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) 20-3986492 (I.R.S. Employer Identification Number)

919 W. Dillon Road Louisville, Colorado (Address of Principal Executive Offices)

80027 (Zip Code)

Biodesix, Inc. 2020 Equity Incentive Plan Biodesix, Inc. Employee Stock Purchase Plan (Full Title of the Plan)

Scott Hutton
President and Chief Executive Officer
Biodesix, Inc.
919 W. Dillon Road
Louisville, Colorado 80027
(303) 417-0500

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

	(Name, Address a	nu Telephone Number, Including Area Code, of Agent for Service)	
•	ny. See the definitions of "large	accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth	an
Large accelerated filer Non-accelerated filer		Accelerated filer Smaller reporting company Emerging growth company	
0 00	1 3,	a if the registrant has elected not to use the extended transition period for complying with any pursuant to Section $7(a)(2)(B)$ of the Securities Act. \Box	r

EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed by Biodesix, Inc. (the "Registrant") for the purpose of registering (i) an additional 5,819,663 shares of the Registrant's common stock, par value \$0.001 per share (the "Common Stock") issuable under the Biodesix, Inc. 2020 Equity Incentive Plan (the "2020 Plan"), as a result of the operation of the automatic annual increase provision therein effective January 1, 2025, and (ii) an additional 338,106 shares of Common Stock issuable under the Biodesix, Inc. Employee Stock Purchase Plan (the "ESPP"), as a result of the operation of the automatic annual increase provision therein effective January 1, 2025. The shares of the Registrant's Common Stock previously reserved for issuance under the 2020 Plan were registered on the Registrant's Registration Statement on Form S-8 filed with the Securities and Exchange Commission (the "Commission") on November 2, 2020 (File No. 333-249805) (the "2020 Prior Form S-8"), the Registrant's Registration Statement on Form S-8 filed with the Commission on June 6, 2022 (File No. 333-265445) (the "2022 Prior Form S-8"), and the Registrant's Registration Statement on Form S-8 filed with the Commission on February 2, 2023 (File No. 333-276842) (the "2024 Prior Form S-8", together with the 2020 Prior Form S-8, the 2022 Prior Form S-8, and the 2023 Prior Form S-8, the "Prior Form S-8, the 2023 Prior Form S-8, and the 2024 Prior Form S-8.

This Registration Statement on Form S-8 relates to securities of the same class as that to which the Prior Forms S-8 relate, and is submitted in accordance with General Instruction E to Form S-8 regarding Registration of Additional Securities. Pursuant to General Instruction E of Form S-8, the contents of the Prior Forms S-8, to the extent relating to the registration of Common Stock issuable under the 2020 Plan and the ESPP, are incorporated herein by reference and made part of this Registration Statement on Form S-8, except as amended hereby.

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 Commission (excluding any portions of such documents that have been "furnished" but not "filed" for purposes of the Securities Exchange Act of 1934, as amended (the "Exchange Act"):

- (1) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the Commission on March 1, 2024, including all material incorporated by reference therein;
- (2) The Registrant's Quarterly Reports on Form 10-Q for the quarters ended March 31, 2024, June 30, 2024, and September 30, 2024, filed with the Commission on May 8, 2024, August 7, 2024 and November 1, 2024;
- (3) The Registrant's Current Reports on Form 8-K, filed with the Commission on April 9, 2024 and May 23, 2024; and
- (4) 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 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 or 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 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	Certificate of Designations of Series A Non-Voting Convertible Preferred Stock (incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K (No. 001-39659), filed with the Commission on April 9, 2024).
4.3	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).
4.4	Biodesix, Inc. 2020 Equity Incentive Plan (incorporated by reference to Exhibit 10.5 to the Company's Registration Statement on Form S-1/A filed with the Commission on October 26, 2020).
4.5	Biodesix, Inc. 2020 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.6 to the Company's Registration Statement on Form S-1/A 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).
107*	Filing Fee Exhibit.

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

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended (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 Louisville, Colorado, on the 7th day of February, 2025.

Biodesix, Inc.

By: /s/ Scott Hutton

Scott Hutton
President, Chief Executive Officer and Director
(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)	February 7, 2025
/s/ Robin Harper Cowie Robin Harper Cowie	Chief Financial Officer and Treasurer (Principal Financial Officer)	February 7, 2025
/s/ Christopher C. Vazquez Christopher C. Vazquez	Chief Accounting Officer (Principal Accounting Officer)	February 7, 2025
/s/ John Patience John Patience	Director	February 7, 2025
/s/ Jean Franchi Jean Franchi	Director	February 7, 2025
/s/ Jon Faiz Kayyem Jon Faiz Kayyem, Ph.D.	Director	February 7, 2025

SIGNATURE	TITLE	DATE
/s/ Lawrence T. Kennedy, Jr. Lawrence T. Kennedy, Jr.	Director	February 7, 2025
/s/ Hany Massarany Hany Massarany	Director	February 7, 2025
/s/ Jack Schuler Jack Schuler	Director	February 7, 2025
/s/ Matthew Strobeck Matthew Strobeck, Ph.D.	Director	February 7, 2025
/s/ Charles Watts Charles Watts, M.D.	Director	February 7, 2025



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

February 7, 2025

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

Re: <u>6,157,769 Shares of Common Stock, \$0.001 par value per share</u>

Ladies and Gentlemen:

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) 5,819,663 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") and (ii) 338,106 shares of Common Stock which may be issued under the Biodesix, Inc. Employee Stock Purchase Plan (the "ESPP", and together with 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 2020 Plan, the ESPP, 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 2020 Plan, the ESPP and the issuance of the Registered Shares thereunder and the resolutions of the Company's stockholders authorizing the 2020 Plan and the ESPP. 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.

Biodesix, Inc. February 7, 2025 Page 2

Based on the foregoing, we are of the opinion that each Registered Share that is newly issued pursuant to the 2020 Plan and the ESPP 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 2020 Plan and the ESPP; 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 2020 Plan and the ESPP.

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



KPMG LLP Suite 800 1225 17th Street Denver, CO 80202-5598

Consent of Independent Registered Public Accounting Firm

We consent to the use of our report dated March 1, 2024, with respect to the financial statements of Biodesix, Inc., incorporated herein by reference.

/s/ KPMG LLP

Denver, Colorado February 7, 2025

KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee.

Calculation of Filing Fee Tables

Form S-8 (Form Type)

Biodesix, Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered ⁽¹⁾	Proposed Maximum Offering Price Per Unit ⁽²⁾	Maximum Aggregate Offering Price ⁽²⁾	Fee Rate	Amount of Registration Fee
Equity	Common Stock, par value \$0.001	Rule 457(c) and Rule					
	per share	457(h)	5,819,663(3)	\$1.03	\$5,994,252.89	0.00015310	\$917.72
Equity	Common Stock, par value \$0.001	Rule 457(c) and Rule					
	per share	457(h)	338,106(4)	\$1.03	\$348,249.18	0.00015310	\$53.32
Total Offering Amounts					\$6,342,502.07		\$971.04
Total Fee Offsets							_
Net Fee Due						\$971.04	

- 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 shares of common stock, par value \$0.001 per share (the "Common Stock") of Biodesix, Inc., a Delaware corporation (the "Registrant"), as may become issuable pursuant to the provisions of the plans relating to adjustments for changes resulting from a share dividend, share split or similar change.
- (2) Estimated pursuant to Rule 457(h) under the Securities Act solely for the purpose of calculating the registration fee. The price of \$1.03 per share represents the average high and low prices of the Common Stock as quoted on the Nasdaq Global Select Market on January 31, 2025, a date within five business days prior to the filing of this Registration Statement, in accordance with Rule 457(c) of the Securities Act.
- (3) Represents shares of Common Stock that were automatically added to the shares authorized for issuance under the Biodesix, Inc. 2020 Equity Incentive Plan (the "2020 Plan") on January 1, 2025 pursuant to an "evergreen" provision contained in the 2020 Plan. Pursuant to such provision, on the first day of each fiscal year, beginning with the fiscal year ending December 31, 2022, and continuing until, and including, the calendar year ending December 31, 2030, the number of shares authorized for issuance under the 2020 Plan is automatically increased by a number equal to the lesser of (i) 4% of the number of shares of Common Stock issued and outstanding as of the December 31st of the immediately preceding calendar year and (ii) such lesser amount determined by the Registrant's board of directors.
- Represents shares of Common Stock that were automatically added to the shares authorized for issuance under the Biodesix, Inc. Employee Stock Purchase Plan (the "ESPP") on January 1, 2025 pursuant to an "evergreen" provision contained in the ESPP (the "ESPP evergreen provision"). Pursuant to the ESPP evergreen provision, on the first day of each fiscal year, beginning with the fiscal year ending December 31, 2022, and continuing until, and including, the fiscal year ending December 31, 2030, the number of shares authorized for issuance under the ESPP is automatically increased by a number equal to the lesser of (i) 338,106 shares, (ii) 1% of the number of shares of Common Stock issued and outstanding as of the December 31st of the immediately preceding fiscal year and (iii) such lesser amount determined by the Registrant's board of directors