Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM S-8 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

HARVARD BIOSCIENCE, INC. (Exact Name of Registrant as Specified in Its Charter)

Delaware (State or other jurisdiction of incorporation or organization)

> 84 October Hill Road Holliston, Massachusetts (Address of Principal Executive Offices)

04-3306140 (I.R.S. Employer Identification No.)

> 01746 (Zip Code)

HARVARD BIOSCIENCE, INC. EMPLOYEE STOCK PURCHASE PLAN (Full Title of the Plan)

James Green, Chief Executive Officer HARVARD BIOSCIENCE, INC. 84 October Hill Road Holliston, Massachusetts 01746 (508) 893-8999 (Name, address, and telephone number, including area code, of agent for service)

> With copies to: Mitchell Raab Olshan Frome Wolosky LLP 1325 Avenue of the Americas New York, New York 10019 (212) 451-2300

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	Accelerated filer	X
Non-accelerated filer	Smaller reporting company	
	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 7(a)(2)(B) of the Securities Act \Box

INCORPORATION BY REFERENCE OF PRIOR REGISTRATION STATEMENT

This Registration Statement is filed by Harvard Bioscience, Inc. (the "Registrant") for the purpose of registering pursuant to General Instruction E to Form S-8, 500,000 additional shares of the Registrant's common stock, par value \$0.01 per share (the "Common Stock") under Amendment No. 5 to the Harvard Bioscience, Inc. Employee Stock Purchase Plan (as amended, the "ESPP"). On April 7, 2022, the Registrant filed with the Securities and Exchange Commission (the "Commission") a definitive proxy statement that included proposals to, among other things, increase the number of shares available for issuance under the ESPP by 500,000 shares of Common Stock. The proposal to increase the number of shares available for issuance under the ESPP was approved by the Registrant's stockholders on May 17, 2022. This Registration Statement registers the 500,000 additional shares of Common Stock available for issuance under the ESPP.

The additional 500,000 shares of Common Stock available for issuance under the ESPP registered pursuant to this Registration Statement are the same class as those included on registration statements on Form S-8, and post-effective amendments thereto, filed on January 17, 2001 (File No. 333-53848), June 15, 2001 (File No. 333-53848), June 7, 2013 (File No. 333-189175), June 5, 2017 (File No. 333-218497) and May 30, 2019 (File No. 333-231825). The contents of all aforementioned Registration Statements, including any amendments thereto or filings incorporated therein, are incorporated herein by reference, except as modified herein.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The Registrant is subject to the informational and reporting requirements of Sections 13(a), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith files reports, proxy statements and other information with the Commission. The following documents, which are on file with the Commission, are hereby incorporated by reference in, and shall be deemed a part of, this Registration Statement (other than any such documents or portions thereof that are furnished under Item 2.02 or Item 7.01 of Form 8-K, unless otherwise indicated therein, including any exhibits included with such Items):

(a) The Registrant's Annual Report on Form 10-K for the year ended December 31, 2021 filed with the Commission on March 11, 2022;

(b) The Registrant's Definitive Proxy Statement on Schedule 14A filed with the Commission on <u>April 7, 2022</u>;

(c) The Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2022 filed with the Commission on May 4, 2022;

(d) The Registrant's Current Reports on Form 8-K filed with the Commission on January 25, 2022, January 28, 2022, April 28, 2022, and May 17, 2022; and

(e) The description of the Registrant's Common Stock contained in the Registrant's registration statement on Form 8-A (File No. 000-31923) filed with the Commission on <u>November 9, 2000</u> under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment 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 in this Registration Statement and to be part hereof from the date of the filing of such documents. The Registrant is not, however, incorporating by reference any documents or portions thereof, whether specifically listed above or filed in the future, that are not deemed "filed" with the Commission, including any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement. Under no circumstances will any information furnished under Items 2.02 or 7.01 of Form 8-K be deemed incorporated by reference unless such Current Report on Form 8-K expressly provides to the contrary.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

As permitted by Section 102 of the Delaware General Corporation Law, the Registrant has adopted provisions in its Second Amended and Restated Certificate of Incorporation, or its Charter, and Amended and Restated Bylaws, as amended, or its Bylaws, that limit or eliminate the personal liability of its directors for a breach of their fiduciary duty of care as a director. The duty of care generally requires that, when acting on behalf of a corporation, directors exercise an informed business judgment based on all material information reasonably available to them. Consequently, a director will not be personally liable to the Registrant or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to the Registrant or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;

- any act related to unlawful stock repurchases, redemptions or other distributions or payments of dividends; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not affect the availability of equitable remedies such as injunctive relief or rescission. The Registrant's Bylaws also authorizes the Registrant to indemnify its officers, directors and other agents to the fullest extent permitted under Delaware law.

As permitted by Section 145 of the Delaware General Corporation Law, the Registrant's Bylaws provide that it will 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 other proceeding by reason of the fact that such person, or a person of whom he or she is the legal representative, is or was the Registrant's director or officer, or by reason of the fact that the Registrant's director or officer is or was serving, at the Registrant's request, as a director, partner, trustee, officer, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans maintained or sponsored by the Registrant. The Registrant will indemnify such persons against expenses (including reasonable attorneys' fees), judgments, penalties, fines and amounts reasonably paid in settlement that are incurred in connection with such action if such person acted in good faith and in a manner reasonably believed to be in or not opposed to the Registrant's best interests and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful. Any amendment of this provision will not reduce the Registrant's indemnification obligations relating to actions taken before an amendment.

In addition, the Registrant has entered into separate indemnification agreements, a form of which is attached as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q (filed with the Commission on May 8, 2020), with the Registrant's directors and certain of its officers which may be broader than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements generally require the Registrant, among other things, to indemnify such officers and directors against liabilities that may arise by reason of their status or service as directors or officers, subject to certain exceptions and limitations. These indemnification agreements also require the Registrant to advance any expenses incurred by such directors or officers as a result of any proceeding against them as to which they could be indemnified.

The Registrant has also obtained policies that insure its directors and officers and those of its subsidiaries against certain liabilities they may incur in their capacity as directors and officers. Under these policies, the insurer, on the Registrant's behalf, may also pay amounts for which the Registrant has granted indemnification to the directors or officers. These indemnification provisions and the indemnification agreements may be sufficiently broad to permit indemnification of the Registrant's officers and directors for liabilities, including reimbursement of expenses incurred, arising under the Securities Act.

The foregoing summaries are qualified in their entirety by the terms and provisions of such arrangements.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

The Exhibit Index preceding the signature page to this Registration Statement is incorporated by reference.

Item 9. Undertakings.

(a) The undersigned 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. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective 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 undersigned 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 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 this 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.

(h) Insofar as indemnification for liabilities arising under the Securities Act may be permitted 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.

EXHIBIT INDEX

Exhibit	
Number	Description
4.1 ⁽¹⁾	Second Amended and Restated Certificate of Incorporation of Harvard Bioscience, Inc.
$4.2^{(1)}$	Amended and Restated Bylaws of Harvard Bioscience, Inc.
4.3 ⁽²⁾	Amendment No. 1 to Amended and Restated Bylaws of Harvard Bioscience, Inc.
4.4 ⁽¹⁾	Specimen certificate for shares of Common Stock, \$0.01 par value, of Harvard Bioscience, Inc.
4.5 ⁽³⁾	Harvard Bioscience, Inc. Employee Stock Purchase Plan, as amended.
5.1*	Opinion of Olshan Frome Wolosky LLP.
23.1*	Consent of Grant Thornton LLP.
23.2*	Consent of Olshan Frome Wolosky LLP (contained in Exhibit 5.1).
24.1*	Power of attorney (included on the signature page to this Registration Statement).
107*	Filing Fee Table

* Filed herewith.

 Previously filed as an exhibit to the Company's Registration Statement on Form S-1/A (File No. 333-45996) (filed on November 9, 2000) and incorporated by reference thereto.

(2) Previously filed as an exhibit to the Company's Current Report on Form 8-K (filed on November 1, 2007) and incorporated by reference thereto.

(3) Previously filed as an exhibit to the Company's Current Report on Form 8-K (filed on May 17, 2022) and incorporated by reference thereto.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 the Town of Holliston, Massachusetts, on this 8th day of June, 2022.

HARVARD BIOSCIENCE, INC.

By: /s/ JAMES GREEN James Green, Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints each of James Green and Michael A. Rossi as such person's true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for such person in such person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement (or any registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that any said attorney-in-fact and agent, or any substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the date indicated. Each person listed below has signed this registration statement as an officer or director of Harvard Bioscience, Inc.

Signature	Title	Date
/s/ JAMES GREEN	Chief Executive Officer and Director	June 8, 2022
James Green	(Principal Executive Officer)	
/s/ MICHAEL A. ROSSI	_Chief Financial Officer	June 8, 2022
Michael A. Rossi	(Principal Financial Officer and Principal Accounting Officer)	
/s/ KATHERINE A. EADE	Director	June 8, 2022
Katherine A. Eade		
/s/ ALAN EDRICK	Director	June 8, 2022
Alan Edrick		
/s/ THOMAS W. LOEWALD	Director	June 8, 2022
Thomas W. Loewald	—	
/s/ BERTRAND LOY	Director	June 8, 2022
Bertrand Loy	—	-

OLSHAN

1325 AVENUE OF THE AMERICAS • NEW YORK, NEW YORK 10019 TELEPHONE: \$12.451.2300 • FACSIMILE: \$12.451.2222

June 8, 2022

Harvard Bioscience, Inc. 84 October Hill Road Holliston, Massachusetts 01746

Re[.]

Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to Harvard Bioscience, Inc., a Delaware corporation (the "Company"), in connection with the filing with the Securities and Exchange Commission (the "Commission") of the Company's Registration Statement on Form S-8 (the "Registration Statement") relating to the registration of 500,000 shares (the "Shares") of the Company's common stock, par value \$0.01 per share (the "Common Stock"), issuable pursuant to the terms of and in the manner set forth in the Harvard Bioscience, Inc. Employee Stock Purchase Plan (as amended, the "ESPP"). This opinion letter is being delivered at the request of the Company and in accordance with the requirements of Item 601(b)(5) of Regulation S-K promulgated under the Securities Act of 1933, as amended (the "Securities Act").

We advise you that we have examined executed originals or copies certified or otherwise identified to our satisfaction of (i) the Registration Statement, (ii) the Company's Second Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, each as amended to date, (iii) the ESPP, and (iv) corporate proceedings of the Company, and such other documents, instruments and certificates of officers and representatives of the Company and of public officials, and we have made such examination of law, as we have deemed necessary or appropriate for purposes of the opinion expressed below.

We have assumed for purposes of rendering the opinion set forth herein, without any verification by us, the genuineness of all signatures, the legal capacity of all natural persons to execute and deliver documents, the authenticity and completeness of documents submitted to us as originals and the completeness and conformity with authentic original documents of all documents submitted to us as copies, and that all documents, books and records made available to us by the Company are accurate and complete.

On the basis of the foregoing and in reliance thereon and subject to the assumptions, qualifications and limitations set forth herein, we advise you that in our opinion, the Shares have been duly authorized and, when issued and paid for pursuant to the terms of and in the manner set forth in the ESPP, will be validly issued, fully paid and non-assessable.

We are members of the Bar of the State of New York. We express no opinion as to the effect of any laws other than the laws of the State of New York, the General Corporation Law of the State of Delaware and the federal laws of the United States of America, each as in effect on the date hereof.

This opinion speaks only at and as of its date and is based solely on the facts and circumstances known to us at and as of such date. We assume no obligation to revise or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention or any changes in fact or law that may hereafter occur.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby concede that our firm is within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours, /s/ Olshan Frome Wolosky LLP OLSHAN FROME WOLOSKY LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our reports dated March 11, 2022 with respect to the consolidated financial statements and internal control over financial reporting of Harvard Bioscience, Inc., included in the Annual Report on Form 10-K for the year ended December 31, 2021, which are incorporated by reference in this Registration Statement. We consent to the incorporation by reference of the aforementioned reports in this Registration Statement.

/s/ GRANT THORNTON LLP

Boston, Massachusetts June 8, 2022

Calculation of Filing Fee Table

Form S-8

(Form Type)

Harvard Bioscience, Inc. (Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class	Fee Calculation Rule	Amount Registered	Proposed Maximum Offering Price Per Unit ⁽²⁾	Maximum Aggregate Offering Price (2)	Fee Rate	Amount of Registration Fee
Equity	Common Stock,						
	par value \$0.01	Rule 457(c) and	500,000 (1)	\$3.59	\$1,795,000	.0000927	\$166.40
	per share	Rule 457(h)					
Total Offering							
Amounts							\$166.40
Total Fee							
Offsets							-
Net Fee Due							\$166.40

- (1) Represents shares of common stock, par value \$0.01 per share ("Common Stock"), of Harvard Bioscience, Inc. (the "Registrant") that are issuable pursuant to the Registrant's Employee Stock Purchase Plan, as amended. Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers such additional securities that become issuable by reason of any stock dividend, stock split, recapitalization or any other similar transactions.
- (2) Estimated solely for the purposes of calculating the registration fee pursuant to Rule 457(c) and 457(h) under the Securities Act, based on the average of the high and low prices of the Common Stock as reported on the Nasdaq Global Market on June 2, 2022.