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)

2970 Wilderness Place, Suite 100 Boulder, Colorado (Address of Principal Executive Offices)

80301 (Zip Code)

Biodesix, Inc. 2020 Equity Incentive 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 accelerated filer	an accelerated filer, a non-accelerated filer, a smaller reporting company, or a "accelerated filer," "smaller reporting company," and "emerging growth	n
Large accelerated filer		Accelerated filer	
Non-accelerated filer	\boxtimes	Smaller reporting company	X
		Emerging growth company	X
	mpany, indicate by check mark if the registrant accounting standards provided pursuant to Secti	has elected not to use the extended transition period for complying with any n $7(a)(2)(B)$ of the Securities Act. \Box	

EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed by Biodesix, Inc. (the "Registrant") for the purpose of registering an additional 1,231,586 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, 2022. 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 "Prior Form S-8").

This Registration Statement on Form S-8 relates to securities of the same class as that to which the Prior Form S-8 relates, 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 Form S-8, to the extent relating to the registration of Common Stock issuable under the 2020 Plan, 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:

- (1) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2021, filed with the Commission on March 14, 2022, including all material incorporated by reference therein;
- (2) The Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2022, filed with the Commission on May 11, 2022;
- (3) The Registrant's Current Reports on Form 8-K, filed with the Commission on <u>January 4, 2022</u>, <u>February 14, 2022</u>, <u>March 7, 2022</u>, <u>April 11, 2022</u> and May 25, 2022; 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 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 8.	EXHIBITS
Exhibit No.	<u>Description</u>
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).
4.3	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).
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*	<u>Filing Fee Exhibit.</u>

^{*} 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 Boulder, Colorado, on the 6th day of June, 2022.

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	<u>DATE</u>
/s/ Scott Hutton	President and Chief Executive Officer and Director	June 6, 2022
Scott Hutton	(Principal Executive Officer)	
/s/ Robin Harper Cowie	Chief Financial Officer and Treasurer	June 6, 2022
Robin Harper Cowie	(Principal Financial Officer)	
/s/ Ryan Siurek	Chief Accounting Officer	June 6, 2022
Ryan Siurek	(Principal Accounting Officer)	
/s/ John Patience	Director	June 6, 2022
John Patience		
/s/ Jean Franchi	Director	June 6, 2022
Jean Franchi		•
/s/ Jon Faiz Kayyem, Ph.D.	Director	June 6, 2022
Jon Faiz Kayyem, Ph.D.		,
/s/ Hany Massarany	Director	June 6, 2022
Hany Massarany		
/s/ Jack Schuler	Director	June 6, 2022
Jack Schuler		June 0, 2022

SIGNATURE	TITLE	DATE
/s/ Matthew Strobeck, Ph.D. Matthew Strobeck, Ph.D.	Director	June 6, 2022
/s/ Charles Watts, M.D. Charles Watts, M.D.	Director	June 6, 2022



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

June 6, 2022

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

Re: 1,231,586 Shares of Common Stock, \$0.001 par value per share

Ladies and Gentlemen:

We refer to the Registration Statement on Form S-8 (the "<u>Registration Statement</u>") being filed by Biodesix, Inc., a Delaware corporation (the "<u>Company</u>"), with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "<u>Securities Act</u>"), relating to the registration of 1,231,586 shares of Common Stock, \$0.001 par value per share (the "<u>Common Stock</u>"), of the Company which may be issued under the Biodesix, Inc. 2020 Equity Incentive Plan (the "<u>2020 Plan</u>" and the aggregate shares of Common Stock to be registered under the Registration Statement, the "<u>Registered Shares</u>").

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 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 and the issuance of the Registered Shares thereunder and the resolutions of the Company's stockholders authorizing the 2020 Plan. 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 the foregoing, we are of the opinion that each Registered Share that is newly issued pursuant to the 2020 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 2020 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 2020 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

We consent to the use of our report dated March 14, 2022, with respect to the financial statements of Biodesix, Inc., incorporated herein by reference.

/s/ KPMG LLP

Denver, Colorado June 6, 2022

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	Rule 457(c)					
	value \$0.001	and Rule					
	per share	457(h)	1,231,586(3)	\$1.40	\$1,724,220.40	0.0000927	\$159.84
Total Offering Amounts				\$1,724,220.40		\$159.84	
Total Fee Offsets							
Net Fee Due					_		\$159.84

- (1) 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. (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 \$1.40 per share represents the average high and low prices of the Common Stock as quoted on the Nasdaq Global Select Market on June 2, 2022, 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, 2022 pursuant to an "evergreen" provision contained in the 2020 Plan. Pursuant to such provision, on the first day of each calendar year, beginning with the calendar 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.