UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

Biodesix, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

2970 Wilderness Place, Suite 100 Boulder, Colorado (Address of Principal Executive Offices) 20-3986492 (I.R.S. Employer Identification Number)

> 80301 (Zip Code)

Biodesix, Inc. 2020 Equity Incentive Plan Biodesix, Inc. 2016 Equity Incentive Plan Amended and Restated 2006 Employee, Director and Consultant Stock Plan Biodesix, Inc. Employee Stock Purchase Plan (Full Title of the Plan)

Scott Hutton
President and Chief Executive Officer
Biodesix, Inc.
2970 Wilderness Place, Suite 100
Boulder, Colorado 80301
(303) 417-0500

(Name, Address and Telephone Number, Including Area Code, of Agent for Service)

,	y. See the definitions of "large acce	lerated filer, an accelerated filer, a non-accelerated filer, elerated filer," "accelerated filer," "smaller reporting com	1 & 1 3,	ın
Large accelerated filer			Accelerated filer	
Non-accelerated filer			Smaller reporting company	×
			Emerging growth company	×
		he registrant has elected not to use the extended transition than to Section $7(a)(2)(B)$ of the Securities Act. \Box	n period for complying with any	

Calculation of Registration Fee

Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee(2)
Common Stock, par value \$0.001 per share	1,893,395 shares(3)	\$12.74(4)	\$24,121,852	\$2,632
Common Stock, par value \$0.001 per share	2,473,941 shares(6)	\$2.08(5)	\$5,145,797	\$561
Common Stock, par value \$0.001 per share	249,370 shares(7)	\$3.84(5)	\$957,581	\$105
Common Stock, par value \$0.001 per share	338,106 shares(8)	\$12.74(4)	\$4,307,470	\$470

- (1) Biodesix, Inc., a Delaware corporation (the "Registrant"), is registering an aggregate of 1,893,395 shares of common stock, par value \$0.001 per share (the "Common Stock"), that may be issued under the Biodesix, Inc. 2020 Equity Incentive Plan (the "2020 Plan"), 2,473,941 shares of Common Stock that may be issued pursuant to the exercise of outstanding stock options, or the settlement of outstanding restricted stock units, in each case under the Biodesix, Inc. 2016 Equity Incentive Plan (the "2016 Plan"), 249,370 shares of Common Stock that may be issued pursuant to the exercise of outstanding stock options under the Amended and Restated 2006 Employee, Director and Consultant Stock Plan (the "2006 Plan") and 338,106 shares of Common Stock that may be issued under the Biodesix, Inc. Employee Stock Purchase Plan (the "Employee Stock Purchase Plan"). Pursuant to Rule 416 of the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers such additional and indeterminate number of securities as may become issuable pursuant to the provisions of the plans relating to adjustments for changes resulting from a stock dividend, stock split or similar change.
- (2) Estimated in accordance with Rule 457(h) under the Securities Act of 1933, as amended, solely for the purpose of calculating the registration fee.
- (3) Represents shares of Common Stock that may be issued under the 2020 Plan.
- (4) Estimated pursuant to Rule 457(h) under the Securities Act solely for the purpose of calculating the registration fee. The price of \$12.74 per share represents the average high and low sales prices of the Common Stock as quoted on the Nasdaq Global Market on October 30, 2020.
- (5) Estimated pursuant to Rule 457(h) under the Securities Act solely for the purpose of calculating the registration fee. The price of \$2.08 per share represents the weighted average exercise price per share of outstanding equity awards under the 2016 Plan.
- (6) Represents shares of Common Stock that may be issued pursuant to the exercise of outstanding stock options, or the settlement of outstanding restricted stock units, in each case under the 2016 Plan.
- (7) Represents shares of Common Stock that may be issued pursuant to the exercise of outstanding stock options under the 2006 Plan.
- (8) Represents shares of Common Stock that may be issued under the Employee Stock Purchase Plan.

The Registration Statement shall become effective upon filing in accordance with Rule 462(a) under the Securities Act.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

All information required by Part I to be contained in the prospectus is omitted from this Registration Statement in accordance with the explanatory note to Part I of Form S-8 and Rule 428 under the Securities Act of 1933, as amended (the "Securities Act"). This Registration Statement on Form S-8 is filed by Biodesix, Inc., a Delaware corporation (the "Registrant"), regarding the Biodesix, Inc. 2020 Equity Incentive Plan, the Biodesix, Inc. 2016 Equity Incentive Plan, the Amended and Restated 2006 Employee, Director and Consultant Stock Plan and the Biodesix, Inc. Employee Stock Purchase Plan. Documents containing the information required by Part I of the Registration Statement will be sent or given to plan participants as specified by Rule 428(b)(1) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE

The Registrant hereby incorporates by reference in this Registration Statement the following documents and information previously filed with the Securities and Exchange Commission (the "Commission"):

- (1) The Registrant's prospectus contained in the Registrant's Registration Statement on Form S-1 (Registration No. 333-249260); and
- (2) The description of the Registrant's Common Stock contained in the Registrant's Registration Statement on Form 8-A filed with the Commission on October 26, 2020, pursuant to Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including any amendment or report for the purpose of updating such description.

All documents subsequently filed by the Registrant with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the respective dates of filing of such documents (such documents, and the documents enumerated above, being hereinafter referred to as "Incorporated Documents").

Any statement contained in an Incorporated Document shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed Incorporated Document modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

ITEM 4. DESCRIPTION OF SECURITIES

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL

Not applicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 145(a) of the General Corporation Law of the State of Delaware, as amended (the "DGCL"), provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), because he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Section 145(b) of the DGCL provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor because the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made with respect to any claim, issue or matter as to which he or she shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, he or she is fairly and reasonably entitled to indemnity for such expenses which the adjudicating court shall deem proper.

Section 145(g) of the DGCL provides, in general, that a corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify the person against such liability under Section 145 of the DGCL.

The Registrant's amended and restated certificate of incorporation provides that no director of the Registrant shall be personally liable to the Registrant or its stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability (1) for any breach of the director's duty of loyalty to the Registrant or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) in respect of unlawful dividend payments or stock redemptions or repurchases or other distributions pursuant to Section 174 of the DGCL, or (4) for any transaction from which the director derived an improper personal benefit. In addition, the Registrant's amended and restated certificate of incorporation provides that if the DGCL is amended to authorize the further elimination or limitation of the liability of directors, then the liability of a director of the Registrant shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

The Registrant's amended and restated certificate of incorporation further provides that any amendment, repeal or modification of such article unless otherwise required by law will not adversely affect any right or protection existing at the time of such repeal or modification with respect to any acts or omissions occurring before such repeal or amendment of a director serving at the time of such repeal or modification.

The Registrant's amended and restated certificate of incorporation provides that the Registrant shall indemnify each of its directors and executive officers, and shall have power to indemnify the Registrant's other officers, employees and agents, to the fullest extent permitted by the DGCL as the same may be amended (except that in the case of an amendment, only to the extent that the amendment permits the Registrant to provide broader indemnification rights than the DGCL permitted the Registrant to provide prior to such the amendment) against any and all expenses, judgments, penalties, fines and amounts reasonably paid in settlement that are incurred by the director, officer or such employee or on the director's, officer's or employee's behalf in connection with any threatened, pending or completed proceeding or any claim, issue or matter therein, to which he or she is or is threatened to be made a party because he or she is or was serving as a director, officer or employee of the Registrant, or at the Registrant's request as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Registrant and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. The Registrant's amended and restated certificate of incorporation further provides for the advancement of expenses to each of the Registrant's directors and, in the discretion of the board of directors, to certain officers and employees, in advance of the final disposition of such action, suit or proceeding only upon receipt of an undertaking by such person to repay all amounts advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that such person is not entitled to be indemnified for such expenses.

In addition, the Registrant's amended and restated certificate of incorporation provides that the right of each of the Registrant's directors and officers to indemnification and advancement of expenses shall not be exclusive of any other right now possessed or hereafter acquired under any statute, provision of the charter or bylaws, agreement, vote of stockholders or otherwise. Furthermore, the Registrant's amended and restated certificate of incorporation authorizes the Registrant to provide insurance for its directors, officers, employees and agents against any liability, whether or not the Registrant would have the power to indemnify such person against such liability under the DGCL or the bylaws.

The Registrant has entered into indemnification agreements with each of its directors and executive officers. These agreements provide that the Registrant will indemnify each of its directors and such officers to the fullest extent permitted by law and the Registrant's amended and restated certificate of incorporation. The Registrant also maintains a general liability insurance policy which covers certain liabilities of directors and officers of the Registrant arising out of claims based on acts or omissions in their capacities as directors or officers.

ITEM 7.EXEMPTION FROM REGISTRATION CLAIMED

Not applicable.

ITEM 8.EXHIBITS

Exhibit No.	Description
4.1	Amended and Restated Certificate of Incorporation of Biodesix, Inc. (incorporated by reference to Exhibit 3.2 of the Registrant's Registration Statement on Form S-1 (No. 333-249260), filed with the Commission on October 21, 2020).
4.2	Amended and Restated Bylaws of Biodesix, Inc. (incorporated by reference to Exhibit 3.4 of the Registrant's Registration Statement on Form S-1 (No. 333-249260). filed with the Commission on October 21, 2020).

Exhibit No.	Description
4.3	Biodesix, Inc. Amended and Restated 2006 Employee, Director and Consultant Stock Plan, as amended to date (incorporated by reference to Exhibit 10.1 to the Registrant's Registration Statement on Form S-1 (No. 333-249260), filed with the Commission on October 9, 2020).
4.4	Biodesix, Inc. 2016 Equity Incentive Plan, as amended to date (incorporated by reference to Exhibit 10.3 to the Registrant's Registration Statement on Form S-1 (No. 333-249260), filed with the Commission on October 2, 2020).
4.5	Biodesix, Inc. 2020 Equity Incentive Plan (incorporated by reference to Exhibit 10.5 to the Registrant's Registration Statement on Form S-1 (No. 333-249260), filed with the Commission on October 26, 2020).
4.6	Biodesix, Inc. Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.6 to the Registrant's Registration Statement on Form S-1 (No. 333-249260), filed with the Commission on October 26, 2020).
5.1*	Opinion of Sidley Austin LLP with respect to validity of issuance of securities.
23.1*	Consent of Independent Registered Public Accounting Firm.
23.2*	Consent of Sidley Austin LLP (included in Exhibit 5.1).
24.1*	Power of Attorney (included on the signature page of the Registration Statement).

^{*} Each document marked with an asterisk is filed herewith.

ITEM 9.UNDERTAKINGS

- (a) The Registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement; and
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement:

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Boulder, Colorado, on the 2nd day of November, 2020.

Biodesix, Inc.

By: /s/ Scott Hutton
Scott Hutton
President and Chief Executive Officer
(Principal Executive Officer)

POWER OF ATTORNEY AND SIGNATURES

Each of the undersigned officers and directors of Biodesix, Inc. does hereby severally constitute and appoint Scott Hutton and Robin Harper Cowie, and each of them acting alone, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for him or her and in his or her name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission and any applicable securities exchange or securities self-regulatory body, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or his or her substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
/s/ Scott Hutton Scott Hutton	President and Chief Executive Officer and Director (Principal Executive Officer)	November 2, 2020
/s/ Robin Harper Cowie Robin Harper Cowie	Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	November 2, 2020
/s/ John Patience John Patience	Director	November 2, 2020
/s/ Jack Schuler Jack Schuler	Director	November 2, 2020
/s/ Matthew Strobeck, Ph.D. Matthew Strobeck, Ph.D.	Director	November 2, 2020
/s/ Charles Watts, M.D. Charles Watts, M.D.	Director	November 2, 2020
/s/ Jean Franchi Jean Franchi	Director	November 2, 2020
/s/ Hany Massarany Hany Massarany	Director	November 2, 2020



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

November 2, 2020

Biodesix, Inc. 2970 Wilderness Place, Suite 100 Boulder, CO 80301

4,954,812 Shares of Common Stock, \$0.001 par value per share

Ladies and Gentlemen:

Re:

We refer to the Registration Statement on Form S-8 (the "Registration Statement") being 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"), relating to the registration of (i) 1,893,395 shares shares of Common Stock, \$0.001 par value per share (the "Common Stock"), of the Company which may be issued under the Biodesix, Inc. 2020 Equity Incentive Plan (the "2020 Plan"), (ii) 2,473,941 shares of Common Stock which may be issued under the Biodesix, Inc. 2016 Equity Incentive Plan (the "2016 Plan"), (iii) 249,370 shares of Common Stock that may be issued under the Amended and Restated 2006 Employee, Director and Consultant Stock Plan (the "2006 Plan"), and (iv) 338,106 shares of Common Stock that may be issued under the Biodesix, Inc. Employee Stock Purchase Plan (together with the 2020 Plan, the 2016 Plan and the 2006 Plan, the "Plans" and the aggregate shares of Common Stock to be registered under the Registration Statement, the "Registered Shares").

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 Plans, the Registration Statement, the Amended and Restated Certificate of Incorporation of the Company, the Amended and Restated Bylaws of the Company, the resolutions of the Company's Board of Directors authorizing the Plans and the issuance of the Registered Shares thereunder and the resolutions of the Company's stockholders authorizing the Plans. 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.

Sidley Austin LLP is a limited liability partnership practicing in affiliation with other Sidley Austin partnerships.

Based on the foregoing, we are of the opinion that each Registered Share that is newly issued pursuant to each Plan will be validly issued, fully paid and non-assessable when: (i) the Registration Statement, as finally amended, shall have become effective under the Securities Act; (ii) such Registered Share shall have been duly issued and delivered in accordance with the applicable Plan; and (iii) certificates representing such Registered Share shall have been duly executed, countersigned and registered and duly delivered to the person entitled thereto against payment of the agreed consideration therefor (in an amount not less than the par value thereof) or, if any Registered Share is to be issued in uncertificated form, the Company's books shall reflect the issuance of such Registered Share to the person entitled thereto against payment of the agreed consideration therefor (in an amount not less than the par value thereof), all in accordance with the applicable Plan.

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

Consent of Independent Registered Public Accounting Firm

The Board of Directors Biodesix, Inc.:

We consent to the use of our report dated May 27, 2020, except for earnings per share and Note 1(aa), as to which the date is August 12, 2020 and Note 14, as to which the date is October 20, 2020, incorporated by reference herein.

/s/ KPMG LLP

Denver, Colorado November 2, 2020