferred Stock beneficially owned by such Holder or any of its Attribution Parties, and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation (including any warrants) beneficially owned by such Holder or any of its Attribution Parties that are subject to a limitation on conversion or exercise similar to the limitation contained in Section 6.4 of the Certificate of Designation, is \_\_\_\_\_. For purposes hereof, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the applicable regulations of the SEC. In addition, for purposes hereof, "group" has the meaning set forth in Section 13(d) of the Exchange Act and the applicable regulations of the SEC.

CONVERSION CALCULATIONS:

Date to Effect Conversion: \_\_\_\_\_

Number of shares of Series A Non-Voting Convertible Preferred Stock owned prior to Conversion: \_\_\_\_\_

Number of shares of Series A Non-Voting Convertible Preferred Stock to be Converted: \_\_\_\_\_

Number of shares of Common Stock to be Issued: \_\_\_\_\_

Address for delivery of physical certificates: \_\_\_\_\_

For DWAC Delivery, please provide the following: \_\_\_\_\_

Broker No.: \_\_\_\_\_

Account No.: \_\_\_\_\_

[HOLDER]

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

**SIDLEY**

SIDLEY AUSTIN LLP  
555 CALIFORNIA STREET  
SUITE 2000  
SAN FRANCISCO, CA 94104  
+1 415 772 1200  
+1 415 772 7400 FAX  
AMERICA • ASIA PACIFIC • EUROPE

April 9, 2024

Biodesix, Inc.  
919 W. Dillon Road  
Louisville, CO 80027

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We refer to the Registration Statement on Form S-3, File No. 333-261095 (the "Registration Statement"), filed by Biodesix, Inc., a Delaware corporation (the "Company"), with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"), which Registration Statement became effective upon filing pursuant to Rule 462(e) under the Securities Act. Pursuant to the Registration Statement, the Company is issuing 17,391,832 shares (the "Shares") of its Common Stock, \$0.001 par value per share. The Shares are to be sold by the Company pursuant to an underwriting agreement dated April 5, 2024 (the "Underwriting Agreement") among the Company and the Underwriter named therein.

This opinion letter is being delivered in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act.

We have examined the Registration Statement, the Underwriting Agreement, the Company's certificate of incorporation and the resolutions adopted by the board of directors of the Company and the pricing committee thereof established by such board relating to the Registration Statement and the issuance of the Shares by the Company. We have also examined originals, or copies of originals certified to our satisfaction, of such agreements, documents, certificates and statements of the Company and other corporate documents and instruments, and have examined such questions of law, as we have considered relevant and necessary as a basis for this opinion letter. We have assumed the authenticity of all documents submitted to us as originals, the genuineness of all signatures, the legal capacity of all persons and the conformity with the original documents of any copies thereof submitted to us for examination. As to facts relevant to the opinions expressed herein, we have relied without independent investigation or verification upon, and assumed the accuracy and completeness of, certificates, letters and oral and written statements and representations of public officials and officers and other representatives of the Company.

Based on and subject to the foregoing and the other limitations, qualifications and assumptions set forth herein, we are of the opinion that the issuance and sale of the Shares covered by the Registration Statement pursuant to the Underwriting Agreement have been duly authorized by the Company, and such Shares will be validly issued, fully paid and non-assessable when certificates representing such Shares shall have been duly executed, countersigned and registered and duly delivered to the purchasers thereof against payment of the agreed consideration therefor in accordance with the Underwriting Agreement.

This opinion letter is limited to the General Corporation Law of the State of Delaware. We express no opinion as to the laws, rules or regulations of any other jurisdiction, including, without limitation, the federal laws of the United States of America or any state securities or blue sky laws.

We hereby consent to the filing of this opinion letter as an Exhibit to the Registration Statement and to all references to our Firm included in or made a part of the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act.

Very truly yours,

/s/ Sidley Austin LLP

**SECURITIES PURCHASE AGREEMENT**

**BY AND AMONG**

**BIODESIX, INC.,**

**AND**

**THE PURCHASERS**

**AS SET FORTH HEREIN**

**APRIL 5, 2024**

## TABLE OF CONTENTS

1.	Definitions	2
2.	Purchase and Sale of Securities	5
2.1	Purchase and Sale	5
2.2	Closing	5
3.	Representations and Warranties of the Company	5
3.1	Organization and Power; No Subsidiaries	5
3.2	Capitalization	6
3.3	Registration Rights	6
3.4	Authorization	6
3.5	Valid Issuance	6
3.6	Consents	7
3.7	SEC Filings; Financial Statements	7
3.8	Absence of Changes	8
3.9	Absence of Litigation	8
3.10	Compliance with Law; Permits	8
3.11	Intellectual Property	8
3.12	Taxes	9
3.13	Environmental Laws	9
3.14	Title	10
3.15	Insurance	10
3.16	Nasdaq Stock Market	10
3.17	Regulatory Compliance	10
3.18	Compliance with Health Care Laws	10
3.19	Accounting Controls and Disclosure Controls and Procedures	11
3.20	Price Stabilization of Common Stock	12
3.21	Investment Company Act	12
3.22	General Solicitation; No Integration or Aggregation	12
3.23	Brokers and Finders	12
3.24	Reliance by the Purchasers	12
3.25	Anti-Bribery and Anti-Money Laundering Laws	12
3.26	Compliance with Data Privacy Laws	13
3.27	Transactions with Affiliates and Employees	13
3.28	Use of Proceeds	13
3.29	Disclosure	13
3.30	Off-Balance Sheet Arrangements	13
3.31	No Additional Agreements	13
3.32	Disclosure of Transactions	14
4.	Representations and Warranties of Each Purchaser	14
4.1	Organization	14
4.2	Authorization	14
4.3	No Conflicts	14
4.4	Residency	15

4.5	Brokers and Finders	15
4.6	Investment Representations and Warranties	15
4.7	Intent	15
4.8	Investment Experience; Ability to Protect Its Own Interests and Bear Economic Risks	16
4.9	Independent Investment Decision	16
4.10	Securities Not Registered; Legends	16
4.11	Placement Agents	18
4.12	No General Solicitation	18
4.13	Access to Information	19
4.14	Certain Trading Activities	19
4.15	No Governmental Review	19
4.16	Regulation M	19
5.	Covenants	20
5.1	Further Assurances	20
5.2	Listing	20
5.3	Disclosure of Transactions	20
5.4	Integration	20
5.5	Subsequent Equity Sales	21
5.6	Use of Proceeds	21
5.7	Removal of Legends	21
5.8	Withholding Taxes	22
5.9	Fees and Taxes	22
5.10	No Conflicting Agreements	22
5.11	Reporting Status	22
5.12	Beneficial Ownership Limitation	22
5.13	Requisite Stockholder Approval	24
5.14	Conversion and Exercise Procedures	24
5.15	Short Sales After the Date Hereof	24
5.16	Equal Treatment of Purchasers	25
6.	Conditions of Closing	25
6.1	Conditions to the Obligation of the Purchasers	25
6.2	Conditions to the Obligation of the Company	27
7.	Termination	27
7.1	Termination	27
7.2	Notice	28
8.	Miscellaneous Provisions	28
8.1	Public Statements or Releases	28
8.2	Notices	29
8.3	Severability	29
8.4	Governing Law; Submission to Jurisdiction; Venue; Waiver of Trial by Jury	30
8.5	Waiver	30
8.6	Expenses	31



8.7	Assignment	31
8.8	Confidential Information	31
8.9	Reliance by and Exculpation of Placement Agents	32
8.10	Third Parties	33
8.11	Independent Nature of Purchasers' Obligations and Right	33
8.12	Counterparts	33
8.13	Entire Agreement; Amendments	33
8.14	Survival	34
8.15	Mutual Drafting	34
8.16	Additional Matters	34
8.17	Further Assurances	34

Exhibits

Exhibit A	Purchasers	A-1
Exhibit B	Form of Registration Rights Agreement	B-1
Exhibit C	Certificate of Designations	C-1

This **SECURITIES PURCHASE AGREEMENT** (this “**Agreement**”) is dated as of April 5, 2024, by and among Biodesix, Inc., a Delaware corporation (the “**Company**”), and the entities listed on Exhibit A attached to this Agreement (each, a “**Purchaser**” and together, the “**Purchasers**”).

**WHEREAS**, the Company and the Purchasers are executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the Securities Act of 1933, as amended (the “**Securities Act**”);

**WHEREAS**, the Company desires to sell to the Purchasers, and each Purchaser desires to purchase from the Company, severally and not jointly, upon the terms and subject to the conditions stated in this Agreement, shares (the “**Securities**”) of Series A Non-Voting Convertible Preferred Stock, par value \$0.001 per share (and including any other class of securities into which the Series A Preferred Stock may hereafter be reclassified or changed into, the “**Series A 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, in the form attached hereto as Exhibit C (the “**Certificate of Designations**”), which will be convertible into shares (the “**Conversion Shares**”) of the Company’s common stock, par value \$0.001 per share (“**Common Stock**”), in accordance with the terms set forth in the Certificate of Designations;

**WHEREAS**, pursuant to the terms and conditions of the Certificate of Designations, the conversion of the Series A Preferred Stock shall be subject to receipt of the Requisite Stockholder Approval (as defined herein);

**WHEREAS**, certain other “qualified institutional buyers” (as defined in Rule 144A under the Securities Act) or “accredited investors” (within the meaning of Rule 501(a) under the Securities Act) (the “**Other Purchasers**”) have, severally and not jointly, entered into a separate securities purchase agreement with the Company, dated as of the date hereof (the “**Other Securities Purchase Agreement**”), pursuant to which such Other Purchasers have agreed to purchase Securities from the Company at the Per Share Price;

**WHEREAS**, the Company has engaged Cowen and Company, LLC, William Blair & Company, L.L.C., Canaccord Genuity LLC and Lake Street Capital Markets LLC as its exclusive placement agents (the “**Placement Agents**”) for the offering of the Securities on a “best efforts” basis; 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 B, pursuant to which the Company will agree to, among other things, provide certain registration rights with respect to the Conversion Shares 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 Purchaser, severally and not jointly, agree as follows:

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

**“2024 SEC Reports”** shall mean (a) the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2023 and (b) any Quarterly Reports on Form 10-Q or any Current Reports on Form 8-K filed or furnished (as applicable) by the Company after December 31, 2023, together in each case with any documents incorporated by reference therein or exhibits thereto.

**“Affiliate”** shall mean, 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 hereof.

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

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

**“Anti-Money Laundering Laws”** has the meaning set forth in Section 3.25 hereof.

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

**“CLIA”** has the meaning set forth in Section 3.18 hereof.

**“Closing”** has the meaning set forth in Section 2.2 hereof.

**“Closing Date”** shall mean April 9, 2024.

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

**“Common Stock Equivalents”** means any securities of the Company which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, 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 hereof.

**“Contract”** means, with respect to any Person, any written or oral agreement, contract, subcontract, lease (whether for real or personal property), mortgage, license, or other legally binding commitment or undertaking of any nature to which such Person is a party or by which

such Person or any of its assets are bound or affected under applicable law.

**“Data”** has the meaning set forth in Section 3.26 hereof.

**“Data Security Obligations”** has the meaning set forth in Section 3.26 hereof.

“**Disclosure Document**” has the meaning set forth in Section 5.3 hereof.

“**Environmental Laws**” has the meaning set forth in Section 3.12 hereof.

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

“**Effective Date**” means the date on which the initial Registration Statement required by Section 2(a) of the Registration Rights Agreement is first declared effective by the Commission.

“**FDA**” has the meaning set forth in Section 3.18 hereof.

“**Financial Statements**” has the meaning set forth in Section 3.7(b) hereof.

“**GAAP**” has the meaning set forth in Section 3.7(b) hereof.

“**Governmental Authorizations**” has the meaning set forth in Section 0 hereof.

“**Health Care Laws**” has the meaning set forth in Section 3.18 hereof.

“**HIPAA**” has the meaning set forth in Section 3.18 hereof.

“**Intellectual Property Rights**” has the meaning set forth in Section 3.11 hereof.

“**Material Adverse Effect**” shall mean any change, event, circumstance, development, condition, occurrence or effect that, individually or in the aggregate, has had, or would reasonably be expected to have, a material adverse effect on the business, properties, condition (financial or otherwise), management, assets, liabilities, stockholders’ equity or results of operations of the Company or the ability of the Company to perform, its obligations under this Agreement and the other Transaction Agreements (including, without limitation, the issuance and sale of the Securities and the issuance of the Conversion Shares).

“**Material Contract**” means any Contract to which the Company is a party or by which the Company is bound that is material to the business of the Company, including those that have been filed as an exhibit to the SEC Reports pursuant to Item 601(b)(10) of Regulation S-K.

“**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.

“**Per Share Price**” means \$46.00 per share of Series A Preferred Stock.

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

“**Placement Agents**” has the meaning set forth in the recitals hereof; provided that, for the avoidance of doubt “Placement Agents” shall include Cowen and Company, LLC’s affiliate TD Securities (USA) LLC.

“**Purchaser**” and “**Purchasers**” have the meanings set forth in the recitals hereof.

“**Purchaser Adverse Effect**” has the meaning set forth in Section 4.3 hereof.

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

“**Regulatory Authorities**” has the meaning set forth in Section 3.18 hereof.

“**Requisite Stockholder Approval**” has the meaning set forth in Section 5.13 hereof.

“**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 United States Securities and Exchange Commission.

“**SEC Reports**” has the meaning set forth in Section 3.7(a) hereof.

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

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

“**Short Sales**” include, without limitation, (i) 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 (ii) 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).

“**Trading Day**” means a day on which the Nasdaq Global Select Market is open for business.

“**Transaction Agreements**” shall mean this Agreement, the schedules and exhibits attached hereto, the Registration Rights Agreement, the Certificate of Designations and any other documents or agreements explicitly contemplated hereunder.

“**Transfer Agent**” shall mean, with respect to the Common Stock, Computershare Trust Company, N.A., or such other financial institution that provides transfer agent services as the Company may engage from time to time.

## 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 Purchasers, severally and not jointly, agree to purchase, up to an aggregate of \$29.2 million of Securities, with a purchase price per share of Series A Preferred Stock equal to the Per Share Price. Subject to and upon the terms and conditions set forth in this Agreement, at the Closing, the Company shall issue and sell to each Purchaser, and each Purchaser, severally and not jointly, shall purchase from the Company, that number of Securities equal to (x) the dollar amount set forth opposite such Purchaser's name on Exhibit A under the heading "Aggregate Purchase Price" divided by (y) the Per Share Price, rounded down to the nearest whole share.

2.2 Closing. Subject to the satisfaction or waiver of the conditions set forth in Section 5.8 of this Agreement, the closing of the purchase and sale of the Securities (the "**Closing**") shall occur remotely via the exchange of documents and signatures on the Closing Date to be agreed to by the Company and the Purchasers but (i) in no event earlier than the second Trading Day after the date hereof and (ii) in no event later than the fifth Trading Day after the date hereof, or at such other time, date and location as the Company and the Purchasers may mutually agree in writing. At the Closing, the Securities shall be issued and registered in the name of each Purchaser, or in such nominee name(s) as designated by such Purchaser, representing the number of Securities to be purchased by such Purchaser at such Closing as set forth in Exhibit A, in each case against payment to the Company of the purchase price therefor 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 Purchasers prior to the Closing, to an account to be designated by the Company (which shall not be an escrow account). On the Closing Date, the Company will issue the Securities in book-entry form, free and clear of all restrictive and other legends (except as expressly provided in Section 4.10 hereof) and shall provide evidence of such issuance from the Company's Transfer Agent as of the Closing Date to each Purchaser. The failure of the Closing to occur on the Closing Date shall not terminate this Agreement or otherwise relieve any party of any of its obligations hereunder. In the event the Closing does not occur within five Trading Days after the Closing Date, unless otherwise agreed by the Company and the Purchasers, the Company shall promptly return any previously wired funds to the Purchasers by wire transfer of United States dollars in immediately available funds to the account specified by each Purchaser, and any book entries for the Securities in respect of such returned funds shall be deemed cancelled.

3. Representations and Warranties of the Company. The Company hereby represents and warrants to each of the Purchasers and the Placement Agents that the statements contained in this Section 3 are true and correct as of the date hereof and 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; No Subsidiaries. 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 as proposed to be conducted as described in the SEC Reports and to perform its obligations under all Material Contracts. The Company 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 so qualify would not reasonably be expected to have a Material Adverse Effect. The Company has no subsidiaries.

3.2 Capitalization. As of the date of this Agreement, the authorized share capital of the Company consists of 200,000,000 shares of Common Stock and 5,000,000 shares of preferred stock, \$0.001 par value per share. As of the date of this Agreement, there are 97,159,448 shares of Common Stock outstanding and no shares of preferred stock outstanding. The shares of Common Stock outstanding have been duly authorized and are validly issued, fully paid and non-assessable. The issuance and sale of the Securities (including, subject to the Company obtaining the Requisite Stockholder Approval, the issuance of Conversion Shares upon conversion of the Securities) will not obligate the Company to issue shares of Common Stock or other securities to any Person (other than the Purchasers) and will not result in a right of any holder of Company securities to adjust the exercise, conversion, exchange or reset price under any of such securities.

3.3 Registration Rights. Except as set forth in the Transaction Agreements or as disclosed in the 2024 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 that have not 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. All corporate action on the part of the Company, its officers, directors and stockholders necessary for the authorization of the Securities, the authorization, execution, delivery and performance of the Transaction Agreements and the consummation of the transactions contemplated herein and therein has been taken. This Agreement has been duly authorized, executed and delivered by the Company and assuming the due authorization, execution and delivery by each Purchaser and that this Agreement constitutes the legal, valid and binding agreement of each Purchaser, this Agreement 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 the legal, valid and binding agreement 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 Securities being purchased by the Purchasers hereunder, upon issuance pursuant to the terms hereof, against full payment therefor in accordance with the terms hereof, 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). The issuance of the Conversion Shares has been duly authorized and the Conversion Shares, subject to receipt of the Requisite Stockholder Approval, when issued in accordance with the terms of the Certificate of Designations, will be duly authorized, 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). The Company has reserved such number of shares of Common Stock sufficient to enable full conversion of all of the Securities to the extent allowable prior to receipt of the Requisite Stockholder Approval and, upon receipt of the Requisite Stockholder Approval, the Company shall have reserved such number of shares of Common Stock sufficient to enable the full conversion of all of the Securities. Subject to the accuracy of the representations and warranties made by the Purchasers in Section 4 hereof, the offer and sale of the Securities to the Purchasers is and will be, and the issuance of the Conversion Shares will be, in compliance with applicable exemptions from (i) the registration and prospectus delivery requirements of the Securities Act and (ii) the registration and qualification requirements of applicable securities laws of the states of the United States.

3.6 Consents. (i) The execution and delivery by the Company of, and the performance by the Company of its obligations under, the Transaction Agreements will not contravene (i) any provision of applicable law, (ii) or the Amended and Restated Certificate of Incorporation or the Amended and Restated Bylaws, (iii) or any Material Contract or other material instrument binding upon the Company, or (iv) any judgment, order or decree of any governmental body, agency or court having jurisdiction over the Company, except in the case of clauses (i), (iii) and (iv), where such contravention would not reasonably be expected to have a Material Adverse Effect, and no consent, approval, authorization or order of, or qualification with, any governmental body, agency or court is required for the performance by the Company of its obligations under the Transaction Agreements, except such as have been obtained or waived or as may be required by the securities or Blue Sky laws of the various states in connection with the offer and sale of the Securities. The Company is unaware of any facts or circumstances that might prevent the Company from obtaining or effecting any of the consents, approvals, authorizations or orders, or qualifications pursuant to this Section 3.6.

### 3.7 SEC Filings; Financial Statements.

(a) The Company has timely filed or furnished, as applicable, all forms, statements, certifications, reports and documents required to be filed or furnished by it with the SEC under the Exchange Act or the Securities Act for the one year preceding the date hereof (the “**SEC Reports**”). As of the time it was filed with, or furnished to, 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 SEC Reports complied in all material respects with the applicable requirements of the Securities Act or the Exchange Act (as the case may be) and, as of the time they were filed or furnished, none of the 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 in comment letters received from the SEC staff with respect to the SEC Reports. None of the SEC Reports is the subject of an ongoing SEC review.

(b) As of their respective filing dates, the financial statements of the Company included in the SEC Reports, together with the related schedules and notes thereto (collectively, the “**Financial Statements**”), complied as to form in all material respects with the applicable requirements of the Securities Act and the Exchange Act, as applicable, and presented



fairly, in all material respects, the consolidated financial position of the Company as of the dates shown and its results of operations and cash flows for the periods shown, and such Financial Statements have been prepared in conformity with generally accepted accounting principles in the United States (“GAAP”) applied on a consistent basis throughout the periods covered thereby except for any normal year-end adjustments in the Company’s quarterly financial statements. Except as set forth in the consolidated financial statements of the Company included in the 2024 SEC Reports filed at least one (1) Trading Day prior to the date hereof, the Company has not incurred any liabilities, contingent or otherwise, except those incurred in the ordinary course of business, consistent (as to amount and nature) with past practices since the date of such Financial Statements, none of which have had a Material Adverse Effect. The books of account and other financial records of the Company are true and complete in all material respects.

3.8 Absence of Changes. Except as otherwise stated or disclosed in the 2024 SEC Reports filed at least one Trading Day prior to the date hereof, between December 31, 2023 and the date of this Agreement, (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 (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 is bound or to which any of its assets or properties is subject has been entered into that has not been disclosed in the 2024 SEC Reports; and (c) there has not been any other event or condition of any character that has had a Material Adverse Effect.

3.9 Absence of Litigation. There are no legal or governmental proceedings pending or, to the Company’s knowledge, threatened to which the Company is a party or to which any of the properties of the Company is subject that have had a Material Adverse Effect.

3.10 Compliance with Law; Permits. The Company possesses all certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct its business, and the Company has not received any written notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a Material Adverse Effect.

3.11 Intellectual Property. The Company solely and exclusively owns or has a valid and enforceable license or right to use all patents, inventions, copyrights, know how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, service marks, trade names and all other intellectual property and similar proprietary rights (including all registrations and applications for registration of, and all goodwill associated with, any of the foregoing, as applicable) (collectively, “**Intellectual Property Rights**”) used in or reasonably necessary to conduct its business; (ii) the Intellectual Property Rights owned by the Company and, to the Company’s knowledge, the Intellectual Property Rights licensed to the Company, are valid, subsisting and enforceable, and there is no material pending or, to the Company’s knowledge, threatened action, suit, proceeding or claim by others challenging the validity, scope or enforceability of any such Intellectual Property Rights; (iii) the Company has not received any written notice alleging any material infringement, misappropriation or other violation of Intellectual Property Rights; (iv) to the Company’s knowledge, no third party is infringing, misappropriating or otherwise violating, or

has infringed, misappropriated or otherwise violated, any Intellectual Property Rights owned or licensed by the Company; (v) the Company does not infringe, misappropriate or otherwise violate, nor has infringed, misappropriated or otherwise violated, any Intellectual Property Rights; (vi) all employees or contractors engaged in the development of Intellectual Property Rights on behalf of the Company have executed an invention assignment agreement whereby such employees or contractors presently assign all of their right, title and interest in and to such Intellectual Property Rights to the Company, and to the Company's knowledge no such agreement has been breached or violated; and (vii) the Company uses, and has used, commercially reasonable efforts to appropriately maintain all information intended to be maintained as a trade secret.

3.12 Taxes. The Company has filed all federal, state, local and foreign tax returns required to be filed through the date of this Agreement or have requested extensions thereof (except where the failure to file would not, singly or in the aggregate, reasonably be expected to have a Material Adverse Effect) and have paid all taxes required to be paid thereon (except for cases in which the failure to file or pay would not, singly or in the aggregate, reasonably be expected to have a Material Adverse Effect, or, except as currently being contested in good faith and for which reserves required by GAAP have been created in the financial statements of the Company), and no tax deficiency has been determined adversely to the Company which, singly or in the aggregate, has had (nor does the Company have any notice or knowledge of any tax deficiency which could reasonably be expected to be determined adversely to the Company and which could reasonably be expected to have) a Material Adverse Effect.

3.13 Environmental Laws. The Company (w) is, and has been, in compliance with any and all applicable foreign, federal, state and local laws, rules, orders, consents and regulations relating to the protection of health and human safety, the environment, natural resources, and hazardous or toxic substances, wastes, chemicals, pollutants or contaminants ("**Environmental Laws**"), (x) has received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct its business, (y) is in compliance with all terms and conditions of any such permit, license or approval and (z) has not received notices of, and has no knowledge of any event or condition that would reasonably be expected to result in, any actual or potential liability or violation, and is not subject to any pending or to the Company's knowledge, threatened action, suit, proceeding, investigation or claim, arising under or relating to any Environmental Law, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals, failure to comply with the terms and conditions of such permits, licenses or approvals, or notice, action, suit, proceeding, investigation or claim would not, singularly or in the aggregate, reasonably be expected to have a Material Adverse Effect, (ii) there are no costs (including anticipated capital expenditures), obligations or liabilities associated with or arising under Environmental Laws of or relating to the Company and (iii) except as described in the Transaction Agreements, (y) there are no proceedings pending, or to the Company's knowledge, contemplated, against the Company under Environmental Laws in which a government authority is also a party, other than such proceedings which it is reasonably believed no monetary sanctions of \$300,000 or more will be imposed and (z) the Company is not aware of any facts or issues regarding compliance with Environmental Laws that could reasonably be expected to have a material effect on the capital expenditures, earnings or competitive position of the Company.

3.14 Title. The Company has good and marketable title to all real property and good and marketable title to all personal property owned by them which is material to the business of the Company, free and clear of all liens, encumbrances and defects except such as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company; and any real property and buildings held under lease by the Company is held under valid, subsisting and enforceable leases with such exceptions as are not material and would not reasonably be expected to materially interfere with the use made and proposed to be made of such property and buildings by the Company.

3.15 Insurance. The Company is insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as in the Company's reasonable judgment are prudent and customary in the businesses in which they are engaged; the Company has not been refused any insurance coverage sought or applied for; and the Company does not have any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not reasonably be expected to have a Material Adverse Effect.

3.16 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 Global Select Market under the symbol "BDSX". The Company is in compliance with all applicable listing requirements of The Nasdaq Stock Market LLC ("Nasdaq") applicable to the Company. As of the date hereof, 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, respectively, to prohibit or terminate the listing of the Common Stock on the Nasdaq Global Select Market or to deregister the Common Stock under the Exchange Act. The Company has taken no action as of the date hereof that is designed to terminate the registration of the Common Stock under the Exchange Act.

3.17 Regulatory Compliance(i). (i) The studies, tests and preclinical and clinical trials conducted by or, to the Company's knowledge, on behalf of or sponsored by the Company or in which the Company has participated, were, and if still pending are being conducted in all material respects in accordance with standard medical and experimental protocols, procedures and controls pursuant to accepted professional scientific research standards and procedures, and all applicable Health Care Laws, the rules and regulations of the Regulatory Authorities and, to the extent required, current Good Clinical Practices and Good Laboratory Practices and (ii) the Company has not received any written notices or correspondence from any Regulatory Authority or any other governmental entity requiring the termination, material modification or suspension of any studies or trials that could result in a Material Adverse Effect.

3.18 Compliance with Health Care Laws. The Company has operated at all times and is currently in compliance in all material respects with all applicable statutes, rules and regulations of the U.S. Food and Drug Administration (the "FDA") and applicable foreign regulatory authorities, including the European Medicines Agency and the UK Medicines & Healthcare products Regulatory Agency (collectively, the "Regulatory Authorities"), including, without limitation: (i) the Federal Food, Drug, and Cosmetic Act and the regulations promulgated thereunder; (ii) applicable federal, state, local and foreign health care laws, including the U.S.

Anti-Kickback Statute (42 U.S.C. Section 1320a-7b(b)), the Civil Monetary Penalties Law (42 U.S.C. § 1320a-7a), the U.S. Civil False Claims Act (31 U.S.C. Section 3729 et seq.), all applicable federal, state, local and all foreign criminal laws relating to health care fraud and abuse, including but not limited to false statements relating to health care matters (42 U.S.C. Section 1320a-7b(a)), 18 U.S.C. Sections 286 and 287, and the health care fraud criminal provisions under the U.S. Health Insurance Portability and Accountability Act of 1996 (“HIPAA”) (42 U.S.C. Section 1320d et seq.), the exclusion laws, the statutes, regulations and directives of applicable government funded or sponsored healthcare programs, and the regulations promulgated pursuant to such statutes; (iii) the Standards for Privacy of Individually Identifiable Health Information, the Security Standards, and the Standards for Electronic Transactions and Code Sets promulgated under HIPAA, the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. Section 17921 et seq.), and the regulations promulgated thereunder and any state or non-U.S. counterpart thereof or any other law or regulation the purpose of which is to protect the privacy of individuals or prescribers; (iv) the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, the regulations promulgated thereunder; (v) the U.S. Controlled Substances Act (21 U.S.C. Section 801 et seq.); (vi) the Clinical Laboratories Improvement Act of 1967, as amended (“CLIA”); (vii) licensure, quality, safety and accreditation requirements under applicable federal, state, local or foreign laws or regulatory bodies; and (viii) all other local, state, federal, national, supranational and foreign laws, relating to the regulation of the Company and the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product under development, manufactured or distributed by the Company; (clauses (i) through (viii), collectively, “**Health Care Laws**”).

3.19 Accounting Controls and Disclosure Controls and Procedures. The Company is in compliance in all material respects with the applicable provisions of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated thereunder. The Company maintains a system of internal accounting controls designed to provide reasonable assurance that (a) transactions are executed in accordance with management’s general or specific authorizations; (b) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability; (c) access to assets is permitted only in accordance with management’s general or specific authorization and (d) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Since the end of the Company’s most recent audited fiscal year, there has been (i) no material weakness in the Company’s internal control over financial reporting (whether or not remediated) and (ii) no change in the Company’s internal control over financial reporting that has materially and adversely affected, or is reasonably likely to materially and adversely affect, the Company’s internal control over financial reporting. The Company maintains an effective system of “disclosure controls and procedures” (as defined in Rule 13a-15(e) of the Exchange Act) that complies with the applicable requirements of the Exchange Act and that has been designed to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission’s rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to the Company’s management as appropriate to allow timely decisions regarding required disclosure. The Company has carried out evaluations of the effectiveness of its disclosure controls and procedures as required by Rule 13a-15 of the Exchange Act.

3.20 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 Securities.

3.21 Investment Company Act. The Company is not, and immediately after receipt of payment for the Securities will not be, required to register as an “investment company” as such term is defined in the Investment Company Act of 1940, as amended.

3.22 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) with respect to offers or sales of the 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 Securities sold 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 the Nasdaq Global Market. Assuming the accuracy of the representations and warranties of the Purchaser set forth in Section 4, neither the Company nor any of its Affiliates, 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) for the exemption from registration for the transactions contemplated hereby.

3.23 Brokers and Finders. Other than the Placement Agents, 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. The Purchasers shall have no obligation with respect to any fees or with respect to any claims made for fees of a type contemplated in this Section 3.23 that may be due in connection with the transactions contemplated by the Transaction Documents.

3.24 Reliance by the Purchasers. The Company acknowledges that each of the Purchasers 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.

3.25 Anti-Bribery and Anti-Money Laundering Laws. The operations of the Company are and have been conducted at all times in material compliance with all applicable financial recordkeeping and reporting requirements, including those of the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act), and the applicable anti-money laundering statutes of jurisdictions where the Company conducts business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the “**Anti-Money Laundering Laws**”), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company with respect to the Anti-Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

3.26 Compliance with Data Privacy Laws. (i) The Company has complied in all material respects and is presently in compliance with all internal and external privacy policies, contractual obligations, industry standards, applicable laws, statutes, judgments, orders, rules and regulations of any court or arbitrator or other governmental or regulatory authority and any other legal obligations, in each case, relating to the collection, use, transfer, import, export, storage, protection, disposal and disclosure by the Company of personally identifiable or other regulated data (“**Data Security Obligations**”, and such data, “**Data**”); (ii) the Company has not received any written notification of or complaint regarding material non-compliance with any Data Security Obligation; and (iii) there is no action, suit, investigation or proceeding by or before any court or governmental agency, authority or body pending or, to the Company’s knowledge, threatened alleging non-compliance with any Data Security Obligation.

3.27 Transactions with Affiliates and Employees. No relationship, direct or indirect, exists between or among the Company, on the one hand, and the directors, officers, stockholders, customers or suppliers of the Company, on the other hand, that is required to be described in the SEC Reports that is not so described.

3.28 Use of Proceeds. The net proceeds of the sale of the Securities hereunder shall be used by the Company for advancement of the Company’s commercial expansion of sales, supporting the Company’s product pipeline, research and development and for general corporate purposes.

3.29 Disclosure. The Company confirms that it has not provided, and to the Company’s knowledge, none of its officers or directors nor any other Person acting on its or their behalf (including, without limitation, the Placement Agents) has provided, and it has not authorized the Placement Agents to provide, any Purchaser or its respective agents or counsel with any information that it believes constitutes material, nonpublic information except insofar as the existence, provisions and terms of the Transaction Agreement and the proposed transactions hereunder and thereunder may constitute such information, all of which will be disclosed by the Company as contemplated by Section 5.3 hereof. The Company understands and confirms that the Purchasers will rely on the foregoing representations in effecting transactions in securities of the Company.

3.30 Off-Balance Sheet Arrangements. There is no transaction, arrangement, or other relationship between the Company and an unconsolidated or other off-balance sheet entity that is required to be disclosed by the Company in SEC Reports and is not so disclosed.

3.31 No Additional Agreements. The Company does not have and will not enter into any agreement or understanding (including side letters) with any Purchaser with respect to the transactions contemplated by the Transaction Agreements other than as specified in the Transaction Agreements. The Other Securities Purchase Agreement does not provide, and will not be amended (including via any side letter or similar arrangement) to provide, any terms or conditions (including, without limitation, with respect to the purchase price for the Securities to be issued and sold thereunder) that are more favorable to the Other Purchasers than the terms and conditions of this Agreement and the other Transaction Agreements are to the Purchasers.

3.32 Disclosure of Transactions. Upon the filing of the earlier of any press release disclosing all material terms of the transactions contemplated hereby (the “Press Release”) or the Disclosure Document (as defined below), no Purchaser that is not an officer or a director of the Company shall be in possession of any material, non-public information received from the Company or any of the Company’s officers, directors, employees or agents, that is not disclosed in the Press Release or the Disclosure Document.

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

4.1 Organization. Such Purchaser 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 enter into this Agreement and perform its obligations hereunder.

4.2 Authorization. Such Purchaser 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 Purchaser 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 other transactions contemplated herein has been taken. The signature of the Purchaser on this Agreement is genuine and the signatory to this Agreement, if the Purchaser is an individual, has the legal competence and capacity to execute the same or, if the Purchaser is not an individual, the signatory has been duly authorized to execute the same on behalf of the Purchaser. Assuming this Agreement constitutes the legal, valid and binding agreement of the Company, this Agreement constitutes a legal, valid and binding obligation of such Purchaser, enforceable against such Purchaser 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 such Purchaser, the purchase of the Securities in accordance with their terms and the consummation by such Purchaser of the other transactions contemplated hereby will not conflict with or result in any violation of, breach or default by such Purchaser (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 such Purchaser, 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 Purchaser 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 such Purchaser to perform its obligations under the Transaction Agreements (such delay or hindrance, a “**Purchaser Adverse Effect**”).

4.4 Residency. Such Purchaser'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 such Purchaser's name on Exhibit A.

4.5 Brokers and Finders. Such Purchaser 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. Such Purchaser hereby represents and warrants that, it (i) as of the date hereof is, if an entity, is 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. Such Purchaser further represents and warrants that (x) it is a sophisticated institutional investor, experienced in investing in private equity transactions and capable of evaluating investment risks independently, both in general and with regard to all transactions and investment strategies involving a security or securities, including the Purchaser's investment with respect to the Securities, 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). Such Purchaser 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 such Purchaser's representations as expressed herein.

4.7 Intent. Such Purchaser is purchasing the Securities (and the Conversion Shares) solely for investment purposes, for such Purchaser'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 Purchaser 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 Purchaser's right at all times to sell or otherwise dispose of all or any part of such Securities (or Conversion Shares) in compliance with applicable federal and state securities laws. Notwithstanding the foregoing, if such Purchaser is purchasing the Securities (and Conversion Shares) as a fiduciary or agent for one or more investor accounts, such Purchaser 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. Such Purchaser understands that the Securities (and Conversion Shares) must be held indefinitely unless such Securities (or Conversion Shares) 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 or agreement by such Purchaser that it will hold the Securities (or Conversion Shares) for any period of time. Such Purchaser is acquiring the Securities hereunder in the ordinary course of its business.



Such Purchaser does not presently have any agreement, plan or understanding, directly or indirectly, with any Person to distribute or effect any distribution of any of the Securities (or any securities which are derivatives thereof) to or through any person or entity in violation of federal securities law; such Purchaser is not a registered broker-dealer under Section 15 of the Exchange Act or an entity engaged in a business that would require it to be so registered as a broker-dealer.

4.8 Investment Experience; Ability to Protect Its Own Interests and Bear Economic Risks. Such Purchaser 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 such Purchaser has had an opportunity to seek, and has sought, such accounting, legal, business and tax advice as such Purchaser has considered necessary to make an informed investment decision.

Such Purchaser acknowledges that such Purchaser (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. Such Purchaser acknowledges that such Purchaser 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), such Purchaser has adequately analyzed and fully considered the risks of an investment in the Securities and determined that the Securities are a suitable investment for such Purchaser. Such Purchaser is, at this time and in the foreseeable future, able to afford the loss of such Purchaser's entire investment in the Securities and such Purchaser acknowledges specifically that a possibility of total loss exists.

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

4.10 Securities Not Registered; Legends. Such Purchaser 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 such Purchaser 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 such Purchaser 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. Such Purchaser 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 such Purchaser'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. Such Purchaser 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. Such Purchaser 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.

Such Purchaser understands that the Securities and Conversion Shares may bear one or more legends in substantially the following form and substance:

“THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER SECURITIES ACT OF 1933. THE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND MAY NOT BE SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THESE SECURITIES UNDER THE SECURITIES ACT OF 1933 OR AN AVAILABLE REGISTRATION EXEMPTION. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.”

In addition, the Securities and Conversion Shares may contain a legend regarding affiliate status of the Purchaser, if applicable.

The Company acknowledges and agrees that a Purchaser may from time to time pledge, and/or grant a security interest in, some or all of the legended Securities or Conversion Shares in connection with applicable securities laws, pursuant to a bona fide margin agreement in compliance with a bona fide margin loan. Such a pledge would not be subject to approval or consent of the Company and no legal opinion of legal counsel to the pledgee, secured party or pledgor shall be required in connection with the pledge, but such legal opinion shall be required in connection with a subsequent transfer or foreclosure following default by the Purchaser transferee of the pledge. No notice shall be required of such pledge, but Purchaser's transferee shall promptly notify the Company of any such subsequent transfer or foreclosure. Each Purchaser acknowledges that the Company shall not be responsible for any pledges relating to, or the grant of any security interest in, any of the Securities or Conversion Shares or for any agreement, understanding or arrangement between any Purchaser and its pledgee or secured party. At the appropriate Purchaser's expense, the Company will execute and deliver such reasonable documentation as a pledgee or secured party of Securities or Conversion Shares may reasonably request in connection with a pledge or transfer of the Securities or Conversion Shares, as applicable, including the preparation and filing of any required prospectus supplement under Rule 424(b)(3) of the Securities Act or other applicable provision of the Securities Act to appropriately amend the list of selling stockholders thereunder. Each Purchaser acknowledges and agrees that, except as otherwise provided in Section 5.7, any Securities or Conversion Shares subject to a pledge or security interest as contemplated by this Section 4.10 shall continue to bear the legend set forth in this Section 4.10 and be subject to the restrictions on transfer set forth in this Section 4.10.

**4.11 Placement Agents.** Such Purchaser hereby acknowledges and agrees that (a) each Placement Agent is acting solely as placement agent in connection with the execution, delivery and performance of the Transaction Agreements and the issuance of the Securities to Purchaser and neither the Placement Agents nor any of their respective affiliates have acted as an underwriter or in any other capacity and is not and shall not be construed as a fiduciary or financial advisor for such Purchaser, the Company or any other person or entity in connection with the execution, delivery and performance of the Transaction Agreements and the issuance and purchase of the Securities, (b) each Placement Agent has not made and does not make any representation or warranty, whether express or implied, of any kind or character, or has not provided any advice or recommendation in connection with the execution, delivery and performance of the Transaction Agreements or with respect to the Securities, nor is such information or advice necessary or desired, (c) each Placement Agent will not have any responsibility with respect to (i) any representations, warranties or agreements made by any person or entity under or in connection with the execution, delivery and performance of the Transaction Agreements, or the execution, legality, validity or enforceability (with respect to any person) thereof, or (ii) the business, affairs, financial condition, operations, properties or prospects of, or any other matter concerning the Company, and (d) each Placement Agent will not have any liability or obligation (including without limitation, for or with respect to any losses, claims, damages, obligations, penalties, judgments, awards, liabilities, costs, expenses or disbursements incurred by such Purchaser, the Company or any other person or entity), whether in contract, tort or otherwise, to such Purchaser, or to any person claiming through it, in respect of the execution, delivery and performance of the Transaction Agreements, except in each case for such party's own gross negligence, willful misconduct or bad faith. No disclosure or offering document has been prepared by the Placement Agents or any of their respective affiliates in connection with the offer and sale of the Securities. Neither the Placement Agents nor any of their respective affiliates have made or make any representation as to the quality or value of the Securities and the Placement Agents and any of their respective affiliates may have acquired non-public information with respect to the Company which Purchaser agrees need not be provided to it.

**4.12 No General Solicitation.** Such Purchaser acknowledges and agrees that the Purchaser is purchasing the Securities directly from the Company. Such Purchaser became aware of this offering of the Securities solely by means of direct contact from the Placement Agents or directly from the Company as a result of a pre-existing, substantive relationship with the Company or the Placement Agents, 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 such Purchaser solely by direct contact between Purchaser and the Company, the Placement Agents and/or their respective representatives. Purchaser did not become aware of this offering of the Securities, nor were the Securities offered to Purchaser, by any other means, and none of the Company, the Placement Agents and/or their respective representatives acted as investment advisor, broker or dealer to such Purchaser. Such Purchaser 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.

4.13 Access to Information. In making its decision to purchase the Securities, such Purchaser has relied solely upon independent investigation made by such Purchaser and upon the representations, warranties and covenants set forth herein and upon the statements contained in the SEC Reports. Such Purchaser acknowledges and agrees that such Purchaser has received such information as such Purchaser deems necessary in order to make an investment decision with respect to the Securities. Without limiting the generality of the foregoing, such Purchaser acknowledges that copies of the 2024 SEC Reports filed prior to the date hereof are available on EDGAR at [www.sec.gov](http://www.sec.gov). Such Purchaser acknowledges and agrees that such Purchaser and its 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 such Purchaser and its professional advisor(s), if any, have deemed necessary to make an investment decision with respect to the Securities and that such Purchaser has independently made its own analysis and decision to invest in the Company.

4.14 Certain Trading Activities. Other than consummating the transaction contemplated hereby, the Purchaser has not, nor has any Person acting on behalf of or pursuant to any understanding with such Purchaser, 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 such Purchaser was first contacted by the Company or any other Person regarding the transaction contemplated hereby and ending immediately prior to the date hereof. Notwithstanding the foregoing, in the case of a Purchaser that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser'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. Other than to other Persons party to this Agreement (and such Purchaser's legal counsel and other professional advisors), such Purchaser 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.

4.15 No Governmental Review. Such Purchaser understands that no United States federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Securities or the fairness or suitability of the investment in the Securities nor have such authorities passed upon or endorsed the merits of the offering of the Securities.

4.16 Regulation M. Such Purchaser is aware that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of Securities and other activities with respect to the Securities by the Purchasers.

## 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 hereof 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 hereof. Each Purchaser acknowledges that the Company and the Placement Agents will rely on the acknowledgments, understandings, agreements, representations and warranties contained in this Agreement. Prior to the Closing, the Purchaser 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. The Company shall use commercially reasonable efforts to maintain the listing and trading of its Common Stock on the Nasdaq Global Select Market 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.

5.3 Disclosure of Transactions. The Company shall, by 5:30 p.m., New York City time, on or prior to the fourth (4th) business day immediately following the date hereof, file with the SEC a Current Report on Form 8-K (the "**Disclosure Document**") disclosing all material terms of the transactions contemplated hereby, by the other Transaction Agreements (and including as exhibits to such Current Report on Form 8-K the material Transaction Agreements (including, without limitation, this Agreement and the Registration Rights Agreement)). The Company represents and warrants that upon the issuance of the Disclosure Document, no Purchaser that is not an officer or a director of the Company shall be in possession of any material, non-public information received from the Company or from any of the Company's officers, directors, employees or agents, that is not disclosed in the Disclosure Document. Notwithstanding anything in this Agreement to the contrary, the Company shall not publicly disclose the name of any Purchaser or any of its affiliates or advisers, or include the name of any Purchaser or any of its affiliates or advisers 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 such Purchaser, 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 (including signature pages thereto) 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 the Nasdaq Global Market. The Company shall, not later than 9:00 a.m., New York City time, on the Trading Day immediately following the date hereof, release the Press Release.

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 Purchasers, 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 Subsequent Equity Sales. From the date hereof until 30 days after the effective date of the Initial Registration Statement (as defined in the Registration Rights Agreement), without the consent of the Purchasers of at least a majority in interest of the Securities then held by Purchasers, the Company shall not (a) issue shares of Common Stock or Common Stock Equivalents, or (b) file with the SEC a registration statement under the Securities Act relating to any shares of Common Stock or Common Stock Equivalents. Notwithstanding the foregoing, the provisions of this Section 5.5 shall not apply to (i) the issuance of the Securities hereunder, (ii) the transactions contemplated by the Registration Rights Agreement, (iii) the issuance of Common Stock upon the exercise of any options or warrants or upon the vesting of any restricted stock units outstanding on the date hereof, (iv) the issuance of Common Stock or Common Stock Equivalents to employees, directors or consultants pursuant to (a) any stock option or equity incentive or employee stock purchase plan in effect on the date hereof, or (b) any compensation agreements, (v) the issuance of Common Stock in connection with acquisitions or strategic transactions, provided that any such issuance shall only be to a Person which is an operating company in a business synergistic with the business of the Company, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities, provided that the aggregate number of shares of Common Stock issued in accordance with clause (v) of this Section 5.5 do not exceed 10% of the number of shares of Common Stock outstanding immediately after the issuance and sale of the Shares, (vi) the filing of a registration statement on Form S-8, and (vii) facilitating the establishment of a trading plan on behalf of a stockholder, officer or director of the Company pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock.

5.6 Use of Proceeds. The Company shall use the proceeds from the sale of the Securities for commercial expansion of sales, supporting the Company's product pipeline, research and development and for general corporate purposes.

#### 5.7 Removal of Legends.

(a) Once a Registration Statement covering the resale of the Conversion Shares is declared effective, the Company shall instruct the Transfer Agent to remove all restrictive legends, including the legend set forth in Section 4.10 above (or, in the event that Conversion Shares are issued upon conversion after the Registration Statement is declared effective, the Conversion Shares shall be issued without restrictive legends). Further, the Company shall instruct the Transfer Agent to remove all restrictive legends, including the legend set forth in Section 4.10 above, (i) following any sale of such Securities or Conversion Shares pursuant to Rule 144 or any other applicable exemption from the registration requirements of the Securities Act, or (ii) if such Conversion Shares are eligible for resale under Rule 144(b)(1) or any successor provision (or, in the event that Conversion Shares are issued upon conversion after the conditions set forth in clauses (i) and (ii) above, the Conversion Shares shall be issued without restrictive legends). Without limiting the foregoing, upon request of the Purchaser, upon receipt by the Company of an opinion of counsel reasonably satisfactory to the Company to the effect that such legend is no

longer required under the Securities Act and applicable state securities laws, the Company shall, within three Trading Days, cause the legend to be removed from any certificate (or electronic book-entry notation) for any Securities or Conversion Shares in accordance with the terms of this Agreement and deliver, or cause to be delivered, to any Purchaser new certificate(s) (or electronic book-entry statements) representing the Securities or Conversion Shares that are free from all restrictive and other legends or, at the request of such Purchaser, via DWAC transfer to such Purchaser's account.

(b) In addition to such Purchaser's other available remedies, if the Company shall not cause the legend to be removed within three Trading Days (the "**Legend Removal Date**"), the Company shall pay to a Purchaser, in cash, as partial liquidated damages and not as a penalty, for each \$1,000 of Series A Non-Voting Convertible Preferred Stock subject to such conversion (based on the volume-weighted average price of the Common Stock on the date of the applicable Notice of Conversion (as defined in the Certificate of Designations)), \$10 per Trading Day for each Trading Day after the Legend Removal Date until the Conversion Shares are delivered without a legend.

5.8 Withholding Taxes. Each Purchaser agrees to furnish the Company with such 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). Each Purchaser represents that it has provided the Company with a completed and executed Internal Revenue Service Form W-9 or applicable Form W-8, as appropriate, and agrees to promptly furnish the Company with such forms upon any expiration, obsolescence or inaccuracy of any prior forms or upon request of the Company.

5.9 Fees and Taxes. The Company shall be responsible for the payment of the Placement Agents' fees, any financial advisory fees, or broker's commissions relating to or arising out of the transactions contemplated hereby, including, without limitation, any fees or commissions payable to placement agents as the Company may engage in connection with the transactions contemplated by the Transaction Agreements.

5.10 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 Purchasers under the Transaction Agreements.

5.11 Reporting Status. The Company shall timely file all reports required to be filed with the SEC pursuant to the Exchange Act, and the Company shall not terminate its status as an issuer required to file reports under the Exchange Act even if the Exchange Act or the rules and regulations thereunder would otherwise permit such termination.

5.12 Beneficial Ownership Limitation. Notwithstanding anything to the contrary set forth in the Certificate of Designations, the Company shall not effect any conversion of any share of Series A Preferred Stock, and a Purchaser shall not have the right to convert any portion of its Series A Preferred Stock, to the extent that, after giving effect to such attempted conversion set forth on an applicable Notice of Conversion with respect to the Series A Preferred Stock, such Purchaser (or any of such Purchaser's Affiliates or any other Person who would be a beneficial owner of Common Stock beneficially owned by the Purchaser for purposes of Section 13(d) or

Section 16 of the Exchange Act and the applicable rules and regulations of the Commission, including any “group” of which the Purchaser is a member (the foregoing, “Attribution Parties”)) would beneficially own a number of shares of Common Stock in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by such Purchaser and its Attribution Parties shall include the number of shares of Common Stock issuable upon conversion of the Series A Preferred Stock subject to the Notice of Conversion or the Automatic Conversion, as applicable, with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (i) conversion of the remaining, unconverted Series A Preferred Stock beneficially owned by such Purchaser or any of its Attribution Parties, and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company beneficially owned by such Purchaser or any of its Attribution Parties that are subject to and would exceed a limitation on conversion or exercise similar to the limitation contained herein. Except as set forth in the preceding sentence, for purposes of this Section 5.12, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the applicable rules and regulations of the Commission, and the terms “beneficial ownership” and “beneficially own” have the meanings ascribed to such terms therein. In addition, for purposes hereof, “group” has the meaning set forth in Section 13(d) of the Exchange Act and the applicable rules and regulations of the Commission. For purposes of this Section 5.12, in determining the number of outstanding shares of Common Stock, a Purchaser may rely on the number of outstanding shares of Common Stock as stated in the most recent of the following: (i) the Company’s most recent periodic or annual filing with the Commission, as the case may be, (ii) a more recent public announcement by the Company that is filed with the Commission, or (iii) a more recent notice by the Company or the Company’s transfer agent to the Purchaser setting forth the number of shares of Common Stock then outstanding. For any reason at any time, upon the written request of a Purchaser (which may be by e-mail), the Company shall, within two (2) Trading Days of such request, confirm in writing to such Purchaser (which may be by e-mail) the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to any actual conversion or exercise of securities of the Company, including Series A Preferred Stock, by such Purchaser or its Attribution Parties since the date as of which such number of outstanding shares of Common Stock was last publicly reported or confirmed to the Purchaser. The “Beneficial Ownership Limitation” shall initially be set at the discretion of each Purchaser to a percentage between 0% and 19.9% of the number of shares of the Common Stock outstanding or deemed to be outstanding as of the applicable measurement date, and such percentage shall be set at 19.9% for any Holder that does not make such designation on the signature page hereto. The Company shall be entitled to rely on representations made to it by any Purchaser in any Notice of Conversion regarding its Beneficial Ownership Limitation. Notwithstanding the foregoing, by written notice to the Company, (i) any Purchaser may reset the Beneficial Ownership Limitation percentage to a higher percentage, not to exceed 19.9%, which increase will not be effective until the sixty-first (61st) day after such written notice is delivered to the Company, and (ii) any Purchaser may reset the Beneficial Ownership Limitation percentage to a lower percentage provided that such decrease shall not become effective until the later of (x) 5:00 p.m. Eastern time on the third Trading Day after the date of the Requisite Stockholder Approval and (y) if the Requisite Stockholder Approval is not obtained within six months after the initial issuance of the Series A Preferred Stock, the date that is three Trading Days after the date that is six months after the initial issuance of the Series A



Preferred Stock. Upon such a change by a Purchaser of the Beneficial Ownership Limitation, not to exceed 19.9%, the Beneficial Ownership Limitation may not be further amended by such Purchaser without first providing the minimum notice required by this Section 5.12. Notwithstanding the foregoing, at any time following notice of a Fundamental Transaction, the Purchaser may waive and/or change the Beneficial Ownership Limitation effective immediately upon written notice to the Company and may reinstitute a Beneficial Ownership Limitation at any time thereafter effective immediately upon written notice to the Company. The provisions of this Section 5.12 shall be construed, corrected and implemented in a manner so as to effectuate the intended Beneficial Ownership Limitation herein contained and the shares of Common Stock underlying the Securities in excess of the Beneficial Ownership Limitation shall not be deemed to be beneficially owned by the Purchaser for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the Exchange Act. Capitalized terms used in this Section 5.12 without definition shall have the meanings ascribed to them in the Certificate of Designations.

5.13 Requisite Stockholder Approval. The Company shall hold a meeting of the stockholders on May 21, 2024 (the “**Annual Meeting**”), for the purpose of obtaining stockholder approval of the conversion of all issued and outstanding Series A Preferred Stock into shares of Common Stock in accordance with the Nasdaq Stock Market Rules (the “**Requisite Stockholder Approval**”). The Company shall use its best efforts to solicit its stockholders’ approval of such resolution and to cause the Board of Directors to recommend to the stockholders that they approve such resolution. If the Requisite Stockholder Approval is not obtained at the Annual Meeting, the Company shall cause an additional meeting of stockholders to be held within 60 days from the date of the Annual Meeting (the “**Extended Stockholder Approval Period**”). If the Requisite Stockholder Approval is not obtained within the Extended Stockholder Approval Period, then the Company shall convene additional stockholder meetings every 60 days thereafter until the Requisite Stockholder Approval is obtained.

5.14 Conversion and Exercise Procedures. The form of Notice of Conversion included in the Certificate of Designations sets forth the totality of the procedures required of the Purchasers in order to convert the Securities. Without limiting the preceding sentence, no ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required in order for the registered holder thereof to convert the Securities. No additional legal opinion, other information or instructions shall be required of a Purchaser to convert its Securities. The Company shall honor conversions of the Securities and shall deliver Conversion Shares in accordance with the terms, conditions and time periods set forth in the Transaction Agreements.

5.15 Short Sales After the Date Hereof. Such Purchaser shall not engage, directly or indirectly, in any transactions in the Company’s securities (including, without limitation, any Short Sales involving the Company’s securities) during the period from the date hereof until the earlier of such time as (i) the transactions contemplated by this Agreement are first publicly announced as required by and described in Section 5.3 or (ii) this Agreement is terminated in full pursuant to Section 7.

Notwithstanding the foregoing, no Purchaser makes any representation, warranty or covenant hereby that it will not engage in Short Sales in the securities of the Company after the time that the transactions contemplated by this Agreement are first publicly announced as described in Section 5.3; *provided, however*, each Purchaser agrees, severally and not jointly with any Purchasers, that they will not enter into any Net Short Sales (as hereinafter defined) from the period commencing on the Closing Date and ending on the earliest of (x) the Effective Date, (y) the twenty-four (24) month anniversary of the Closing Date or (z) the date that such Purchaser no longer holds any Securities. For purposes of this Section 5.15, a “Net Short Sale” by any Purchaser shall mean a sale of Common Stock by such Purchaser that is marked by such Purchaser as a short sale and that is made at a time when there is no equivalent offsetting long position in Common Stock held by such Purchaser. Notwithstanding the foregoing, in the event that a Purchaser is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser’s assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser’s assets, the representation set forth above shall apply only with respect to the portion of assets managed by the portfolio manager that have knowledge about the financing transaction contemplated by this Agreement. Moreover, notwithstanding the foregoing, in the event that a Purchaser has sold Securities pursuant to Rule 144 prior to the Effective Date and the Company has failed to deliver certificates without legends prior to the settlement date for such sale (assuming that such certificates meet the requirements set forth in Section 5.7 for the removal of legends), the provisions of this Section 5.15 shall not prohibit the Purchaser from entering into Net Short Sales for the purpose of delivering shares of Common Stock in settlement of such sale. Each Purchaser understands and acknowledges, severally and not jointly with any other Purchaser, that the Commission currently takes the position that covering a short position established prior to effectiveness of a resale registration statement with shares included in such registration statement would be a violation of Item 239.10 of the Securities Act Sections Compliance and Disclosure Interpretations issued by the Commission’s Division of Corporation Finance.

5.16 Equal Treatment of Purchasers. No consideration shall be offered or paid to any Purchaser to amend or consent to a waiver or modification of any provision of this Agreement unless the same consideration is also offered to all of the Purchasers. For clarification purposes, this provision constitutes a separate right granted to each Purchaser by the Company and negotiated separately by each Purchaser and shall not in any way be construed as the Purchasers acting in concert or as a group with respect to the purchase, disposition or voting of shares of Common Stock or otherwise.

## 6. Conditions of Closing.

6.1 Conditions to the Obligation of the Purchasers. The several obligations of each Purchaser 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 the waiver by such Purchaser 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 hereof 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.

(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 Purchaser 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 Securities at the Closing.

(f) Adverse Changes. Since the date hereof, no event or series of events shall have occurred that has had a Material Adverse Effect.

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

(h) Compliance Certificate. An authorized officer of the Company shall have delivered to the Purchasers 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) and 6.1(k) (Listing Requirements) of this Agreement have been fulfilled.

(i) Secretary's Certificate. The Secretary of the Company shall have delivered to the Purchasers at the Closing Date a certificate certifying (i) the Amended and Restated Certificate of Incorporation; (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.

(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 Purchasers.

(k) 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.

(l) 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 entity, shall have been issued, and no action or proceeding shall have been instituted by any governmental entity, enjoining or preventing the consummation of the transactions contemplated hereby or in the other Transaction Agreements.

(m) A lock-up agreement from the Company's officers and directors in a form previously agreed to with TD Securities (USA) LLC, William Blair & Company, L.L.C. and Canaccord Genuity LLC.

(n) This Agreement shall not have been terminated as to such Purchaser in accordance with Section 7 hereof.

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 Purchaser 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 Purchaser 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 Purchaser of each of the representations, warranties, covenants and agreements of the Purchaser contained in this Agreement as of the Closing Date.

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

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

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

(e) 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 Purchaser 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 Purchaser, on the other hand, to effect the Closing shall terminate as follows:

(i) Upon the mutual written consent of the Company and the Purchaser 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 the Purchaser if any of the conditions set forth in Section 6.1 shall have become incapable of fulfillment, and shall not have been waived by the Purchaser; or

(iv) By either the Company or the Purchaser if the Closing has not occurred on or prior to the fifth Trading Day following the date of this Agreement;

provided, however, that, except in the case of clauses (ii), (iii) and (iv) 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 Purchaser of its obligations to effect the Closing pursuant to Section 7.1, written notice thereof shall be given to the other party. 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 Purchaser shall make any public announcement with respect to the existence or terms of this Agreement or the transactions provided for herein without the prior approval of the other parties 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 Purchaser reasonable time to comment on such release or announcement in advance of such issuance. The Company shall not include the name of the Purchaser in any press release or public announcement (which, for the avoidance of doubt, shall not include any filing with the SEC) without the prior written consent of the Purchaser, 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 Purchaser, to the extent reasonably practicable in the circumstances, reasonable time to comment on such release or announcement in advance of such issuance. Interpretation. The words "hereof," "herein" and "hereunder" and words of similar import when used in this Agreement will refer to this Agreement as a whole and not to any particular provision of this Agreement, and section and subsection references are to this Agreement unless otherwise specified. The headings in this Agreement are included for convenience of reference only and will not limit or otherwise affect the meaning or interpretation of this

Agreement. Whenever the words “include,” “includes” or “including” are used in this Agreement, they will be deemed to be followed by the words “without limitation.” The phrases “the date of this Agreement,” “the date hereof” and terms of similar import, unless the context otherwise requires, will be deemed to refer to the date set forth in the first paragraph of this Agreement. The meanings given to terms defined herein will be equally applicable to both the singular and plural forms of such terms. All matters to be agreed to by any party hereto must be agreed to in writing by such party unless otherwise indicated herein. References to agreements, policies, standards, guidelines or instruments, or to statutes or regulations, are to such agreements, policies, standards, guidelines or instruments, or statutes or regulations, as amended or supplemented from time to time (or to successors thereto).

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:

Biodesix, Inc.  
919 West Dillon Rd.  
Louisville, CO 80027  
Attention: Robin Harper Cowie  
Email: robin.cowie@biodesix.com

with a copy (which shall not constitute notice):

Sidley Austin LLP  
555 California Street, Suite 2000  
San Francisco, CA 94104  
Attention: Frank F. Rahmani; Samir A. Gandhi  
Email: frahmani@sidley.com; sgandhi@sidley.com

(b) If to any Purchaser, at its address set forth on Exhibit A or to such e-mail address, or 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 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.

8.4 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 Purchasers 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 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.

8.5 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.

8.6 Expenses. Except as expressly set forth in the Transaction Agreements 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 Purchasers. The Company shall pay all Placement Agent fees relating to or arising out of the transactions contemplated by this Agreement.

8.7 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 a Purchaser, and (y) the Purchasers, in the case of the Company, provided that a Purchaser 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 Purchaser (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 hereof). 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.

#### 8.8 Confidential Information.

(a) Each Purchaser covenants that until such time as the transactions contemplated by this Agreement and any material non-public information provided to such Purchaser are publicly disclosed by the Company (which the Company shall effect in accordance with Section 5.3 hereof), such Purchaser 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 Purchaser's outside attorney, accountant, auditor or investment advisor 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 Purchasers such additional information as the Company may deem necessary to evaluate the eligibility of the Purchaser to acquire the Securities, and the Purchaser 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 Purchaser 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 Purchaser 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.



## 8.9 Reliance by and Exculpation of Placement Agents.

(a) Each Purchaser agrees for the express benefit of each Placement Agent, its affiliates and its representatives that (i) such 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, and such Purchaser will not rely on any statements made by such Placement Agent, orally or in writing, to the contrary, (ii) such Purchaser will be responsible for conducting its own due diligence investigation with respect to the Company and the offer and sale of the Securities, (iii) such Purchaser will be purchasing Securities based on the results of its own due diligence investigation of the Company and such 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 Purchaser by the Company, (iv) such Purchaser has negotiated the offer and sale of the Securities directly with the Company, and such Placement Agent will not be responsible for the ultimate success of any such investment and (v) the decision to invest in the Company will involve a significant degree of risk, including a risk of total loss of such investment. Each Purchaser further represents and warrants to each 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 8.9 shall survive any termination of this Agreement.

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

(c) Neither the Placement Agents nor any of their respective 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, 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, willful misconduct or bad faith.

(d) The Company agrees that the Placement Agents, their respective 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 a Placement Agent hereunder pursuant to the indemnification provisions set forth in the applicable letter agreement between the Company and each Placement Agent.

8.10 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, the Placement Agents are an intended third-party beneficiary of the representations and warranties of the Company and of each Purchaser set forth in Section 3, Section 4 and Section 6.1(h) and Section 8.9 respectively, of this Agreement.

8.11 Independent Nature of Purchasers' Obligations and Right. The obligations of each Purchaser under this Agreement are several and not joint with the obligations of any other Purchaser, and no Purchaser shall be responsible in any way for the performance obligations of any other Purchaser under this Agreement. Nothing contained herein, and no action taken by any Purchaser pursuant hereto, shall be deemed to constitute the Purchasers as, and the Company acknowledges that the Purchasers do not so constitute, a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Purchasers 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 Purchaser confirms that it has independently participated in the negotiation of the transaction contemplated hereby with the advice of its own counsel and advisors. Each Purchaser also acknowledges that Sidley Austin LLP has rendered legal advice to the Company and not such Purchaser. Each Purchaser 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 Purchaser to be joined as an additional party in any proceeding for such purpose. The Company has elected to provide all Purchasers 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 Purchaser.

8.12 Counterparts. This Agreement may be signed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument.

8.13 Entire Agreement; Amendments. This Agreement and the other Transaction Agreements constitute the entire agreement between the parties hereto respecting the subject matter hereof and supersedes all prior agreements, negotiations, understandings, representations and statements respecting the subject matter hereof, whether written or oral. No 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 Purchasers of at least a majority in interest of the Series A Preferred Stock then held by the Purchasers. 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 Purchaser without the written consent of such Purchaser unless such amendment or waiver applies to all Purchasers in the same fashion and provided that the consent of each Purchaser is required for the waiver of any of the conditions set forth in Sections 6.1(f) or 6.1(k). The Company, on the one hand, and each Purchaser, on the other hand, may by an instrument signed in writing by such parties waive the performance, compliance or satisfaction by such Purchaser or the Company, respectively, with any term or provision hereof or any condition hereto to be performed, complied with or satisfied by such Purchaser or the Company, respectively.

8.14 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 Purchaser shall be responsible only for its own representations, warranties, agreements and covenants hereunder.

8.15 Mutual Drafting. This Agreement is the joint product of each Purchaser 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.

8.16 Additional Matters. 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.

8.17 Further Assurances. The parties shall execute and deliver all such further instruments and documents and take all such other actions as may reasonably be required to carry out the transactions contemplated hereby and to evidence the fulfillment of the agreements herein contained

*[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:**

BIODESIX, INC.

By: /s/ Robin Harper Cowie

\_\_\_\_\_  
Name: Robin Harper Cowie

Title: Chief Financial Officer

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

**PURCHASER:**

**AIGH Investment Partners LP**

By: /s/ Orin Hirschman  
Name: Orin Hirschman  
Title: Managing Member, AIGH Capital Management  
LLC

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

**PURCHASER: BEMAP Master Fund Ltd**

**c/o Monashee Investment Management, LLC**

By: /s/ Jeff Muller

Name: Jeff Muller

Title: CCO, Monashee Investment Management, LLC

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

**PURCHASER: BLACKSTONE CSP-MST FMAP Fund**

**c/o Monashee Investment Management, LLC**

By: /s/ Jeff Muller

Name: Jeff Muller

Title: CCO, Monashee Investment Management, LLC

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

**PURCHASER:**

**CVI Investments, Inc., By: Heights Capital Management, Inc., its authorized agent**

By: /s/ Martin Kobinger

Name: Martin Kobinger

Title: President



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

**PURCHASER:**

**Farallon Capital (AM) Investors, L.P.**

By: /s/ Philip Dreyfuss

Name: Philip Dreyfuss

Title: Authorized Signatory

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

**PURCHASER:**

**Farallon Capital F5 Master I, L.P.**

By: /s/ Philip Dreyfuss

Name: Philip Dreyfuss

Title: Authorized Signatory

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

**PURCHASER:**

**Farallon Capital Institutional Partners, L.P.**

By: /s/ Philip Dreyfuss

Name: Philip Dreyfuss

Title: Authorized Signatory

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

**PURCHASER:**

**Farallon Capital Institutional Partners II, L.P.**

By: /s/ Philip Dreyfuss  
Name: Philip Dreyfuss  
Title: Authorized Signatory

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

**PURCHASER:**

**Farallon Capital Institutional Partners III, L.P.**

By: /s/ Philip Dreyfuss  
Name: Philip Dreyfuss  
Title: Authorized Signatory

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

**PURCHASER:**

**Farallon Capital Offshore Investors II, L.P.**

By: /s/ Philip Dreyfuss

Name: Philip Dreyfuss

Title: Authorized Signatory

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

**PURCHASER:**

**Farallon Capital Partners, L.P.**

By: /s/ Philip Dreyfuss

Name: Philip Dreyfuss

Title: Authorized Signatory

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

**PURCHASER:**

**Four Crossings Institutional Partners V, L.P.**

By: /s/ Philip Dreyfuss  
Name: Philip Dreyfuss  
Title: Authorized Signatory



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

**PURCHASER: Mission Pure Alpha LP**

**c/o Monashee Investment Management, LLC**

By: /s/ Jeff Muller

Name: Jeff Muller

Title: CCO, Monashee Investment Management, LLC

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

**PURCHASER: Monashee Pure Alpha SPV I LP**

**c/o Monashee Investment Management, LLC**

By: /s/ Jeff Muller

Name: Jeff Muller

Title: CCO, Monashee Investment Management, LLC

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

**PURCHASER: Opaley, L.P.**

By: /s/ James Silverman

Name: James Silverman

Title: President

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

**PURCHASER:**

**PCOF EQ AIV IV, LP**

By: PCOF EQ AIV GP, LLC, its general partner

By: /s/ Sandeep Dixit

Name: Sandeep Dixit

Title: Chief Credit Officer

By: /s/ Sam Chawla

Name: Sam Chawla

Title: Portfolio Manager

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

**PURCHASER:**

**Perceptive Credit Holdings IV, LP**

By: Perceptive Credit Opportunities GP, LLC, its general partner

By: /s/ Sandeep Dixit

Name: Sandeep Dixit

Title: Chief Credit Officer

By: /s/ Sam Chawla

Name: Sam Chawla

Title: Portfolio Manager

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

**PURCHASER:**

**SilverArc Capital Alpha Fund I, L.P.**

By: /s/ Andrew Timpson

Name: Andrew Timpson

Title: Chief Operating Officer, SilverArc Capital  
Management, LLC, in its capacity as investment  
manager to SilverArc Capital Alpha Fund I, L.P.

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

**PURCHASER:**

**SilverArc Capital Alpha Fund II, L.P.**

By: /s/ Andrew Timpson

Name: Andrew Timpson

Title: Chief Operating Officer, SilverArc Capital  
Management, LLC, in its capacity as investment  
manager to SilverArc Capital Alpha Fund II, L.P.

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

**PURCHASER:**

**Sio Capital Management, LLC**

By: /s/ Michael Castor

Name: Michael Castor

Title: Portfolio Manager



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

**PURCHASER:**

**SOLEUS CAPITAL MASTER FUND, L.P.**

**By: Soleus Capital, LLC, as general partner**

By: /s/ Steven Musumeci

Name: Steven Musumeci

Title: COO

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

**PURCHASER:**

**Squarepoint Diversified Partners Fund Limited**

By: /s/ Andrew Timpson

Name: Andrew Timpson

Title: Chief Operating Officer, SilverArc Capital  
Management, LLC, in its capacity as investment  
manager to Squarepoint Diversified Partners Fund  
Limited

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

**PURCHASER:**

**ST Global Health LP**

By: /s/ Lauren Schmidt

Name: Lauren Schmidt

Title: Partner

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

**PURCHASER:**

**Telemark Fund, LP**

By: Telemark Asset Management, LLC

By: /s/ Brian C. Miley

Name: Brian C. Miley

Title: CFO, Telemark Asset Management, LLC

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

**PURCHASER:**

**WVP Emerging Manager Onshore Fund, LLC –  
Optimized Equity Series**

By: /s/ Orin Hirschman  
Name: Orin Hirschman  
Title: Managing Member, AIGH Capital Management  
LLC

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

**PURCHASER:**

**WVP Emerging Manager Onshore Fund, LLC – AIGH Series**

By: /s/ Orin Hirschman  
Name: Orin Hirschman  
Title: Managing Member, AIGH Capital Management  
LLC

**EXHIBIT A**

**PURCHASERS**

<b>Purchaser Name and Address</b>	<b>Number of Common Shares</b>	<b>Number of Preferred Shares</b>	<b>Aggregate Purchase Price</b>	<b>Beneficial Ownership Limitation</b>
Soleus Capital Master Fund, L.P. <i>104 Field Point Road, 2nd Floor Greenwich CT, 06830</i>	3,895,760	97,394	\$ 4,480,124	9.99%
Telemark Fund, LP <i>1 International Place, Suite 4620 Boston, MA 02110</i>	5,217,360	130,434	\$ 5,999,964	19.99%
Farallon Capital Partners, L.P. <i>One Maritime Plaza, Suite 2100 San Francisco, CA 94111</i>	683,560	17,089	\$ 786,094	9.99%
Farallon Capital Institutional Partners, L.P. <i>One Maritime Plaza, Suite 2100 San Francisco, CA 94111</i>	597,040	14,926	\$ 686,596	9.99%
Farallon Capital Institutional Partners II, L.P. <i>One Maritime Plaza, Suite 2100 San Francisco, CA 94111</i>	153,600	3,840	\$ 176,640	9.99%
Farallon Capital Institutional Partners III, L.P. <i>One Maritime Plaza, Suite 2100 San Francisco, CA 94111</i>	29,400	735	\$ 33,810	9.99%
Four Crossings Institutional Partners V, L.P. <i>One Maritime Plaza, Suite 2100 San Francisco, CA 94111</i>	110,880	2,772	\$ 127,512	9.99%
Farallon Capital Offshore Investors II, L.P. <i>One Maritime Plaza, Suite 2100 San Francisco, CA 94111</i>	1,291,600	32,290	\$ 1,485,340	9.99%
Farallon Capital F5 Master I, L.P. <i>One Maritime Plaza, Suite 2100 San Francisco, CA 94111</i>	388,360	9,709	\$ 446,614	9.99%
Farallon Capital (AM) Investors, L.P. <i>One Maritime Plaza, Suite 2100 San Francisco, CA 94111</i>	84,800	2,120	\$ 97,520	9.99%
Sio Partners LP <i>600 Third Avenue, 2nd Floor New York, NY 10016</i>	1,095,680	27,392	\$ 1,260,032	19.99%
Sio Partners Offshore, Ltd. <i>600 Third Avenue, 2nd Floor New York, NY 10016</i>	643,480	16,087	\$ 740,002	19.99%

BEMAP Master Fund Ltd 75 Park Plaza, Boston MA 02116	584,360	14,609	\$ 672,014	19.99%
Monashee Pure Alpha SPV I LP 75 Park Plaza, Boston MA 02116	626,120	15,653	\$ 720,038	19.99%
BLACKSTONE CSP-MST FMAP Fund 75 Park Plaza, Boston MA 02116	688,720	17,218	\$ 792,028	19.99%
Mission Pure Alpha LP 75 Park Plaza, Boston MA 02116	187,840	4,696	\$ 216,016	19.99%
AIGH Investment Partners, LP 6006 Berkeley Avenue Baltimore MD 21209	1,243,800	31,095	\$ 1,430,370	4.99%
WVP Emerging Manager Onshore Fund, LLC – AIGH Series 6006 Berkeley Avenue Baltimore MD 21209	330,440	8,261	\$ 380,006	4.99%
WVP Emerging Manager Onshore Fund, LLC – Optimized Equity Series 6006 Berkeley Avenue Baltimore MD 21209	95,400	2,385	\$ 109,710	4.99%
Perceptive Credit Holdings IV, LP 51 Astor Place, Floor 10 New York, NY 10003	1,036,560	25,914	\$ 1,192,044	19.99%
PCOF EQ AIV IV, LP 51 Astor Place, Floor 10 New York, NY 10003	1,137,320	28,433	\$ 1,307,918	19.99%
CVI Investments, Inc. 101 California Street, Suite 3250, San Francisco, CA 94111	556,520	13,913	\$ 639,998	4.99%
ST Global Health LP 66 West Flagler Street - Suite 900, Miami, FL 33130	116,280	2,907	\$ 133,722	19.99%
Opaleye, L.P. One Boston Place, 26th Floor Boston, MA 02108	2,620,000	65,500	\$ 3,013,000	19.99%
Squarepoint Diversified Partners Fund Limited 20 Park Plaza, 4th Floor Boston, MA 02116	493,400	12,335	\$ 567,410	19.99%
SilverArc Capital Alpha Fund I, L.P. 20 Park Plaza, 4th Floor Boston, MA 02116	64,080	1,602	\$ 73,692	19.99%
SilverArc Capital Alpha Fund II, L.P. 20 Park Plaza, 4th Floor Boston, MA 02116	1,390,400	34,760	\$ 1,598,960	19.99%
<b>TOTAL:</b>	<b><u>25,362,760</u></b>	<b><u>634,069</u></b>	<b><u>\$29,167,174</u></b>	



---

**EXHIBIT B**

**FORM OF REGISTRATION RIGHTS AGREEMENT**

B-1

---

**EXHIBIT C**

**CERTIFICATE OF DESIGNATION**

C-1

**SECURITIES PURCHASE AGREEMENT**

**BY AND AMONG**

**BIODESIX, INC.,**

**AND**

**THE PURCHASERS**

**AS SET FORTH HEREIN**

**APRIL 5, 2024**

## TABLE OF CONTENTS

1. Definitions	2
2. Purchase and Sale of Securities	5
2.1 Purchase and Sale	5
2.2 Closing	5
3. Representations and Warranties of the Company	5
3.1 Organization and Power; No Subsidiaries	5
3.2 Capitalization	6
3.3 Registration Rights	6
3.4 Authorization	6
3.5 Valid Issuance	7
3.6 Consents	7
3.7 SEC Filings; Financial Statements	7
3.8 Absence of Changes	8
3.9 Absence of Litigation	8
3.10 Compliance with Law; Permits	8
3.11 Intellectual Property	8
3.12 Taxes	9
3.13 Environmental Laws	9
3.14 Title	10
3.15 Insurance	10
3.16 Nasdaq Stock Market	10
3.17 Regulatory Compliance	10
3.18 Compliance with Health Care Laws	11
3.19 Accounting Controls and Disclosure Controls and Procedures	11
3.20 Price Stabilization of Common Stock	12
3.21 Investment Company Act	12
3.22 General Solicitation; No Integration or Aggregation	12
3.23 Brokers and Finders	12
3.24 Reliance by the Purchasers	12
3.25 Anti-Bribery and Anti-Money Laundering Laws	12
3.26 Compliance with Data Privacy Laws	13
3.27 Transactions with Affiliates and Employees	13
3.28 Use of Proceeds	13
3.29 Disclosure	13
3.30 Off-Balance Sheet Arrangements	13
3.31 No Additional Agreements	13
3.32 Disclosure of Transactions	14
4. Representations and Warranties of Each Purchaser	14
4.1 Organization	14
4.2 Authorization	14
4.3 No Conflicts	14
4.4 Residency	15

4.5	Brokers and Finders	15
4.6	Investment Representations and Warranties	15
4.7	Intent	15
4.8	Investment Experience; Ability to Protect Its Own Interests and Bear Economic Risks	16
4.9	Independent Investment Decision	16
4.10	Securities Not Registered; Legends	16
4.11	Placement Agents	18
4.12	No General Solicitation	18
4.13	Access to Information	19
4.14	Certain Trading Activities	19
4.15	No Governmental Review	19
4.16	Regulation M	19
5.	Covenants	20
5.1	Further Assurances	20
5.2	Listing	20
5.3	Disclosure of Transactions	20
5.4	Integration	20
5.5	Subsequent Equity Sales	21
5.6	Use of Proceeds	21
5.7	Removal of Legends	21
5.8	Withholding Taxes	22
5.9	Fees and Taxes	22
5.10	No Conflicting Agreements	22
5.11	Reporting Status	22
5.12	Beneficial Ownership Limitation	22
5.13	Requisite Stockholder Approval	24
5.14	Conversion and Exercise Procedures	24
5.15	Short Sales After the Date Hereof	24
5.16	Equal Treatment of Purchasers	25
6.	Conditions of Closing	25
6.1	Conditions to the Obligation of the Purchasers	25
6.2	Conditions to the Obligation of the Company	27
7.	Termination	27
7.1	Termination	27
7.2	Notice	28
8.	Miscellaneous Provisions	28
8.1	Public Statements or Releases	28
8.2	Notices	29
8.3	Severability	29
8.4	Governing Law; Submission to Jurisdiction; Venue; Waiver of Trial by Jury	29
8.5	Waiver	30
8.6	Expenses	31

8.7	Assignment	31
8.8	Confidential Information	31
8.9	Reliance by and Exculpation of Placement Agents	32
8.10	Third Parties	33
8.11	Independent Nature of Purchasers' Obligations and Right	33
8.12	Counterparts	33
8.13	Entire Agreement; Amendments	33
8.14	Survival	34
8.15	Mutual Drafting	34
8.16	Additional Matters	34
8.17	Further Assurances	34

Exhibits

Exhibit A	Purchasers	A-15
Exhibit B	Form of Registration Rights Agreement	B-1
Exhibit C	Certificate of Designations	C-1

This **SECURITIES PURCHASE AGREEMENT** (this “**Agreement**”) is dated as of April 5, 2024, by and among Biodesix, Inc., a Delaware corporation (the “**Company**”), and the entities listed on Exhibit A attached to this Agreement (each, a “**Purchaser**” and together, the “**Purchasers**”).

**WHEREAS**, the Company and the Purchasers are executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the Securities Act of 1933, as amended (the “**Securities Act**”);

**WHEREAS**, the Company desires to sell to the Purchasers, and each Purchaser desires to purchase from the Company, severally and not jointly, upon the terms and subject to the conditions stated in this Agreement, shares (the “**Securities**”) of Series A Non-Voting Convertible Preferred Stock, par value \$0.001 per share (and including any other class of securities into which the Series A Preferred Stock may hereafter be reclassified or changed into, the “**Series A 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, in the form attached hereto as Exhibit C (the “**Certificate of Designations**”), which will be convertible into shares (the “**Conversion Shares**”) of the Company’s common stock, par value \$0.001 per share (“**Common Stock**”), in accordance with the terms set forth in the Certificate of Designations;

**WHEREAS**, pursuant to the terms and conditions of the Certificate of Designations, the conversion of the Series A Preferred Stock shall be subject to receipt of the Requisite Stockholder Approval (as defined herein);

**WHEREAS**, certain other “qualified institutional buyers” (as defined in Rule 144A under the Securities Act) or “accredited investors” (within the meaning of Rule 501(a) under the Securities Act) (the “**Other Purchasers**”) have, severally and not jointly, entered into a separate securities purchase agreement with the Company, dated as of the date hereof (the “**Other Securities Purchase Agreement**”), pursuant to which such Other Purchasers have agreed to purchase Securities from the Company at the Per Share Price;

**WHEREAS**, the Company has engaged Cowen and Company, LLC, William Blair & Company, L.L.C., Canaccord Genuity LLC and Lake Street Capital Markets LLC as its exclusive placement agents (the “**Placement Agents**”) for the offering of the Securities on a “best efforts” basis; 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 B, pursuant to which the Company will agree to, among other things, provide certain registration rights with respect to the Conversion Shares 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 Purchaser, severally and not jointly, agree as follows:

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

“**2024 SEC Reports**” shall mean (a) the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2023 and (b) any Quarterly Reports on Form 10-Q or any Current Reports on Form 8-K filed or furnished (as applicable) by the Company after December 31, 2023, together in each case with any documents incorporated by reference therein or exhibits thereto.

“**Affiliate**” shall mean, 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 hereof.

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

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

“**Anti-Money Laundering Laws**” has the meaning set forth in Section 3.25 hereof.

“**Approval Closing Date**” means two Trading Days following the Requisite Stockholder Approval.

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

“**CLIA**” has the meaning set forth in Section 3.18 hereof.

“**Approval Closing**” has the meaning set forth in Section 2.2.

“**Other Closing Date**” or “**Closing Date**” shall mean closing date of the transaction contemplated under the Other Securities Purchase Agreement.

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

“**Common Stock Equivalents**” means any securities of the Company which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, 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 hereof.

“**Contract**” means, with respect to any Person, any written or oral agreement, contract, subcontract, lease (whether for real or personal property), mortgage, license, or other legally binding commitment or undertaking of any nature to which such Person is a party or by which such Person or any of its assets are bound or affected under applicable law.



“**Data**” has the meaning set forth in Section 3.26 hereof.

“**Data Security Obligations**” has the meaning set forth in Section 3.26 hereof.

“**Disclosure Document**” has the meaning set forth in Section 5.3 hereof.

“**Environmental Laws**” has the meaning set forth in Section 3.13 hereof.

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

“**Effective Date**” means the date on which the initial Registration Statement required by Section 2(a) of the Registration Rights Agreement is first declared effective by the Commission.

“**FDA**” has the meaning set forth in Section 3.18 hereof.

“**Financial Statements**” has the meaning set forth in Section 3.7(b) hereof.

“**GAAP**” has the meaning set forth in Section 3.7(b) hereof.

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

“**Health Care Laws**” has the meaning set forth in Section 3.18 hereof.

“**HIPAA**” has the meaning set forth in Section 3.18 hereof.

“**Intellectual Property Rights**” has the meaning set forth in Section 3.11 hereof.

“**Material Adverse Effect**” shall mean any change, event, circumstance, development, condition, occurrence or effect that, individually or in the aggregate, has had, or would reasonably be expected to have, a material adverse effect on the business, properties, condition (financial or otherwise), management, assets, liabilities, stockholders’ equity or results of operations of the Company or the ability of the Company to perform, its obligations under this Agreement and the other Transaction Agreements (including, without limitation, the issuance and sale of the Securities and the issuance of the Conversion Shares).

“**Material Contract**” means any Contract to which the Company is a party or by which the Company is bound that is material to the business of the Company, including those that have been filed as an exhibit to the SEC Reports pursuant to Item 601(b)(10) of Regulation S-K.

“**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.

“**Per Share Price**” means \$46.00 per share of Series A Preferred Stock.

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

“**Placement Agents**” has the meaning set forth in the recitals hereof; provided that, for the avoidance of doubt “Placement Agents” shall include Cowen and Company, LLC’s affiliate TD Securities (USA) LLC.

“**Purchaser**” and “**Purchasers**” have the meanings set forth in the recitals hereof.

“**Purchaser Adverse Effect**” has the meaning set forth in Section 4.3 hereof.

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

“**Regulatory Authorities**” has the meaning set forth in Section 3.18 hereof.

“**Requisite Stockholder Approval**” has the meaning set forth in Section 5.13 hereof.

“**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 United States Securities and Exchange Commission.

“**SEC Reports**” has the meaning set forth in Section 3.7(a) hereof.

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

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

“**Short Sales**” include, without limitation, (i) 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 (ii) 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).

“**Trading Day**” means a day on which the Nasdaq Global Select Market is open for business.

“**Transaction Agreements**” shall mean this Agreement, the schedules and exhibits attached hereto, the Registration Rights Agreement, the Certificate of Designations and any other documents or agreements explicitly contemplated hereunder.

“**Transfer Agent**” shall mean, with respect to the Common Stock, Computershare Trust Company, N.A., or such other financial institution that provides transfer agent services as the Company may engage from time to time.

## 2. Purchase and Sale of Securities.

2.1 Purchase and Sale. On the Approval Closing Date, upon the terms and subject to the conditions set forth herein, the Company agrees to sell, and the Purchasers, severally and not jointly, agree to purchase, up to an aggregate of \$5.8 million of Securities, with a purchase price per share of Series A Preferred Stock equal to the Per Share Price. Subject to and upon the terms and conditions set forth in this Agreement, at the Approval Closing (as defined below), the Company shall issue and sell to each Purchaser, and each Purchaser, severally and not jointly, shall purchase from the Company, that number of Securities equal to (x) the dollar amount set forth opposite such Purchaser's name on Exhibit A under the heading "Aggregate Purchase Price" divided by (y) the Per Share Price, rounded down to the nearest whole share.

2.2 Closing. Subject to the satisfaction or waiver of the conditions set forth in Section 5.8 of this Agreement, the closing of the purchase and sale of the Securities (the "**Approval Closing**") shall occur remotely via the exchange of documents and signatures on the Approval Closing Date to be agreed to by the Company and the Purchasers but in no event later than the two Trading Days after the Requisite Stockholder Approval, or at such other time, date and location as the Company and the Purchasers may mutually agree in writing. At the Approval Closing, the Securities shall be issued and registered in the name of each Purchaser, or in such nominee name(s) as designated by such Purchaser, representing the number of Securities to be purchased by such Purchaser at such Approval Closing as set forth in Exhibit A, in each case against payment to the Company of the purchase price therefor in full, by wire transfer to the Company of immediately available funds, at or prior to the Approval Closing, in accordance with wire instructions provided by the Company to the Purchasers prior to the Approval Closing, to an account to be designated by the Company (which shall not be an escrow account). On the Approval Closing Date, the Company will issue the Securities in book-entry form, free and clear of all restrictive and other legends (except as expressly provided in Section 4.10 hereof) and shall provide evidence of such issuance from the Company's Transfer Agent as of the Approval Closing Date to each Purchaser. The failure of the Approval Closing to occur on the Approval Closing Date shall not terminate this Agreement or otherwise relieve any party of any of its obligations hereunder. In the event the Approval Closing does not occur within five Trading Days after the Approval Closing Date, unless otherwise agreed by the Company and the Purchasers, the Company shall promptly return any previously wired funds to the Purchasers by wire transfer of United States dollars in immediately available funds to the account specified by each Purchaser, and any book entries for the Securities in respect of such returned funds shall be deemed cancelled.

3. Representations and Warranties of the Company. The Company hereby represents and warrants to each of the Purchasers and the Placement Agents that the statements contained in this Section 3 are true and correct as of the date hereof and the Other 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; No Subsidiaries. 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 as proposed to be conducted as described in the SEC Reports and to perform its obligations under all Material Contracts. The Company 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 so qualify would not reasonably be expected to have a Material Adverse Effect. The Company has no subsidiaries.

3.2 Capitalization. As of the date of this Agreement, the authorized share capital of the Company consists of 200,000,000 shares of Common Stock and 5,000,000 shares of preferred stock, \$0.001 par value per share. As of the date of this Agreement, there are 97,159,448 shares of Common Stock outstanding and no shares of preferred stock outstanding. The shares of Common Stock outstanding have been duly authorized and are validly issued, fully paid and non-assessable. The issuance and sale of the Securities (including, subject to the Company obtaining the Requisite Stockholder Approval, the issuance of Conversion Shares upon conversion of the Securities) will not obligate the Company to issue shares of Common Stock or other securities to any Person (other than the Purchasers) and will not result in a right of any holder of Company securities to adjust the exercise, conversion, exchange or reset price under any of such securities.

3.3 Registration Rights. Except as set forth in the Transaction Agreements or as disclosed in the 2024 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 that have not 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. All corporate action on the part of the Company, its officers, directors and stockholders necessary for the authorization of the Securities, the authorization, execution, delivery and performance of the Transaction Agreements and the consummation of the transactions contemplated herein and therein has been taken. This Agreement has been duly authorized, executed and delivered by the Company and assuming the due authorization, execution and delivery by each Purchaser and that this Agreement constitutes the legal, valid and binding agreement of each Purchaser, this Agreement 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 the legal, valid and binding agreement 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 Securities being purchased by the Purchasers hereunder, upon issuance pursuant to the terms hereof, against full payment therefor in accordance with the terms hereof, 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). The issuance of the Conversion Shares has been duly authorized and the Conversion Shares, subject to receipt of the Requisite Stockholder Approval, when issued in accordance with the terms of the Certificate of Designations, will be duly authorized, 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). The Company has reserved such number of shares of Common Stock sufficient to enable full conversion of all of the Securities to the extent allowable prior to receipt of the Requisite Stockholder Approval and, upon receipt of the Requisite Stockholder Approval, the Company shall have reserved such number of shares of Common Stock sufficient to enable the full conversion of all of the Securities. Subject to the accuracy of the representations and warranties made by the Purchasers in Section 4 hereof, the offer and sale of the Securities to the Purchasers is and will be, and the issuance of the Conversion Shares will be, in compliance with applicable exemptions from (i) the registration and prospectus delivery requirements of the Securities Act and (ii) the registration and qualification requirements of applicable securities laws of the states of the United States.

3.6 Consents. (i) The execution and delivery by the Company of, and the performance by the Company of its obligations under, the Transaction Agreements will not contravene (i) any provision of applicable law, (ii) or the Amended and Restated Certificate of Incorporation or the Amended and Restated Bylaws, (iii) or any Material Contract or other material instrument binding upon the Company, or (iv) any judgment, order or decree of any governmental body, agency or court having jurisdiction over the Company, except in the case of clauses (i), (iii) and (iv), where such contravention would not reasonably be expected to have a Material Adverse Effect, and no consent, approval, authorization or order of, or qualification with, any governmental body, agency or court is required for the performance by the Company of its obligations under the Transaction Agreements, except such as have been obtained or waived or as may be required by the securities or Blue Sky laws of the various states in connection with the offer and sale of the Securities. The Company is unaware of any facts or circumstances that might prevent the Company from obtaining or effecting any of the consents, approvals, authorizations or orders, or qualifications pursuant to this Section 3.6.

3.7 SEC Filings; Financial Statements.

(a) The Company has timely filed or furnished, as applicable, all forms, statements, certifications, reports and documents required to be filed or furnished by it with the SEC under the Exchange Act or the Securities Act for the one year preceding the date hereof (the “**SEC Reports**”). As of the time it was filed with, or furnished to, 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 SEC Reports complied in all material respects with the applicable requirements of the Securities Act or the Exchange Act (as the case may be) and, as of the time they were filed or furnished, none of the 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 in comment letters received from the SEC staff with respect to the SEC Reports. None of the SEC Reports is the subject of an ongoing SEC review.

(b) As of their respective filing dates, the financial statements of the Company included in the SEC Reports, together with the related schedules and notes thereto (collectively, the “**Financial Statements**”), complied as to form in all material respects with the applicable requirements of the Securities Act and the Exchange Act, as applicable, and presented fairly, in all material respects, the consolidated financial position of the Company as of the dates shown and its results of operations and cash flows for the periods shown, and such Financial Statements have been prepared in conformity with generally accepted accounting principles in the United States (“**GAAP**”) applied on a consistent basis throughout the periods covered thereby except for any normal year-end adjustments in the Company’s quarterly financial statements. Except as set forth in the consolidated financial statements of the Company included in the 2024 SEC Reports filed at least one (1) Trading Day prior to the date hereof, the Company has not incurred any liabilities, contingent or otherwise, except those incurred in the ordinary course of business, consistent (as to amount and nature) with past practices since the date of such Financial Statements, none of which have had a Material Adverse Effect. The books of account and other financial records of the Company are true and complete in all material respects.

3.8 Absence of Changes. Except as otherwise stated or disclosed in the 2024 SEC Reports filed at least one Trading Day prior to the date hereof, between December 31, 2023 and the date of this Agreement, (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 (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 is bound or to which any of its assets or properties is subject has been entered into that has not been disclosed in the 2024 SEC Reports; and (c) there has not been any other event or condition of any character that has had a Material Adverse Effect.

3.9 Absence of Litigation. There are no legal or governmental proceedings pending or, to the Company’s knowledge, threatened to which the Company is a party or to which any of the properties of the Company is subject that have had a Material Adverse Effect.

3.10 Compliance with Law; Permits. The Company possesses all certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct its business, and the Company has not received any written notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a Material Adverse Effect.

3.11 Intellectual Property. The Company solely and exclusively owns or has a valid and enforceable license or right to use all patents, inventions, copyrights, know how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, service marks, trade names and all other intellectual property and similar proprietary rights (including all registrations and applications for registration of, and all goodwill associated with, any of the foregoing, as applicable) (collectively, “**Intellectual Property Rights**”) used in or reasonably necessary to conduct its business; (ii) the Intellectual Property Rights owned by the Company and, to the Company’s knowledge, the Intellectual Property Rights licensed to the Company, are valid, subsisting and enforceable, and there is no material pending or, to the Company’s knowledge, threatened action, suit, proceeding

or claim by others challenging the validity, scope or enforceability of any such Intellectual Property Rights; (iii) the Company has not received any written notice alleging any material infringement, misappropriation or other violation of Intellectual Property Rights; (iv) to the Company's knowledge, no third party is infringing, misappropriating or otherwise violating, or has infringed, misappropriated or otherwise violated, any Intellectual Property Rights owned or licensed by the Company; (v) the Company does not infringe, misappropriate or otherwise violate, nor has infringed, misappropriated or otherwise violated, any Intellectual Property Rights; (vi) all employees or contractors engaged in the development of Intellectual Property Rights on behalf of the Company have executed an invention assignment agreement whereby such employees or contractors presently assign all of their right, title and interest in and to such Intellectual Property Rights to the Company, and to the Company's knowledge no such agreement has been breached or violated; and (vii) the Company uses, and has used, commercially reasonable efforts to appropriately maintain all information intended to be maintained as a trade secret.

3.12 Taxes. The Company has filed all federal, state, local and foreign tax returns required to be filed through the date of this Agreement or have requested extensions thereof (except where the failure to file would not, singly or in the aggregate, reasonably be expected to have a Material Adverse Effect) and have paid all taxes required to be paid thereon (except for cases in which the failure to file or pay would not, singly or in the aggregate, reasonably be expected to have a Material Adverse Effect, or, except as currently being contested in good faith and for which reserves required by GAAP have been created in the financial statements of the Company), and no tax deficiency has been determined adversely to the Company which, singly or in the aggregate, has had (nor does the Company have any notice or knowledge of any tax deficiency which could reasonably be expected to be determined adversely to the Company and which could reasonably be expected to have) a Material Adverse Effect.

3.13 Environmental Laws. The Company (w) is, and has been, in compliance with any and all applicable foreign, federal, state and local laws, rules, orders, consents and regulations relating to the protection of health and human safety, the environment, natural resources, and hazardous or toxic substances, wastes, chemicals, pollutants or contaminants ("**Environmental Laws**"), (x) has received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct its business, (y) is in compliance with all terms and conditions of any such permit, license or approval and (z) has not received notices of, and has no knowledge of any event or condition that would reasonably be expected to result in, any actual or potential liability or violation, and is not subject to any pending or to the Company's knowledge, threatened action, suit, proceeding, investigation or claim, arising under or relating to any Environmental Law, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals, failure to comply with the terms and conditions of such permits, licenses or approvals, or notice, action, suit, proceeding, investigation or claim would not, singularly or in the aggregate, reasonably be expected to have a Material Adverse Effect, (ii) there are no costs (including anticipated capital expenditures), obligations or liabilities associated with or arising under Environmental Laws of or relating to the Company and (iii) except as described in the Transaction Agreements, (y) there are no proceedings pending, or to the Company's knowledge, contemplated, against the Company under Environmental Laws in which a government authority is also a party, other than such proceedings which it is reasonably believed no monetary sanctions of \$300,000 or more will be imposed and (z) the Company is not aware of any facts or issues regarding compliance with Environmental Laws that could reasonably be expected to have a material effect on the capital expenditures, earnings or competitive position of the Company.

3.14 Title. The Company has good and marketable title to all real property and good and marketable title to all personal property owned by them which is material to the business of the Company, free and clear of all liens, encumbrances and defects except such as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company; and any real property and buildings held under lease by the Company is held under valid, subsisting and enforceable leases with such exceptions as are not material and would not reasonably be expected to materially interfere with the use made and proposed to be made of such property and buildings by the Company.

3.15 Insurance. The Company is insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as in the Company's reasonable judgment are prudent and customary in the businesses in which they are engaged; the Company has not been refused any insurance coverage sought or applied for; and the Company does not have any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not reasonably be expected to have a Material Adverse Effect.

3.16 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 Global Select Market under the symbol "BDSX". The Company is in compliance with all applicable listing requirements of The Nasdaq Stock Market LLC ("Nasdaq") applicable to the Company. As of the date hereof, 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, respectively, to prohibit or terminate the listing of the Common Stock on the Nasdaq Global Select Market or to deregister the Common Stock under the Exchange Act. The Company has taken no action as of the date hereof that is designed to terminate the registration of the Common Stock under the Exchange Act.

3.17 Regulatory Compliance(i) . (i) The studies, tests and preclinical and clinical trials conducted by or, to the Company's knowledge, on behalf of or sponsored by the Company or in which the Company has participated, were, and if still pending are being conducted in all material respects in accordance with standard medical and experimental protocols, procedures and controls pursuant to accepted professional scientific research standards and procedures, and all applicable Health Care Laws, the rules and regulations of the Regulatory Authorities and, to the extent required, current Good Clinical Practices and Good Laboratory Practices and (ii) the Company has not received any written notices or correspondence from any Regulatory Authority or any other governmental entity requiring the termination, material modification or suspension of any studies or trials that could result in a Material Adverse Effect.



**3.18 Compliance with Health Care Laws.** The Company has operated at all times and is currently in compliance in all material respects with all applicable statutes, rules and regulations of the U.S. Food and Drug Administration (the “**FDA**”) and applicable foreign regulatory authorities, including the European Medicines Agency and the UK Medicines & Healthcare products Regulatory Agency (collectively, the “**Regulatory Authorities**”), including, without limitation: (i) the Federal Food, Drug, and Cosmetic Act and the regulations promulgated thereunder; (ii) applicable federal, state, local and foreign health care laws, including the U.S. Anti-Kickback Statute (42 U.S.C. Section 1320a-7b(b)), the Civil Monetary Penalties Law (42 U.S.C. § 1320a-7a), the U.S. Civil False Claims Act (31 U.S.C. Section 3729 et seq.), all applicable federal, state, local and all foreign criminal laws relating to health care fraud and abuse, including but not limited to false statements relating to health care matters (42 U.S.C. Section 1320a-7b(a)), 18 U.S.C. Sections 286 and 287, and the health care fraud criminal provisions under the U.S. Health Insurance Portability and Accountability Act of 1996 (“**HIPAA**”) (42 U.S.C. Section 1320d et seq.), the exclusion laws, the statutes, regulations and directives of applicable government funded or sponsored healthcare programs, and the regulations promulgated pursuant to such statutes; (iii) the Standards for Privacy of Individually Identifiable Health Information, the Security Standards, and the Standards for Electronic Transactions and Code Sets promulgated under HIPAA, the Health Information Technology for Economic and Clinical Health Act (42 U.S.C. Section 17921 et seq.), and the regulations promulgated thereunder and any state or non-U.S. counterpart thereof or any other law or regulation the purpose of which is to protect the privacy of individuals or prescribers; (iv) the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, the regulations promulgated thereunder; (v) the U.S. Controlled Substances Act (21 U.S.C. Section 801 et seq.); (vi) the Clinical Laboratories Improvement Act of 1967, as amended (“**CLIA**”); (vii) licensure, quality, safety and accreditation requirements under applicable federal, state, local or foreign laws or regulatory bodies; and (viii) all other local, state, federal, national, supranational and foreign laws, relating to the regulation of the Company and the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product under development, manufactured or distributed by the Company; (clauses (i) through (viii), collectively, “**Health Care Laws**”).

**3.19 Accounting Controls and Disclosure Controls and Procedures.** The Company is in compliance in all material respects with the applicable provisions of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated thereunder. The Company maintains a system of internal accounting controls designed to provide reasonable assurance that (a) transactions are executed in accordance with management’s general or specific authorizations; (b) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability; (c) access to assets is permitted only in accordance with management’s general or specific authorization and (d) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Since the end of the Company’s most recent audited fiscal year, there has been (i) no material weakness in the Company’s internal control over financial reporting (whether or not remediated) and (ii) no change in the Company’s internal control over financial reporting that has materially and adversely affected, or is reasonably likely to materially and adversely affect, the Company’s internal control over financial reporting. The Company maintains an effective system of “disclosure controls and procedures” (as defined in Rule 13a-15(e) of the Exchange Act) that complies with the applicable requirements of the Exchange Act and that has been designed to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission’s rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to the Company’s management as appropriate to allow timely decisions regarding required disclosure. The Company has carried out evaluations of the effectiveness of its disclosure controls and procedures as required by Rule 13a-15 of the Exchange Act.

3.20 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 Securities.

3.21 Investment Company Act. The Company is not, and immediately after receipt of payment for the Securities will not be, required to register as an “investment company” as such term is defined in the Investment Company Act of 1940, as amended.

3.22 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) with respect to offers or sales of the 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 Securities sold 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 the Nasdaq Global Market. Assuming the accuracy of the representations and warranties of the Purchaser set forth in Section 4, neither the Company nor any of its Affiliates, 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) for the exemption from registration for the transactions contemplated hereby.

3.23 Brokers and Finders. Other than the Placement Agents, 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. The Purchasers shall have no obligation with respect to any fees or with respect to any claims made for fees of a type contemplated in this Section 3.23 that may be due in connection with the transactions contemplated by the Transaction Documents.

3.24 Reliance by the Purchasers. The Company acknowledges that each of the Purchasers 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.

3.25 Anti-Bribery and Anti-Money Laundering Laws. The operations of the Company are and have been conducted at all times in material compliance with all applicable financial recordkeeping and reporting requirements, including those of the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act), and the applicable anti-money laundering statutes of jurisdictions where the Company conducts business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the “**Anti-Money Laundering Laws**”), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company with respect to the Anti-Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

3.26 Compliance with Data Privacy Laws. (i) The Company has complied in all material respects and is presently in compliance with all internal and external privacy policies, contractual obligations, industry standards, applicable laws, statutes, judgments, orders, rules and regulations of any court or arbitrator or other governmental or regulatory authority and any other legal obligations, in each case, relating to the collection, use, transfer, import, export, storage, protection, disposal and disclosure by the Company of personally identifiable or other regulated data (“**Data Security Obligations**”, and such data, “**Data**”); (ii) the Company has not received any written notification of or complaint regarding material non-compliance with any Data Security Obligation; and (iii) there is no action, suit, investigation or proceeding by or before any court or governmental agency, authority or body pending or, to the Company’s knowledge, threatened alleging non-compliance with any Data Security Obligation.

3.27 Transactions with Affiliates and Employees. No relationship, direct or indirect, exists between or among the Company, on the one hand, and the directors, officers, stockholders, customers or suppliers of the Company, on the other hand, that is required to be described in the SEC Reports that is not so described.

3.28 Use of Proceeds. The net proceeds of the sale of the Securities hereunder shall be used by the Company for advancement of the Company’s commercial expansion of sales, supporting the Company’s product pipeline, research and development and for general corporate purposes.

3.29 Disclosure. The Company confirms that it has not provided, and to the Company’s knowledge, none of its officers or directors nor any other Person acting on its or their behalf (including, without limitation, the Placement Agents) has provided, and it has not authorized the Placement Agents to provide, any Purchaser or its respective agents or counsel with any information that it believes constitutes material, nonpublic information except insofar as the existence, provisions and terms of the Transaction Agreement and the proposed transactions hereunder and thereunder may constitute such information, all of which will be disclosed by the Company as contemplated by Section 5.3 hereof. The Company understands and confirms that the Purchasers will rely on the foregoing representations in effecting transactions in securities of the Company.

3.30 Off-Balance Sheet Arrangements. There is no transaction, arrangement, or other relationship between the Company and an unconsolidated or other off-balance sheet entity that is required to be disclosed by the Company in SEC Reports and is not so disclosed.

3.31 No Additional Agreements. The Company does not have and will not enter into any agreement or understanding (including side letters) with any Purchaser with respect to the transactions contemplated by the Transaction Agreements other than as specified in the Transaction Agreements. The Other Securities Purchase Agreement does not provide, and will not be amended (including via any side letter or similar arrangement) to provide, any terms or conditions (including, without limitation, with respect to the purchase price for the Securities to be issued and sold thereunder) that are more favorable to the Other Purchasers than the terms and conditions of this Agreement and the other Transaction Agreements are to the Purchasers.

3.32 Disclosure of Transactions. Upon the filing of the earlier of any press release disclosing all material terms of the transactions contemplated hereby (the “Press Release”) or the Disclosure Document (as defined below), no Purchaser that is not an officer or a director of the Company shall be in possession of any material, non-public information received from the Company or any of the Company’s officers, directors, employees or agents, that is not disclosed in the Press Release or the Disclosure Document.

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

4.1 Organization. Such Purchaser 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 enter into this Agreement and perform its obligations hereunder.

4.2 Authorization. Such Purchaser 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 Purchaser 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 other transactions contemplated herein has been taken. The signature of the Purchaser on this Agreement is genuine and the signatory to this Agreement, if the Purchaser is an individual, has the legal competence and capacity to execute the same or, if the Purchaser is not an individual, the signatory has been duly authorized to execute the same on behalf of the Purchaser. Assuming this Agreement constitutes the legal, valid and binding agreement of the Company, this Agreement constitutes a legal, valid and binding obligation of such Purchaser, enforceable against such Purchaser 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 such Purchaser, the purchase of the Securities in accordance with their terms and the consummation by such Purchaser of the other transactions contemplated hereby will not conflict with or result in any violation of, breach or default by such Purchaser (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 such Purchaser, 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 Purchaser 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 such Purchaser to perform its obligations under the Transaction Agreements (such delay or hindrance, a “**Purchaser Adverse Effect**”).

4.4 Residency. Such Purchaser'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 such Purchaser's name on Exhibit A.

4.5 Brokers and Finders. Such Purchaser 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. Such Purchaser hereby represents and warrants that, it (i) as of the date hereof is, if an entity, is 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. Such Purchaser further represents and warrants that (x) it is a sophisticated institutional investor, experienced in investing in private equity transactions and capable of evaluating investment risks independently, both in general and with regard to all transactions and investment strategies involving a security or securities, including the Purchaser's investment with respect to the Securities, 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). Such Purchaser 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 such Purchaser's representations as expressed herein.

4.7 Intent. Such Purchaser is purchasing the Securities (and the Conversion Shares) solely for investment purposes, for such Purchaser'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 Purchaser 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 Purchaser's right at all times to sell or otherwise dispose of all or any part of such Securities (or Conversion Shares) in compliance with applicable federal and state securities laws. Notwithstanding the foregoing, if such Purchaser is purchasing the Securities (and Conversion Shares) as a fiduciary or agent for one or more investor accounts, such Purchaser 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. Such Purchaser understands that the Securities (and Conversion Shares) must be held indefinitely unless such Securities (or Conversion Shares) 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 or agreement by such Purchaser that it will hold the Securities (or Conversion Shares) for any period of time. Such Purchaser is acquiring the Securities hereunder in the ordinary course of its business.

Such Purchaser does not presently have any agreement, plan or understanding, directly or indirectly, with any Person to distribute or effect any distribution of any of the Securities (or any securities which are derivatives thereof) to or through any person or entity in violation of federal securities law; such Purchaser is not a registered broker-dealer under Section 15 of the Exchange Act or an entity engaged in a business that would require it to be so registered as a broker-dealer.

4.8 Investment Experience; Ability to Protect Its Own Interests and Bear Economic Risks. Such Purchaser 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 such Purchaser has had an opportunity to seek, and has sought, such accounting, legal, business and tax advice as such Purchaser has considered necessary to make an informed investment decision.

Such Purchaser acknowledges that such Purchaser (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. Such Purchaser acknowledges that such Purchaser 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), such Purchaser has adequately analyzed and fully considered the risks of an investment in the Securities and determined that the Securities are a suitable investment for such Purchaser. Such Purchaser is, at this time and in the foreseeable future, able to afford the loss of such Purchaser's entire investment in the Securities and such Purchaser acknowledges specifically that a possibility of total loss exists.

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

4.10 Securities Not Registered; Legends. Such Purchaser 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 such Purchaser 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 such Purchaser 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. Such Purchaser 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 such Purchaser'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. Such Purchaser 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. Such Purchaser 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.

Such Purchaser understands that the Securities and Conversion Shares may bear one or more legends in substantially the following form and substance:

“THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER SECURITIES ACT OF 1933. THE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND MAY NOT BE SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THESE SECURITIES UNDER THE SECURITIES ACT OF 1933 OR AN AVAILABLE REGISTRATION EXEMPTION. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.”

In addition, the Securities and Conversion Shares may contain a legend regarding affiliate status of the Purchaser, if applicable.

The Company acknowledges and agrees that a Purchaser may from time to time pledge, and/or grant a security interest in, some or all of the legended Securities or Conversion Shares in connection with applicable securities laws, pursuant to a bona fide margin agreement in compliance with a bona fide margin loan. Such a pledge would not be subject to approval or consent of the Company and no legal opinion of legal counsel to the pledgee, secured party or pledgor shall be required in connection with the pledge, but such legal opinion shall be required in connection with a subsequent transfer or foreclosure following default by the Purchaser transferee of the pledge. No notice shall be required of such pledge, but Purchaser's transferee shall promptly notify the Company of any such subsequent transfer or foreclosure. Each Purchaser acknowledges that the Company shall not be responsible for any pledges relating to, or the grant of any security interest in, any of the Securities or Conversion Shares or for any agreement, understanding or arrangement between any Purchaser and its pledgee or secured party. At the appropriate Purchaser's expense, the Company will execute and deliver such reasonable documentation as a pledgee or secured party of Securities or Conversion Shares may reasonably request in connection with a pledge or transfer of the Securities or Conversion Shares, as applicable, including the preparation and filing of any required prospectus supplement under Rule 424(b)(3) of the Securities Act or other applicable provision of the Securities Act to appropriately amend the list of selling stockholders thereunder. Each Purchaser acknowledges and agrees that, except as otherwise provided in Section 5.7, any Securities or Conversion Shares subject to a pledge or security interest as contemplated by this Section 4.10 shall continue to bear the legend set forth in this Section 4.10 and be subject to the restrictions on transfer set forth in this Section 4.10.

4.11 Placement Agents. Such Purchaser hereby acknowledges and agrees that (a) each Placement Agent is acting solely as placement agent in connection with the execution, delivery and performance of the Transaction Agreements and the issuance of the Securities to Purchaser and neither the Placement Agents nor any of their respective affiliates have acted as an underwriter or in any other capacity and is not and shall not be construed as a fiduciary or financial advisor for such Purchaser, the Company or any other person or entity in connection with the execution, delivery and performance of the Transaction Agreements and the issuance and purchase of the Securities, (b) each Placement Agent has not made and does not make any representation or warranty, whether express or implied, of any kind or character, or has not provided any advice or recommendation in connection with the execution, delivery and performance of the Transaction Agreements or with respect to the Securities, nor is such information or advice necessary or desired, (c) each Placement Agent will not have any responsibility with respect to (i) any representations, warranties or agreements made by any person or entity under or in connection with the execution, delivery and performance of the Transaction Agreements, or the execution, legality, validity or enforceability (with respect to any person) thereof, or (ii) the business, affairs, financial condition, operations, properties or prospects of, or any other matter concerning the Company, and (d) each Placement Agent will not have any liability or obligation (including without limitation, for or with respect to any losses, claims, damages, obligations, penalties, judgments, awards, liabilities, costs, expenses or disbursements incurred by such Purchaser, the Company or any other person or entity), whether in contract, tort or otherwise, to such Purchaser, or to any person claiming through it, in respect of the execution, delivery and performance of the Transaction Agreements, except in each case for such party's own gross negligence, willful misconduct or bad faith. No disclosure or offering document has been prepared by the Placement Agents or any of their respective affiliates in connection with the offer and sale of the Securities. Neither the Placement Agents nor any of their respective affiliates have made or make any representation as to the quality or value of the Securities and the Placement Agents and any of their respective affiliates may have acquired non-public information with respect to the Company which Purchaser agrees need not be provided to it.

4.12 No General Solicitation. Such Purchaser acknowledges and agrees that the Purchaser is purchasing the Securities directly from the Company. Such Purchaser became aware of this offering of the Securities solely by means of direct contact from the Placement Agents or directly from the Company as a result of a pre-existing, substantive relationship with the Company or the Placement Agents, 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 such Purchaser solely by direct contact between Purchaser and the Company, the Placement Agents and/or their respective representatives. Purchaser did not become aware of this offering of the Securities, nor were the Securities offered to Purchaser, by any other means, and none of the Company, the Placement Agents and/or their respective representatives acted as investment advisor, broker or dealer to such Purchaser. Such Purchaser 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.



4.13 Access to Information. In making its decision to purchase the Securities, such Purchaser has relied solely upon independent investigation made by such Purchaser and upon the representations, warranties and covenants set forth herein and upon the statements contained in the SEC Reports. Such Purchaser acknowledges and agrees that such Purchaser has received such information as such Purchaser deems necessary in order to make an investment decision with respect to the Securities. Without limiting the generality of the foregoing, such Purchaser acknowledges that copies of the 2024 SEC Reports filed prior to the date hereof are available on EDGAR at [www.sec.gov](http://www.sec.gov). Such Purchaser acknowledges and agrees that such Purchaser and its 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 such Purchaser and its professional advisor(s), if any, have deemed necessary to make an investment decision with respect to the Securities and that such Purchaser has independently made its own analysis and decision to invest in the Company.

4.14 Certain Trading Activities. Other than consummating the transaction contemplated hereby, the Purchaser has not, nor has any Person acting on behalf of or pursuant to any understanding with such Purchaser, 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 such Purchaser was first contacted by the Company or any other Person regarding the transaction contemplated hereby and ending immediately prior to the date hereof. Notwithstanding the foregoing, in the case of a Purchaser that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser'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. Other than to other Persons party to this Agreement (and such Purchaser's legal counsel and other professional advisors), such Purchaser 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.

4.15 No Governmental Review. Such Purchaser understands that no United States federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Securities or the fairness or suitability of the investment in the Securities nor have such authorities passed upon or endorsed the merits of the offering of the Securities.

4.16 Regulation M. Such Purchaser is aware that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of Securities and other activities with respect to the Securities by the Purchasers.

## 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 hereof 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 hereof. Each Purchaser acknowledges that the Company and the Placement Agents will rely on the acknowledgments, understandings, agreements, representations and warranties contained in this Agreement. Prior to the Approval Closing, the Purchaser 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. The Company shall use commercially reasonable efforts to maintain the listing and trading of its Common Stock on the Nasdaq Global Select Market 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.

5.3 Disclosure of Transactions. The Company shall, by 5:30 p.m., New York City time, on or prior to the fourth (4th) business day immediately following the date hereof, file with the SEC a Current Report on Form 8-K (the "**Disclosure Document**") disclosing all material terms of the transactions contemplated hereby, by the other Transaction Agreements (and including as exhibits to such Current Report on Form 8-K the material Transaction Agreements (including, without limitation, this Agreement and the Registration Rights Agreement)). Notwithstanding anything in this Agreement to the contrary, the Company shall not publicly disclose the name of any Purchaser or any of its affiliates or advisers, or include the name of any Purchaser or any of its affiliates or advisers 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 such Purchaser, 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 (including signature pages thereto) 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 the Nasdaq Global Market. The Company shall, not later than 9:00 a.m., New York City time, on the Trading Day immediately following the date hereof, release the Press Release.

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 Purchasers, 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 Subsequent Equity Sales. From the date hereof until 30 days after the effective date of the Initial Registration Statement (as defined in the Registration Rights Agreement), without the consent of the Purchasers of at least a majority in interest of the Securities then held by Purchasers, the Company shall not (a) issue shares of Common Stock or Common Stock Equivalents, or (b) file with the SEC a registration statement under the Securities Act relating to any shares of Common Stock or Common Stock Equivalents. Notwithstanding the foregoing, the provisions of this Section 5.5 shall not apply to (i) the issuance of the Securities hereunder, (ii) the transactions contemplated by the Registration Rights Agreement, (iii) the issuance of Common Stock upon the exercise of any options or warrants or upon the vesting of any restricted stock units outstanding on the date hereof, (iv) the issuance of Common Stock or Common Stock Equivalents to employees, directors or consultants pursuant to (a) any stock option or equity incentive or employee stock purchase plan in effect on the date hereof, or (b) any compensation agreements, (v) the issuance of Common Stock in connection with acquisitions or strategic transactions, provided that any such issuance shall only be to a Person which is an operating company in a business synergistic with the business of the Company, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities, provided that the aggregate number of shares of Common Stock issued in accordance with clause (v) of this Section 5.5 do not exceed 10% of the number of shares of Common Stock outstanding immediately after the issuance and sale of the Shares, (vi) the filing of a registration statement on Form S-8, and (vii) facilitating the establishment of a trading plan on behalf of a stockholder, officer or director of the Company pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock.

5.6 Use of Proceeds. The Company shall use the proceeds from the sale of the Securities for commercial expansion of sales, supporting the Company's product pipeline, research and development and for general corporate purposes.

5.7 Removal of Legends.

(a) Once a Registration Statement covering the resale of the Conversion Shares is declared effective, the Company shall instruct the Transfer Agent to remove all restrictive legends, including the legend set forth in Section 4.10 above (or, in the event that Conversion Shares are issued upon conversion after the Registration Statement is declared effective, the Conversion Shares shall be issued without restrictive legends). Further, the Company shall instruct the Transfer Agent to remove all restrictive legends, including the legend set forth in Section 4.10 above, (i) following any sale of such Securities or Conversion Shares pursuant to Rule 144 or any other applicable exemption from the registration requirements of the Securities Act, or (ii) if such Conversion Shares are eligible for resale under Rule 144(b)(1) or any successor provision (or, in the event that Conversion Shares are issued upon conversion after the conditions set forth in clauses (i) and (ii) above, the Conversion Shares shall be issued without restrictive legends). Without limiting the foregoing, upon request of the Purchaser, upon receipt by the Company of an opinion of counsel reasonably satisfactory to the Company to the effect that such legend is no longer required under the Securities Act and applicable state securities laws, the Company shall, within three Trading Days, cause the legend to be removed from any certificate (or electronic book-entry notation) for any Securities or Conversion Shares in accordance with the terms of this Agreement and deliver, or cause to be delivered, to any Purchaser new certificate(s) (or electronic book-entry statements) representing the Securities or Conversion Shares that are free from all restrictive and other legends or, at the request of such Purchaser, via DWAC transfer to such Purchaser's account.

(b) In addition to such Purchaser's other available remedies, if the Company shall not cause the legend to be removed within three Trading Days (the "**Legend Removal Date**"), the Company shall pay to a Purchaser, in cash, as partial liquidated damages and not as a penalty, for each \$1,000 of Series A Non-Voting Convertible Preferred Stock subject to such conversion (based on the volume-weighted average price of the Common Stock on the date of the applicable Notice of Conversion (as defined in the Certificate of Designations)), \$10 per Trading Day for each Trading Day after the Legend Removal Date until the Conversion Shares are delivered without a legend.

5.8 Withholding Taxes. Each Purchaser agrees to furnish the Company with such 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). Each Purchaser represents that it has provided the Company with a completed and executed Internal Revenue Service Form W-9 or applicable Form W-8, as appropriate, and agrees to promptly furnish the Company with such forms upon any expiration, obsolescence or inaccuracy of any prior forms or upon request of the Company.

5.9 Fees and Taxes. The Company shall be responsible for the payment of the Placement Agents' fees, any financial advisory fees, or broker's commissions relating to or arising out of the transactions contemplated hereby, including, without limitation, any fees or commissions payable to placement agents as the Company may engage in connection with the transactions contemplated by the Transaction Agreements.

5.10 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 Purchasers under the Transaction Agreements.

5.11 Reporting Status. The Company shall timely file all reports required to be filed with the SEC pursuant to the Exchange Act, and the Company shall not terminate its status as an issuer required to file reports under the Exchange Act even if the Exchange Act or the rules and regulations thereunder would otherwise permit such termination.

5.12 Beneficial Ownership Limitation. Notwithstanding anything to the contrary set forth in the Certificate of Designations, the Company shall not effect any conversion of any share of Series A Preferred Stock, and a Purchaser shall not have the right to convert any portion of its Series A Preferred Stock, to the extent that, after giving effect to such attempted conversion set forth on an applicable Notice of Conversion with respect to the Series A Preferred Stock, such Purchaser (or any of such Purchaser's Affiliates or any other Person who would be a beneficial owner of Common Stock beneficially owned by the Purchaser for purposes of Section 13(d) or Section 16 of the Exchange Act and the applicable rules and regulations of the Commission, including any "group" of which the Purchaser is a member (the foregoing, "**Attribution Parties**")) would beneficially own a number of shares of Common Stock in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by such Purchaser and its Attribution

Parties shall include the number of shares of Common Stock issuable upon conversion of the Series A Preferred Stock subject to the Notice of Conversion or the Automatic Conversion, as applicable, with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (i) conversion of the remaining, unconverted Series A Preferred Stock beneficially owned by such Purchaser or any of its Attribution Parties, and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company beneficially owned by such Purchaser or any of its Attribution Parties that are subject to and would exceed a limitation on conversion or exercise similar to the limitation contained herein. Except as set forth in the preceding sentence, for purposes of this Section 5.12, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the applicable rules and regulations of the Commission, and the terms “beneficial ownership” and “beneficially own” have the meanings ascribed to such terms therein. In addition, for purposes hereof, “group” has the meaning set forth in Section 13(d) of the Exchange Act and the applicable rules and regulations of the Commission. For purposes of this Section 5.12, in determining the number of outstanding shares of Common Stock, a Purchaser may rely on the number of outstanding shares of Common Stock as stated in the most recent of the following: (i) the Company’s most recent periodic or annual filing with the Commission, as the case may be, (ii) a more recent public announcement by the Company that is filed with the Commission, or (iii) a more recent notice by the Company or the Company’s transfer agent to the Purchaser setting forth the number of shares of Common Stock then outstanding. For any reason at any time, upon the written request of a Purchaser (which may be by e-mail), the Company shall, within two (2) Trading Days of such request, confirm in writing to such Purchaser (which may be by e-mail) the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to any actual conversion or exercise of securities of the Company, including Series A Preferred Stock, by such Purchaser or its Attribution Parties since the date as of which such number of outstanding shares of Common Stock was last publicly reported or confirmed to the Purchaser. The “Beneficial Ownership Limitation” shall initially be set at the discretion of each Purchaser to a percentage between 0% and 19.9% of the number of shares of the Common Stock outstanding or deemed to be outstanding as of the applicable measurement date, and such percentage shall be set at 19.9% for any Holder that does not make such designation on the signature page hereto. The Company shall be entitled to rely on representations made to it by any Purchaser in any Notice of Conversion regarding its Beneficial Ownership Limitation. Notwithstanding the foregoing, by written notice to the Company, (i) any Purchaser may reset the Beneficial Ownership Limitation percentage to a higher percentage, not to exceed 19.9%, which increase will not be effective until the sixty-first (61st) day after such written notice is delivered to the Company, and (ii) any Purchaser may reset the Beneficial Ownership Limitation percentage to a lower percentage provided that such decrease shall not become effective until the later of (x) 5:00 p.m. Eastern time on the third Trading Day after the date of the Requisite Stockholder Approval and (y) if the Requisite Stockholder Approval is not obtained within six months after the initial issuance of the Series A Preferred Stock, the date that is three Trading Days after the date that is six months after the initial issuance of the Series A Preferred Stock. Upon such a change by a Purchaser of the Beneficial Ownership Limitation, not to exceed 19.9%, the Beneficial Ownership Limitation may not be further amended by such Purchaser without first providing the minimum notice required by this Section 5.12. Notwithstanding the foregoing, at any time following notice of a Fundamental Transaction, the Purchaser may waive and/or change the Beneficial Ownership Limitation effective immediately

upon written notice to the Company and may reinstitute a Beneficial Ownership Limitation at any time thereafter effective immediately upon written notice to the Company. The provisions of this Section 5.12 shall be construed, corrected and implemented in a manner so as to effectuate the intended Beneficial Ownership Limitation herein contained and the shares of Common Stock underlying the Securities in excess of the Beneficial Ownership Limitation shall not be deemed to be beneficially owned by the Purchaser for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the Exchange Act. Notwithstanding the foregoing, to the extent that such Purchaser already holds greater than 19.9% of the number of shares of the Common Stock outstanding or deemed to be outstanding as of the applicable measurement date, this Section 5.12 shall not apply. Capitalized terms used in this Section 5.12 without definition shall have the meanings ascribed to them in the Certificate of Designations.

5.13 Requisite Stockholder Approval. The Company shall hold a meeting of the stockholders on May 21, 2024 (the “**Annual Meeting**”), for the purpose of obtaining stockholder approval of the (i) conversion of all issued and outstanding Series A Preferred Stock into shares of Common Stock in accordance with the Nasdaq Stock Market Rules and (ii) issuance of the Securities to the Purchasers (the “**Requisite Stockholder Approval**”). The Company shall use its best efforts to solicit its stockholders’ approval of such resolution and to cause the Board of Directors to recommend to the stockholders that they approve such resolution. If the Requisite Stockholder Approval is not obtained at the Annual Meeting, the Company shall cause an additional meeting of stockholders to be held within 60 days from the date of the Annual Meeting (the “**Extended Stockholder Approval Period**”). If the Requisite Stockholder Approval is not obtained within the Extended Stockholder Approval Period, then the Company shall convene additional stockholder meetings every 60 days thereafter until the Requisite Stockholder Approval is obtained.

5.14 Conversion and Exercise Procedures. The form of Notice of Conversion included in the Certificate of Designations sets forth the totality of the procedures required of the Purchasers in order to convert the Securities. Without limiting the preceding sentence, no ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required in order for the registered holder thereof to convert the Securities. No additional legal opinion, other information or instructions shall be required of a Purchaser to convert its Securities. The Company shall honor conversions of the Securities and shall deliver Conversion Shares in accordance with the terms, conditions and time periods set forth in the Transaction Agreements.

5.15 Short Sales After the Date Hereof. Such Purchaser shall not engage, directly or indirectly, in any transactions in the Company’s securities (including, without limitation, any Short Sales involving the Company’s securities) during the period from the date hereof until the earlier of such time as (i) the transactions contemplated by this Agreement are first publicly announced as required by and described in Section 5.3 or (ii) this Agreement is terminated in full pursuant to Section 7.

Notwithstanding the foregoing, no Purchaser makes any representation, warranty or covenant hereby that it will not engage in Short Sales in the securities of the Company after the time that the transactions contemplated by this Agreement are first publicly announced as described in Section 5.3; *provided, however*, each Purchaser agrees, severally and not jointly with any Purchasers, that they will not enter into any Net Short Sales (as hereinafter defined) from the period commencing on the Approval Closing Date and ending on the earliest of (x) the Effective Date, (y) the twenty-four (24) month anniversary of the Approval Closing Date or (z) the date that such Purchaser no longer holds any Securities. For purposes of this Section 5.15, a “Net Short Sale” by any Purchaser shall mean a sale of Common Stock by such Purchaser that is marked by such Purchaser as a short sale and that is made at a time when there is no equivalent offsetting long position in Common Stock held by such Purchaser. Notwithstanding the foregoing, in the event that a Purchaser is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser’s assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser’s assets, the representation set forth above shall apply only with respect to the portion of assets managed by the portfolio manager that have knowledge about the financing transaction contemplated by this Agreement. Moreover, notwithstanding the foregoing, in the event that a Purchaser has sold Securities pursuant to Rule 144 prior to the Effective Date and the Company has failed to deliver certificates without legends prior to the settlement date for such sale (assuming that such certificates meet the requirements set forth in Section 5.7 for the removal of legends), the provisions of this Section 5.15 shall not prohibit the Purchaser from entering into Net Short Sales for the purpose of delivering shares of Common Stock in settlement of such sale. Each Purchaser understands and acknowledges, severally and not jointly with any other Purchaser, that the Commission currently takes the position that covering a short position established prior to effectiveness of a resale registration statement with shares included in such registration statement would be a violation of Item 239.10 of the Securities Act Sections Compliance and Disclosure Interpretations issued by the Commission’s Division of Corporation Finance.

5.16 Equal Treatment of Purchasers. No consideration shall be offered or paid to any Purchaser to amend or consent to a waiver or modification of any provision of this Agreement unless the same consideration is also offered to all of the Purchasers. For clarification purposes, this provision constitutes a separate right granted to each Purchaser by the Company and negotiated separately by each Purchaser and shall not in any way be construed as the Purchasers acting in concert or as a group with respect to the purchase, disposition or voting of shares of Common Stock or otherwise.

## 6. Conditions of Closing.

6.1 Conditions to the Obligation of the Purchasers. The several obligations of each Purchaser to consummate the transactions to be consummated at the Approval Closing, and to purchase and pay for the Securities being purchased by it at the Approval Closing pursuant to this Agreement, are subject to the satisfaction or the waiver by such Purchaser 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 hereof 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.

(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 Approval Closing Date.

(c) No Injunction. At the Approval Closing, the purchase of and payment for the Securities by each Purchaser 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 Securities at the Approval Closing.

(f) Opinion of Company Counsel. The Company shall have delivered to the Purchasers and the Placement Agents the opinion of Sidley Austin LLP, dated as of the Closing Date in customary form and substance to be reasonably agreed upon with the Purchasers and addressing such legal matters as the Purchasers and the Company reasonably agree.

(g) Compliance Certificate. An authorized officer of the Company shall have delivered to the Purchasers 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) and 6.1(j) (Listing Requirements) of this Agreement have been fulfilled.

(h) Secretary's Certificate. The Secretary of the Company shall have delivered to the Purchasers at the Approval Closing Date a certificate certifying (i) the Amended and Restated Certificate of Incorporation; (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.

(i) 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 Purchasers.

(j) 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.



(k) 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 entity, shall have been issued, and no action or proceeding shall have been instituted by any governmental entity, enjoining or preventing the consummation of the transactions contemplated hereby or in the other Transaction Agreements.

(l) A lock-up agreement from the Company's officers and directors in a form previously agreed to with TD Securities (USA) LLC, William Blair & Company, L.L.C. and Canaccord Genuity LLC.

(m) This Agreement shall not have been terminated as to such Purchaser in accordance with Section 7 hereof.

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 Purchaser 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 Purchaser in Section 4 hereto shall be true and correct on and as of the Approval 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 Purchaser of each of the representations, warranties, covenants and agreements of the Purchaser contained in this Agreement as of the Approval Closing Date.

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

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

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

(e) 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 Purchaser at the Approval Closing as set forth in Exhibit A.

## 7. Termination.

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

(i) Upon the mutual written consent of the Company and the Purchaser prior to the Approval 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 the Purchaser if any of the conditions set forth in Section 6.1 shall have become incapable of fulfillment, and shall not have been waived by the Purchaser; or

(iv) By either the Company or the Purchaser if the Approval Closing has not occurred on or prior to the fifth Trading Day following the Requisite Stockholder Approval;

provided, however, that, except in the case of clauses (ii), (iii) and (iv) 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 Approval Closing.

7.2 Notice. In the event of termination by the Company or the Purchaser of its obligations to effect the Closing pursuant to Section 7.1, written notice thereof shall be given to the other party. 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 Purchaser shall make any public announcement with respect to the existence or terms of this Agreement or the transactions provided for herein without the prior approval of the other parties 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 Purchaser reasonable time to comment on such release or announcement in advance of such issuance. The Company shall not include the name of the Purchaser in any press release or public announcement (which, for the avoidance of doubt, shall not include any filing with the SEC) without the prior written consent of the Purchaser, 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 Purchaser, to the extent reasonably practicable in the circumstances, reasonable time to comment on such release or announcement in advance of such issuance. Interpretation. The words "hereof," "herein" and "hereunder" and words of similar import when used in this Agreement will refer to this Agreement as a whole and not to any particular provision of this Agreement, and section and subsection references are to this Agreement unless otherwise specified. The headings in this Agreement are included for convenience of reference only and will not limit or otherwise affect the meaning or interpretation of this Agreement. Whenever the words "include," "includes" or "including" are used in this Agreement, they will be deemed to be followed by the words "without limitation." The phrases "the date of this Agreement," "the date hereof" and terms of similar import, unless the context otherwise

requires, will be deemed to refer to the date set forth in the first paragraph of this Agreement. The meanings given to terms defined herein will be equally applicable to both the singular and plural forms of such terms. All matters to be agreed to by any party hereto must be agreed to in writing by such party unless otherwise indicated herein. References to agreements, policies, standards, guidelines or instruments, or to statutes or regulations, are to such agreements, policies, standards, guidelines or instruments, or statutes or regulations, as amended or supplemented from time to time (or to successors thereto).

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:

Biodesix, Inc.  
919 West Dillon Rd.  
Louisville, CO 80027  
Attention: Robin Harper Cowie  
Email: robin.cowie@biodesix.com

with a copy (which shall not constitute notice):

Sidley Austin LLP  
555 California Street, Suite 2000  
San Francisco, CA 94104  
Attention: Frank F. Rahmani; Samir A. Gandhi  
Email: frahmani@sidley.com; sgandhi@sidley.com

(b) If to any Purchaser, at its address set forth on Exhibit A or to such e-mail address, or 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 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.

8.4 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 Purchasers 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 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.

8.5 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.

8.6 Expenses. Except as expressly set forth in the Transaction Agreements 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 Purchasers. The Company shall pay all Placement Agent fees relating to or arising out of the transactions contemplated by this Agreement.

8.7 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 a Purchaser, and (y) the Purchasers, in the case of the Company, provided that a Purchaser 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 Purchaser (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 hereof). 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.

#### 8.8 Confidential Information.

(a) Each Purchaser covenants that until such time as the transactions contemplated by this Agreement and any material non-public information provided to such Purchaser are publicly disclosed by the Company (which the Company shall effect in accordance with Section 5.3 hereof), such Purchaser 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 Purchaser's outside attorney, accountant, auditor or investment advisor 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 Purchasers such additional information as the Company may deem necessary to evaluate the eligibility of the Purchaser to acquire the Securities, and the Purchaser 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 Purchaser 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 Purchaser 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.

#### 8.9 Reliance by and Exculpation of Placement Agents.

(a) Each Purchaser agrees for the express benefit of each Placement Agent, its affiliates and its representatives that (i) such 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, and such Purchaser will not rely on any statements made by such Placement Agent, orally or in writing, to the contrary, (ii) such Purchaser will be responsible for conducting its own due diligence investigation with respect to the Company and the offer and sale of the Securities, (iii) such Purchaser will be purchasing Securities based on the results of its own due diligence investigation of the Company and such 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 Purchaser by the Company, (iv) such Purchaser has negotiated the offer and sale of the Securities directly with the Company, and such Placement Agent will not be responsible for the ultimate success of any such investment and (v) the decision to invest in the Company will involve a significant degree of risk, including a risk of total loss of such investment. Each Purchaser further represents and warrants to each 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 8.9 shall survive any termination of this Agreement.

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

(c) Neither the Placement Agents nor any of their respective 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, 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, willful misconduct or bad faith.

(d) The Company agrees that the Placement Agents, their respective 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 a Placement Agent hereunder pursuant to the indemnification provisions set forth in the applicable letter agreement between the Company and each Placement Agent.

8.10 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, the Placement Agents are an intended third-party beneficiary of the representations and warranties of the Company and of each Purchaser set forth in Section 3, Section 4 and Section 6.1(h) and Section 8.9 respectively, of this Agreement.

8.11 Independent Nature of Purchasers' Obligations and Right. The obligations of each Purchaser under this Agreement are several and not joint with the obligations of any other Purchaser, and no Purchaser shall be responsible in any way for the performance obligations of any other Purchaser under this Agreement. Nothing contained herein, and no action taken by any Purchaser pursuant hereto, shall be deemed to constitute the Purchasers as, and the Company acknowledges that the Purchasers do not so constitute, a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Purchasers 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 Purchaser confirms that it has independently participated in the negotiation of the transaction contemplated hereby with the advice of its own counsel and advisors. Each Purchaser also acknowledges that Sidley Austin LLP has rendered legal advice to the Company and not such Purchaser. Each Purchaser 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 Purchaser to be joined as an additional party in any proceeding for such purpose. The Company has elected to provide all Purchasers 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 Purchaser.

8.12 Counterparts. This Agreement may be signed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument.

8.13 Entire Agreement; Amendments. This Agreement and the other Transaction Agreements constitute the entire agreement between the parties hereto respecting the subject matter hereof and supersedes all prior agreements, negotiations, understandings, representations and statements respecting the subject matter hereof, whether written or oral. No 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 Purchasers of at least a majority in interest of the Series A Preferred Stock then held by the Purchasers. 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 Purchaser without the written consent of such Purchaser unless such amendment or waiver applies to all Purchasers in the same

fashion and provided that the consent of each Purchaser is required for the waiver of any of the conditions set forth in Sections 6.1(f) or 6.1(k). The Company, on the one hand, and each Purchaser, on the other hand, may by an instrument signed in writing by such parties waive the performance, compliance or satisfaction by such Purchaser or the Company, respectively, with any term or provision hereof or any condition hereto to be performed, complied with or satisfied by such Purchaser or the Company, respectively.

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

8.15 Mutual Drafting. This Agreement is the joint product of each Purchaser 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.

8.16 Additional Matters. 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.

8.17 Further Assurances. The parties shall execute and deliver all such further instruments and documents and take all such other actions as may reasonably be required to carry out the transactions contemplated hereby and to evidence the fulfillment of the agreements herein contained

*[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:**

BIODESIX, INC.

By: /s/ Robin Harper Cowie \_\_\_\_\_  
Name: Robin Harper Cowie  
Title: Chief Financial Officer

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

**PURCHASER:**

**Birchview Fund**

By: /s/ Matthew Strobeck \_\_\_\_\_

Name: Matthew Strobeck

Title: Managing Director

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

**PURCHASER:**

**Birchview Capital Separately Managed Account**

By: /s/ Matthew Strobeck

Name: Matthew Strobeck

Title: Managing Director

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

**PURCHASER:**

**Robin Harper Cowie**

By: /s/ Robin Harper Cowie

Name: Robin Harper Cowie

Title: Investor

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

**PURCHASER:**

**Scott Hutton**

By: /s/ Scott Hutton

Name: Scott Hutton

Title: CEO

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

**PURCHASER:**

**KFDI-B LLC**

By: /s/ Lawrence T. Kennedy, Jr.

Name: Lawrence T. Kennedy, Jr.

Title: Manager

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

**PURCHASER:**

**Lawrence T. Kennedy, Jr., Perpetuity Trust UAD  
6/30/2016**

By: /s/ Susan Callahan \_\_\_\_\_

Name: Susan Callahan

Title: Vice President, Trustee, Bryn Mawr Trust of DE

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

**PURCHASER:**

**Robert Lunt**

By: /s/ Robert Lunt

Name: Robert Lunt

Title: Senior Director of Marketing



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

**PURCHASER:**

**Kieran O’Kane**

By: /s/ Kieran O’Kane

Name: Kieran O’Kane

Title: Chief Commercial Officer

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

**PURCHASER:**

**John Patience Trust dated 7/23/1993**

By: /s/ John Patience \_\_\_\_\_

Name: John Patience

Title: Trustee

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

**PURCHASER:**

**Gary Pestano**

By: /s/ Gary Pestano

Name: Gary Pestano

Title: Chief Development Officer

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

**PURCHASER:**

**Jack Schuler**

By: /s/ Jack Schuler

Name: Jack Schuler

Title: Investor

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

**PURCHASER:**

**S.C. Springmeyer**

By: /s/ S.C. Springmeyer

Name: S.C. Springmeyer

Title: Chief Medical Officer

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

**PURCHASER:**

**Chris Vazquez**

By: /s/ Chris Vazquez

Name: Chris Vazquez

Title: Chief Accounting Officer

**EXHIBIT A**

**PURCHASERS**

<u>Purchaser Name and Address</u>	<u>Number of Common Shares</u>	<u>Number of Preferred Shares</u>	<u>Aggregate Purchase Price</u>	<u>Beneficial Ownership Limitation</u>
Birchview Capital Separately Managed Account	52,160	1,304	\$ 60,008	19.99%
Birchview Fund	295,680	7,392	\$ 340,008	19.99%
John Patience Trust dated 7/23/993	217,400	5,435	\$ 250,010	19.99%
Jack Schuler	86,960	2,174	\$ 100,004	N/A
KFDI-B LLC	2,608,720	65,218	\$3,000,008	N/A
Lawrence T. Kennedy, Jr., Perpetuity Trust UAD 6/30/2016	1,739,120	43,478	\$2,000,008	N/A
Scott Hutton	26,120	653	\$ 30,038	19.99%
Robin Harper Cowie	13,080	327	\$ 15,042	19.99%
Kieran O'Kane	13,080	327	\$ 15,042	19.99%
Steven Springmeyer	8,720	218	\$ 10,028	19.99%
Robert Lunt	8,720	218	\$ 10,028	19.99%
Gary Pestano	880	22	\$ 1,012	19.99%
Chris Vazquez	880	22	\$ 1,012	19.99%
<b>TOTAL:</b>	<b><u>5,071,520</u></b>	<b><u>126,788</u></b>	<b><u>\$5,832,248</u></b>	

---

**EXHIBIT B**

**FORM OF REGISTRATION RIGHTS AGREEMENT**

B-1



---

**EXHIBIT C**

**CERTIFICATE OF DESIGNATION**

C-1

## REGISTRATION RIGHTS AGREEMENT

**THIS REGISTRATION RIGHTS AGREEMENT** (this “**Agreement**”), dated as of April 5, 2024, is entered into by and among Bidesix, 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 760,857 shares (the “**Shares**”) of the Company’s Series A Non-Voting Convertible Preferred Stock, par value \$0.001 per share (the “**Series A Preferred Stock**”), pursuant to the Purchase Agreement.

B. To induce the Investors to enter into the Purchase Agreement, the Company has agreed to provide certain registration rights under the 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) “**Common Stock**” means the Company’s common stock, par value \$0.001 per share.

(b) “**Convertible Shares**” means the shares of Common Stock which may be issued upon conversion of the Series A Preferred Stock issued to the Investors pursuant to the Purchase Agreement.

(c) “**Person**” means any individual or entity including but not limited to any corporation, limited liability company, association, partnership, organization, business, individual, governmental or political subdivision thereof or a governmental agency.

(d) “**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 United States Securities and Exchange Commission (the “**SEC**”).

(e) “**Registrable Securities**” means, without regard to any beneficial ownership limitations, the Convertible Shares and any Common Stock issued or issuable with respect to the Shares or the Convertible 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 earliest to occur of the following events: (i) the date that is five years following the initial effective date of the Registration Statement; and (ii) the date on which the Investors shall have resold all the Registrable Securities covered by the Registration Statement.

(f) “**Registration Expenses**” shall mean 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), and (v) all fees and disbursements of one special counsel for Investors during the term of this Agreement, in an amount not to exceed \$35,000.

(g) “**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.

(h) “**Selling Expenses**” shall mean 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.

(i) “**Trading Day**” means a day on which the Nasdaq Global Select Market is open for business.

## 2. REGISTRATION.

(a) Mandatory Registration. The Company shall, as promptly as reasonably practicable and in any event no later than April 23, 2024 (the “**Filing Deadline**”), prepare and file with the SEC an initial Registration Statement (the “**Initial Registration Statement**”), covering the resale of only Registrable Securities of Investors eligible to sell under the Securities Act. 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 four (4) 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 (including any documents incorporated by reference therein), prior to its filing with the SEC. The Company shall (a) use its reasonable best 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 related 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) The Company shall use its reasonable best efforts to have the Initial Registration Statement and the amendment(s) declared effective by the SEC no later than fifty (50) days following the closing of the transactions set forth in the Purchase Agreement (the “**Effectiveness Deadline**”), subject to the approval of the conversion of Convertible Shares being received at the Company’s 2024 annual meeting of stockholders on May 21, 2024. The Company shall notify the Investors by e-mail as promptly as practicable, and in any event, within twenty-four (24) hours, after the Registration Statement is declared effective or is supplemented and shall provide the Investor with copies of any related 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 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 that is five years following the initial effective date of the Registration Statement; (ii) the date on which the Investors shall have resold all the Registrable Securities covered thereby; and (iii) 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 the 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 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.

(d) Liquidated Damages. If (i) the Initial Registration Statement has not been declared effective by the Effectiveness Deadline, (ii) 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 twenty (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, or (iii) after the Filing Deadline, and only in the event a Registration Statement is not effective or available to sell all Registrable Securities, the Company fails to file with the SEC any required reports under Section 13 or 15(d) of the Exchange Act such that it is not in compliance with Rule 144(c)(1), as a result of which the Investors who are not affiliates of the Company are unable to sell Registrable Securities without restriction under Rule 144 (each of (i), (ii), and (iii), a “**Maintenance Failure**”), 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 following the date by which such Registration Statement should have been effective (the “**Blackout Period**”). 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 “**Allowed Delay**” shall mean a period for no more than 30 consecutive calendar days or more than an aggregate of 60 calendar days (which need not be consecutive calendar days) during any 12-month period in which the Company determines in good faith that the

suspension of a Registration Statement is necessary. The amounts payable as liquidated damages pursuant to this paragraph shall be paid in cash no later than five (5) 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 (3) 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) **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 have its legal counsel, at such Investor’s expense, to review and oversee any registration or matters pursuant to this Section 2(e), 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(e), 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(e) 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 obtain effectiveness with respect to such Cut Back Shares shall be the fifty-fifth (55<sup>th</sup>) 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 promptly 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 the amendments, post-effective amendments or supplements to the Initial Registration Statement, any New Registration Statement or any related prospectus, as applicable, that, (a) as may be necessary to keep such Registration Statement effective for the Effectiveness Period and to comply with the provisions of the Securities Act and 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 four (4) 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 use best 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 48 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 (and shall not so disclose to any Investor without such Investor's prior written consent) 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 sixty (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 ninety (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 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 Global Select Market.

(h) The Company shall otherwise use best efforts to comply with all applicable rules and regulations of the SEC under the Securities Act and the Securities Exchange Act of 1934, as amended (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 Effectiveness 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;

(i) Blue-Sky. The Company shall use best efforts to 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 (6) 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; (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 and (iv) provide any legal opinions.

(k) 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.

(l) The Company shall use reasonable best efforts to cause the Company's transfer agent to remove any restrictive legend from any Registrable Securities, as promptly as practicable following such request.

#### **4. OBLIGATIONS OF THE INVESTORS.**

(a) Investor Information. The Investors shall provide a completed Investor Questionnaire in the form attached hereto as Exhibit A in connection with the registration of the Registrable Securities not more than five (5) Trading Days following the date of this Agreement. The Investors will as promptly as practicable notify the Company of any material change in the information provided hereunder,



other than changes in its ownership of Common Stock. At least five (5) Trading Days prior to the first anticipated filing date of a Registration Statement for any registration under this Agreement, the Company will notify each Investor of the information the Company requires from that Investor for inclusion in the Registration Statement other than the information contained in the Investor Questionnaire, if any, which shall be completed and delivered to the Company promptly upon request and, in any event, within three (2) Trading Days prior to the applicable anticipated filing date. Each Investor further agrees that it shall not be entitled to be named as a selling securityholder in the Registration Statement or use the prospectus for offers and resales of Registrable Securities at any time, unless such Investor has provided such information to the Company and responded to any reasonable requests for further information as described in the previous sentence. Each Investor acknowledges and agrees that the information in the Investor Questionnaire or request for further information as described in this Section 4(a) will be used by the Company in the preparation of the Registration Statement and hereby consents to the inclusion of such information in the Registration Statement (subject to such Investor's right to timely review the Registration Statement as set forth herein).

(b) Suspension of Sales. The Investors agree that, upon receipt of any notice from the Company of the existence of Suspension Event as set forth in Section 3(e), the Investors will immediately discontinue disposition of Registrable Securities pursuant to any Registration Statement covering such Registrable Securities until the Investors' receipt of a notice from the Company confirming the resolution of such Suspension Event and that such dispositions may again be made.

(c) Investor Cooperation. The Investors agree to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of the amendments and supplements to any Registration Statement or New Registration Statement hereunder, unless 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 each Investor, the members, the directors, officers, partners, employees, members, managers, agents, representatives and advisors of such Investor and each Person, if any, who controls such Investor 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 (with the prior consent of the Company, such consent not to be unreasonably withheld) 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 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 relevant Investor or such relevant 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, if such 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 be available to the extent such Claim is based on a failure of the relevant Investor to deliver, or cause to be delivered, if required the prospectus to the Persons asserting an untrue statement or omission or alleged untrue statement or omission at or prior to the written confirmation of the sale of Registrable Securities; and (D) 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. 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 (collectively and together with an Indemnified Person, 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 the relevant 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 any 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 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 which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party or Indemnified Person of a release from all liability in respect to such claim or litigation. 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 6 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.

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 Investors holding a majority of the Registrable Securities then outstanding; 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 Investors holding a majority of the Registrable Securities then outstanding shall not be required for such transaction. No Investor may assign its rights under this Agreement, other than to an affiliate of such Investor, without the prior written consent of the Company. 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 or supplemented, or waived only by a written instrument executed by (i) the Company and (ii) the holders of a majority of the then outstanding Registrable Securities (voting together as a single class), provided that any party may give a waiver as to itself and provided further provided that 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. 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 (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:

i. If to the Company, addressed as follows:

Biodesix, Inc.  
919 West Dillon Rd.  
Louisville, CO 80027  
Attention: Robin Harper Cowie  
Email: robin.cowie@biodesix.com

with a copy (which shall not constitute notice):

Sidley Austin LLP.  
555 California Street, Suite 2000  
San Francisco, CA 94104  
Attention: Frank F. Rahmani; Samir A. Gandhi  
Email: frahmani@sidley.com; sgandhi@sidley.com

ii. If to any Investor, at its e-mail address or address set forth on Exhibit A 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) No Waiver. No failure or delay on the part of either party hereto in the exercise of any power, right or privilege under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude any other or further exercise thereof or of any other right, power or privilege.

(c) Governing Law. The provisions of Section 8.4 of the Purchase Agreement are incorporated by reference herein *mutatis mutandis*.

(d) Integration. This Agreement, the Purchase Agreement and the other Transaction Agreements constitute the entire understanding among the parties hereto with respect to the subject matter hereof and thereof. There are no restrictions, promises, warranties or undertakings, other than those set forth or referred to herein and therein. This Agreement, the Purchase Agreement and the other Transaction Agreements supersede all other prior oral or written agreements between the Investors, the Company, their affiliates and persons acting on their behalf with respect to the subject matter hereof and thereof.

(e) No Third Party Benefits. Subject to the requirements of Section 8, this Agreement shall inure to the benefit of and be binding upon the permitted successors and assigns of each of the parties hereto. It is agreed that the Indemnified Persons are intended third party beneficiaries of Sections 6 and 7 of this Agreement.

(f) 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.

(g) 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.

(h) 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.

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

(j) This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

(k) Any provision of this Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof but shall be interpreted as if it were written so as to be enforceable to the maximum extent permitted by applicable law, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. To the extent permitted by applicable law, the parties hereby waive any provision of law which renders any provisions hereof prohibited or unenforceable in any respect.

(l) 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.

(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:**

BIODESIX, INC.

By: /s/ Robin Harper Cowie \_\_\_\_\_

Name: Robin Harper Cowie

Title: Chief Financial Officer

*[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:**

**AIGH Investment Partners LP**

By: /s/ Orin Hirschman

Name: Orin Hirschman

Title: Managing Member, AIGH Capital Management  
LLC

*[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:**

**BEMAP Master Fund Ltd**

**c/o Monashee Investment Management, LLC**

By: /s/ Jeff Muller

Name: Jeff Muller

Title: CCO, Monashee Investment Management, LLC

*[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:**

**BLACKSTONE CSP-MST FMAP Fund**

**c/o Monashee Investment Management, LLC**

By: /s/ Jeff Muller

Name: Jeff Muller

Title: CCO, Monashee Investment Management, LLC

*[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:**

**CVI Investments, Inc., By: Heights Capital Management,  
Inc., its authorized agent**

By: /s/ Martin Kobinger

Name: Martin Kobinger

Title: President

*[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:**

**Farallon Capital (AM) Investors, L.P.**

By: /s/ Philip Dreyfuss

Name: Philip Dreyfuss

Title: Authorized Signatory

*[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:**

**Farallon Capital F5 Master I, L.P.**

By: /s/ Philip Dreyfuss

Name: Philip Dreyfuss

Title: Authorized Signatory

*[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:**

**Farallon Capital Institutional Partners, L.P.**

By: /s/ Philip Dreyfuss

Name: Philip Dreyfuss

Title: Authorized Signatory

*[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:**

**Farallon Capital Institutional Partners II, L.P.**

By: /s/ Philip Dreyfuss

Name: Philip Dreyfuss

Title: Authorized Signatory

*[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:**

**Farallon Capital Institutional Partners III, L.P.**

By: /s/ Philip Dreyfuss

Name: Philip Dreyfuss

Title: Authorized Signatory

*[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:**

**Farallon Capital Offshore Investors II, L.P.**

By: /s/ Philip Dreyfuss

Name: Philip Dreyfuss

Title: Authorized Signatory

*[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:**

**Farallon Capital Partners, L.P.**

By: /s/ Philip Dreyfuss

Name: Philip Dreyfuss

Title: Authorized Signatory

*[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:**

**Four Crossings Institutional Partners V, L.P.**

By: /s/ Philip Dreyfuss

Name: Philip Dreyfuss

Title: Authorized Signatory

*[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:**

**PURCHASER: Mission Pure Alpha LP**

**c/o Monashee Investment Management**

By: /s/ Jeff Muller

Name: Jeff Muller

Title: CCO, Monashee Investment Management, LLC

*[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:**

**Monashee Pure Alpha SPV I LP**

**c/o Monashee Investment Management, LLC**

By: /s/ Jeff Muller

Name: Jeff Muller

Title: CCO, Monashee Investment Management, LLC

*[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:**

**Opaley, L.P.**

By: /s/ James Silverman

Name: James Silverman

Title: President

*[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:**

**PCOF EQ AIV IV, LP**

By: PCOF EQ AIV GP, LLC, its general partner

By: /s/ Sandeep Dixit

Name: Sandeep Dixit

Title: Chief Credit Officer

By: /s/ Sam Chawla

Name: Sam Chawla

Title: Portfolio Manager

*[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:**

**Perceptive Credit Holdings IV, LP**

By: Perceptive Credit Opportunities GP, LLC, its general partner

By: /s/ Sandeep Dixit

Name: Sandeep Dixit

Title: Chief Credit Officer

By: /s/ Sam Chawla

Name: Sam Chawla

Title: Portfolio Manager

*[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:**

**SilverArc Capital Alpha Fund I, L.P.**

By: /s/ Andrew Timpson

Name: Andrew Timpson

Title: Chief Operating Officer, SilverArc Capital  
Management, LLC, in its capacity as investment  
manager to SilverArc Capital Alpha Fund I, L.P.

*[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:**

**SilverArc Capital Alpha Fund II, L.P.**

By: /s/ Andrew Timpson

Name: Andrew Timpson

Title: Chief Operating Officer, SilverArc Capital  
Management, LLC, in its capacity as investment  
manager to SilverArc Capital Alpha Fund II, L.P.

*[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:**

**Sio Capital Management, LLC**

By: /s/ Michael Castor

Name: Michael Castor

Title: Portfolio Manager

*[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:**

**SOLEUS CAPITAL MASTER FUND, L.P.**

**By: Soleus Capital, LLC, as general partner**

By: /s/ Steven Musumeci

Name: Steven Musumeci

Title: COO

*[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:**

**Squarepoint Diversified Partners Fund Limited**

By: /s/ Andrew Timpson

Name: Andrew Timpson

Title: Chief Operating Officer, SilverArc Capital  
Management, LLC, in its capacity as investment  
manager to Squarepoint Diversified Partners Fund  
Limited

*[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:**

**ST Global Health LP**

By: /s/ Lauren Schmidt

Name: Lauren Schmidt

Title: Partner

*[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:**

**Telemark Fund, LP**

By: Telemark Asset Management, LLC

By: /s/ Brian C. Miley

Name: Brian C. Miley

Title: CFO, Telemark Asset Management, LLC

*[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:**

**WVP Emerging Manager Onshore Fund, LLC –  
Optimized Equity Series**

By: /s/ Orin Hirschman  
Name: Orin Hirschman  
Title: Managing Member, AIGH Capital Management  
LLC

*[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:**

**WVP Emerging Manager Onshore Fund, LLC – AIGH Series**

By: /s/ Orin Hirschman  
Name: Orin Hirschman  
Title: Managing Member, AIGH Capital Management  
LLC

*[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:**

**Birchview Fund**

By: /s/ Matthew Strobeck \_\_\_\_\_

Name: Matthew Strobeck

Title: Managing Director

*[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:**

**Birchview Capital Separately Managed Account**

By: /s/ Matthew Strobeck

Name: Matthew Strobeck

Title: Managing Director

*[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:**

**Robin Harper Cowie**

By: /s/ Robin Harper Cowie

Name: Robin Harper Cowie

Title: Investor

*[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:**

**Scott Hutton**

By: /s/ Scott Hutton

Name: Scott Hutton

Title: CEO

*[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:**

**KFDI-B LLC**

By: /s/ Lawrence T. Kennedy, Jr.

Name: Lawrence T. Kennedy, Jr.

Title: Manager

Address:

1700 Madison Road, Suite 200

Cincinnati, OH 45206

Email: lair@westwoodmgmt.com

*[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:**

**Lawrence T. Kennedy, Jr., Perpetuity Trust UAD  
6/30/2016**

By:         /s/ Susan Callahan        

Name: Susan Callahan

Title: Vice President, Trustee, Bryn Mawr Trust of DE

*[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:**

**Robert Lunt**

By: /s/ Robert Lunt

Name: Robert Lunt

Title: Senior Director of Marketing

*[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:**

**Kieran O’Kane**

By: /s/ Kieran O’Kane

Name: Kieran O’Kane

Title: Chief Commercial Officer

*[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:**

**John Patience Trust dated 7/23/1993**

By: /s/ John Patience

Name: John Patience

Title: Trustee

*[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:**

**Gary Pestano**

By: /s/ Gary Pestano

Name: Gary Pestano

Title: Chief Development Officer

*[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:**

**Jack Schuler**

By: /s/ Jack Schuler

Name: Jack Schuler

Title: Investor

*[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:**

**S.C. Springmeyer**

By: /s/ S.C. Springmeyer

Name: S.C. Springmeyer

Title: Chief Medical Officer

*[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:**

**Chris Vazquez**

By: /s/ Chris Vazquez

Name: Chris Vazquez

Title: Chief Accounting Officer

*[Signature Page to Registration Rights Agreement]*

**Exhibit A**

**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: Nicole Garrett at Sidley Austin LLP, counsel to the Company <ngarrett@sidley.com>**

**Biodesix Announces Pricing of Oversubscribed and Upsized Underwritten Offering of Common Stock and Concurrent Private Placement**

**LOUISVILLE, CO, April 5, 2024** – Biodesix, Inc. (Nasdaq: BDSX), a leading diagnostic solutions company with a focus in lung disease, today announced the pricing of its underwritten offering of 17,391,832 shares of its common stock at a price to the public of \$1.15 per share. In addition, Biodesix has entered into securities purchase agreements for a concurrent private placement of 760,857 shares of its Series A Non-Voting Convertible Preferred Stock at a price of \$46.00 per share. Subject to Biodesix stockholder approval, each share of Series A Non-Voting Convertible Preferred Stock will automatically convert to 40 shares of common stock for an aggregate of 30,434,280 shares of common stock. The gross proceeds to Biodesix from the underwritten offering and concurrent private placement, before deducting underwriting discounts and commissions, placement agent fees and other offering expenses payable by Biodesix, and following the receipt of stockholder approval, are expected to be \$55.0 million.

Certain members of management, certain of our directors and funds affiliated with these directors are participating in the concurrent private placement.

TD Cowen, William Blair and Canaccord Genuity are acting as joint bookrunning managers for the underwritten offering and placement agents for the concurrent private placement. Lake Street Capital Markets is acting as lead manager for the underwritten offering and placement agent for the concurrent private placement.

The underwritten offering and concurrent private placement are expected to close on or about April 9, 2024, subject to the satisfaction of customary closing conditions and, in the case of the investment by certain of our directors and funds affiliated with our directors, stockholder approval. The transactions are not contingent on each other.

The shares in the underwritten offering are being offered by Biodesix pursuant to a shelf registration statement on Form S-3 that was initially filed with the Securities and Exchange Commission (“SEC”) on November 15, 2021 and declared effective by the SEC on November 29, 2021. The underwritten offering is being made by means of a prospectus supplement and accompanying prospectus that form part of the registration statement. When available, a prospectus supplement and accompanying prospectus relating to, and describing the terms of, the underwritten offering will be filed with the SEC and will be available on the SEC’s website at [www.sec.gov](http://www.sec.gov).

The shares of Series A Non-Voting Convertible Preferred Stock proposed to be issued in the concurrent private placement and the common stock underlying such shares of Series A Non-Voting Convertible Preferred Stock have not been registered under the Securities Act, or the securities laws of any state or other jurisdiction in the United States, and may not be offered, pledged, sold, delivered or otherwise transferred, directly or indirectly, in the United States except as pursuant to registration under the Securities Act or an applicable exemption from the registration requirements of the Securities Act and, in each case, in compliance with applicable other securities laws. Concurrently with the execution of the securities purchase agreement, Biodesix and the investors entered into a registration rights agreement pursuant to which the Company has agreed to file a registration statement with the SEC registering the sale of the shares of common stock underlying the shares of Series A Non-Voting Convertible Preferred Stock sold in the concurrent private placement.

Copies of the prospectus supplement and the accompanying prospectus relating to the underwritten offering can be obtained by contacting: TD Securities (USA) LLC, 1 Vanderbilt Avenue, New York, NY 10017, by telephone at (855) 495-9846 or by email at TD.ECM\_Prospectus@tdsecurities.com; William Blair & Company, L.L.C., Attention: Prospectus Department, 150 North Riverside Plaza, Chicago, IL 60606, by telephone at (800) 621-0687, or by email at prospectus@williamblair.com; or Canaccord Genuity LLC, One Post Office Square, Suite 3000, Boston, MA 02109, Attn: Syndicate Department, by telephone at (617) 371-3900, or by email at prospectus@cgf.com.

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

### **About Biodesix**

Biodesix is a leading diagnostic solutions and services company with a focus in lung disease. The Company develops diagnostic tests addressing important clinical questions by combining multi-omics through the power of artificial intelligence. Biodesix offers five Medicare-covered tests for patients with lung diseases. The blood based Nodify Lung<sup>®</sup> Nodule Risk Assessment testing strategy, consisting of the Nodify XL2<sup>®</sup> and the Nodify CDT<sup>®</sup> tests, evaluates the risk of malignancy in incidental pulmonary nodules, enabling physicians to better triage patients to the most appropriate course of action. The blood based IQLung<sup>™</sup> strategy for lung cancer patients integrates the GeneStrat<sup>®</sup> targeted ddPCR<sup>™</sup> test, the GeneStrat NGS<sup>®</sup> test and the VeriStrat<sup>®</sup> test to support treatment decisions across all stages of lung cancer with results in an average of two to three business days, expediting the time to treatment. Biodesix also leverages the proprietary and advanced Diagnostic Cortex<sup>®</sup> AI (Artificial Intelligence) platform, to collaborate with many of the world's leading biotechnology and pharmaceutical companies to solve complex diagnostic challenges in lung disease.

### **Note Regarding Forward-Looking Statements**

This press release may contain forward-looking statements that involve substantial risks and uncertainties for purposes of the safe harbor provided by the Private Securities Litigation Reform Act of 1995. All statements contained in this press release other than statements of historical fact, are forward-looking statements. The words "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "plan," "expect," "predict," "potential," "opportunity," "goals," or "should," and similar expressions are intended to identify forward-looking statements. Such statements are based on management's current expectations and involve risks and uncertainties. Actual results and performance could differ materially from those projected in the forward-looking statements as a result of many factors. Biodesix has based these forward-looking statements largely on its current expectations and projections about future events and trends. These forward-looking statements are subject to a number of risks, uncertainties, and assumptions. Forward-looking statements may include information concerning the impact of backlog and the timing and assumptions regarding collection of revenues on projections, availability of funds and future capital including under the term loan facility, expectations regarding revenue and margin growth and its impact on profitability, and the impact of a pandemic, epidemic, or outbreak, including the COVID-19 pandemic, on Biodesix and its operations and financial performance. Forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified. The Company's ability to continue as a going concern could cause actual results to differ materially from those contemplated in this press release and additionally, other factors that could cause actual results to differ materially from those contemplated in this press release can be found in the Risk Factors section of Biodesix most recent annual report on Form 10-K, filed March 1, 2024. Biodesix undertakes no obligation to revise or publicly release the results of any revision to such forward-looking statements, except as required by law. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. All forward-looking statements are qualified in their entirety by this cautionary statement.

---

**Contacts:****Media:**

Natalie St. Denis

Director, Corporate Communications

natalie.stdenis@biodesix.com

(720) 925-9285

**Investors:**

Chris Brinzey

chris.brinzey@westwicke.com

(339) 970-2843