

REGISTRATION STATEMENT NO.

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 04-3306140
(STATE OF INCORPORATION) (I.R.S. EMPLOYER IDENTIFICATION NO.)

84 OCTOBER HILL ROAD
HOLLISTON, MASSACHUSETTS 01746-1371
(508) 893-8066
(ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE,
OF REGISTRANT'S PRINCIPAL EXECUTIVE OFFICES)

HARVARD BIOSCIENCE, INC. 2000 STOCK OPTION AND INCENTIVE PLAN
HARVARD APPARATUS, INC. 1996 STOCK OPTION AND GRANT PLAN
HARVARD BIOSCIENCE, INC. EMPLOYEE STOCK PURCHASE PLAN
(FULL TITLE OF THE PLAN)

CHANE GRAZIANO
CHIEF EXECUTIVE OFFICER
HARVARD BIOSCIENCE, INC.
84 OCTOBER HILL ROAD
HOLLISTON, MASSACHUSETTS 01746-1371
(508) 893-8066
(NAME, ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER,
INCLUDING AREA CODE, OF AGENT FOR SERVICE)

With copy to:
H. DAVID HENKEN, P.C.
GOODWIN, PROCTER & HOAR LLP
EXCHANGE PLACE
BOSTON, MASSACHUSETTS 02109-2881
(617) 570-1000

CALCULATION OF REGISTRATION FEE

Title of Securities Being Registered	Amounts to be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, par value \$.01 per share	4,849,096 shares	\$9.815	\$47,593,877	\$11,899
Plan Interests (3)	N/A (3)	N/A (3)	N/A (3)	N/A (3)

(1) This Registration Statement also relates to such indeterminate number of additional shares of Common Stock, par value \$.01 per share, of Harvard Bioscience, Inc. (the "Common Stock") as may be required pursuant to the Harvard Bioscience, Inc. 2000 Stock Option and Incentive Plan, the Harvard Bioscience, Inc. 1996 Stock Option and Grant Plan and the Harvard Bioscience, Inc. Employee Stock Purchase Plan (the "Plans") in the event of a stock dividend, reverse stock split, split-up, recapitalization, forfeiture of stock under the Plans or other similar event. In addition, pursuant to Rule 416(c) under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also covers an indeterminate amount of interests to be offered or sold pursuant to the employee benefit plan described herein.

(2) This estimate is made pursuant to Rule 457(c) and (h) under the Securities Act solely for the purposes of determining the amount of the registration fee. The registration fee is based upon the average of the

high and low sale price for a share of Common Stock, as reported on the Nasdaq National Market System as of a date within five business days prior to filing this Registration Statement.

- (3) In addition, pursuant to Rule 416(c) under the Securities Act, this Registration Statement also covers an indeterminate amount of interests to be offered or sold pursuant to the Harvard Bioscience, Inc. Employee Stock Purchase Plan. In accordance with Rule 457(h)(2), no separate fee calculation is made for plan interests.

PART I

INFORMATION REQUIRED IN THE SECTION 10(A) PROSPECTUS

Item 1. PLAN INFORMATION.*

Item 2. REGISTRANT INFORMATION AND EMPLOYEE PLAN ANNUAL INFORMATION.*

* Information required by Part I to be contained in Section 10(a) Prospectuses is omitted from this Registration Statement in accordance with Rule 428 under the Securities Act of 1933 (the "Securities Act") and the Introductory Note to Part I of Form S-8.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. INCORPORATION OF DOCUMENTS BY REFERENCE.

Harvard Bioscience, Inc. (the "Registrant") hereby incorporates by reference the following documents which have previously been filed with the Securities and Exchange Commission (the "Commission"):

- (a) the Registrant's Prospectus dated December 6, 2000 as filed with the Commission on December 7, 2000 pursuant to Rule 424(b) under the Securities Act (the "Prospectus");
- (b) all other reports filed with the Commission by the Registrant pursuant to Section 13(a) or 15(d) of the Exchange Act since December 7, 2000; and
- (c) the description of the Registrant's Common Stock contained in the Registration Statement on Form 8-A, dated November 8, 2000, as filed with the Commission on November 9, 2000 pursuant to Section 12(g) of the Exchange Act and any amendments or reports filed for the purpose of updating such description.

In addition, all documents subsequently filed with the Commission 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 hereto that indicates that all securities offered hereunder 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 a part hereof from the date of filing of such documents. Any statement contained in a document incorporated by reference herein shall be deemed to be modified or superseded for purposes hereof to the extent that a statement contained herein or in any subsequently filed document which also is 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.

Item 4. DESCRIPTION OF SECURITIES.

Not Applicable.

Item 5. INTERESTS OF NAMED EXPERTS AND COUNSEL.

Not Applicable.

Item 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

In accordance with Section 145 of the General Corporation Law of the State of Delaware (the "DGCL"), Article VII of the Registrant's Second Amended and Restated Certificate of Incorporation (the "Certificate") provides that no director of the Registrant shall be personally liable to the Registrant or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Registrant or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) in respect of certain unlawful dividend payments or stock redemptions or repurchases, or (iv) for any transaction from which the director derived an improper personal benefit. In addition, the Certificate provides that if the DGCL is amended to authorize the further elimination or limitation of the personal 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.

Article V of the Registrant's Amended and Restated By-laws (the "By-laws") provides for indemnification by the Registrant of its officers and certain non-officer employees under certain circumstances against expenses (including attorneys fees, judgments, fines and amounts paid in settlement) reasonably incurred in connection with the defense or settlement of any threatened, pending or completed legal proceeding in which any such person is involved by reason of the fact that such person is or was an officer or an employee of the Registrant if such person 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 criminal actions or proceedings, that such person had no reasonable cause to believe his or her conduct was unlawful. We have also obtained directors' and officers' insurance against certain liabilities.

The Registrant has entered into indemnification agreements with each of its directors reflecting the foregoing provisions of its By-laws and requiring the advancement of expenses in proceedings, if such person had no reasonable cause to believe his or her conduct was unlawful.

Under Section 8 of the Underwriting Agreement filed as Exhibit 1.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-45996), the Underwriters (as defined therein) have agreed to indemnify, under certain conditions, the Registrant, its directors, certain officers and persons who control the Registrant within the meaning of the Securities Act against certain liabilities.

Item 7. EXEMPTION FROM REGISTRATION CLAIMED.

Not applicable.

Item 8. EXHIBITS.

The following is a complete list of exhibits filed or incorporated by reference as part of this Registration Statement.

EXHIBIT

- *3.2 Second Amended and Restated Certificate of Incorporation of Registrant.
 - *3.3 Amended and Restated By-laws of Registrant.
 - 5.1 Opinion of Goodwin, Procter & Hoar LLP as to the legality of the securities being registered.
 - *10.1 Harvard Apparatus, Inc. 1996 Stock Option and Grant Plan.
 - *10.2 Harvard Bioscience, Inc. 2000 Stock Option and Incentive Plan.
 - *10.3 Harvard Bioscience, Inc. Employee Stock Purchase Plan.
 - 23.1 Consent of Counsel (included in Exhibit 5.1 hereto).
 - 23.2 Consent of KPMG LLP.
 - 23.3 Consent of PricewaterhouseCoopers.
 - 24.1 Powers of Attorney (included in the signature page of this Registration Statement).
- * Incorporated by reference to the relevant exhibit to the Registrant's Registration Statement on Form S-1 (File No. 333-45996), as amended, as filed with the Commission.

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 a 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) herein do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the undersigned 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; and

(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 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 Securities and Exchange 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, Harvard Bioscience, Inc. 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 Holliston, Massachusetts on January 17, 2001.

HARVARD BIOSCIENCE, INC.

By: /s/ CHANE GRAZIANO

 Chane Graziano
 CHIEF EXECUTIVE OFFICER

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints each of Chane Graziano and James Warren such person's true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for such person and 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, 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 dates indicated.

SIGNATURE -----	TITLE -----	DATE -----
/s/ CHANE GRAZIANO ----- Chane Graziano	Chief Executive Officer and Director (Principal Executive Officer)	January 17, 2001
/s/ JAMES WARREN ----- James Warren	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	January 17, 2001
/s/ DAVID GREEN ----- David Green	President and Director	January 17, 2001
/s/ CHRISTOPHER DICK ----- Christopher W. Dick	Director	January 17, 2001
/s/ RICHARD KLAFFKY ----- Richard C. Klaffky, Jr.	Director	January 17, 2001
/s/ ROBERT DISHMAN ----- Robert Dishman	Director	January 17, 2001
/s/ JOHN KENNEDY ----- John F. Kennedy	Director	January 17, 2001
/s/ EARL LEWIS ----- Earl R. Lewis	Director	January 17, 2001

THE PLANS. Pursuant to the requirements of the Securities Act of 1933, the trustees (or other persons who will administer the Plans) have duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Holliston, Massachusetts, on January 17, 2001.

HARVARD BIOSCIENCE, INC.,
as administrator of the Harvard Bioscience, Inc.
2000 Stock Option and Incentive Plan

By: /s/ CHANE GRAZIANO

Chane Graziano
Chief Executive Officer and Director

HARVARD BIOSCIENCE, INC.,
as administrator of the Harvard Apparatus, Inc.
1996 Stock Option and Grant Plan

By: /s/ CHANE GRAZIANO

Chane Graziano
Chief Executive Officer and Director

HARVARD BIOSCIENCE, INC.,
as administrator of the Harvard Bioscience, Inc.
Employee Stock Purchase Plan

By: /s/ CHANE GRAZIANO

Chane Graziano
Chief Executive Officer and Director

EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION
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*3.3	Amended and Restated By-laws of Harvard Bioscience, Inc.
5.1	Opinion of Goodwin, Procter & Hoar LLP as to the legality of the securities being registered.
*10.1	Harvard Apparatus, Inc. 1996 Stock Option and Grant Plan.
*10.2	Harvard Bioscience, Inc. 2000 Stock Option and Incentive Plan.
*10.3	Harvard Bioscience, Inc. Employee Stock Purchase Plan.
23.1	Consent of Counsel (included in Exhibit 5.1 hereto).
23.2	Consent of KPMG LLP.
23.3	Consent of PricewaterhouseCoopers.
24.1	Powers of Attorney (included in the signature page of this Registration Statement).
*	Incorporated by reference to the relevant exhibit to the Registrant's Registration Statement on Form S-1 (File No. 333-45996), as amended, as filed with the Commission.

[GOODWIN, PROCTER & HOAR LLP LETTERHEAD]

January 17, 2001

Harvard Bioscience, Inc.
84 October Hill Road
Holliston, Massachusetts 01746-1371

Ladies and Gentlemen:

Re: REGISTRATION STATEMENT ON FORM S-8

This opinion is delivered in our capacity as counsel to Harvard Bioscience, Inc. (the "Company") in connection with the preparation and filing with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Act") of a Registration Statement on Form S-8 (the "Registration Statement") relating to 4,849,096 shares of Common Stock, par value \$.01 per share (the "Registered Shares") which the Company may issue pursuant to the Harvard Bioscience, Inc. 2000 Stock Option and Incentive Plan, the Harvard Apparatus, Inc. 1996 Stock Option and Grant Plan and the Harvard Bioscience, Inc. Employee Stock Purchase Plan (the "Plans").

As counsel for the Company, we have examined copies of the Plans and the Company's Second Amended and Restated Certificate of Incorporation and Amended and Restated By-laws, each as presently in effect, and such records, certificates and other documents of the Company as we have deemed necessary or appropriate for the purposes of this opinion.

We are attorneys admitted to practice in The Commonwealth of Massachusetts. We express no opinion concerning the laws of any jurisdiction other than the laws of the United States of America, The Commonwealth of Massachusetts and the Delaware General Corporation Law.

Based on the foregoing, we are of the opinion that upon the issuance and delivery of the Registered Shares against payment therefor in accordance with the terms of the Plan and any agreement thereunder, the Registered Shares will be legally issued, fully paid and non-assessable shares of the Company's Common Stock under the General Corporation Law of the State of Delaware.

The foregoing assumes all requisite steps will be taken to comply with the requirements of the Act, applicable requirements of state laws regulating the offer and sale of securities and applicable requirements of The Nasdaq Stock Market, Inc.

We hereby consent to being named as counsel to the Company in the Registration Statement and to the inclusion of this opinion as an exhibit to the Registration Statement.

Very truly yours,

/s/ Goodwin, Procter & Hoar LLP

GOODWIN, PROCTER & HOAR LLP

INDEPENDENT AUDITOR'S CONSENT

We hereby consent to incorporation by reference in this registration statement on Form S-8 of Harvard Bioscience, Inc. for the registration of 4,849,096 shares of Common Stock for Harvard Bioscience, Inc.'s 1996 Stock Option and Grant Plan, the 2000 Stock Option and Incentive Plan and the Employee Stock Purchase Plan of our report dated October 19, 2000, except as to note 20, which is as of October 25, 2000 relating to the consolidated balance sheets of Harvard Apparatus, Inc. as of September 30, 2000, December 31, 1999 and December 31, 1998 and the related consolidated statements of operations, stockholders' equity (deficit) and comprehensive income (loss), and cash flows for the nine months ended September 30, 2000 and for each of the years in the three-year period ended December 31, 1999, which report appears in Amendment No. 6 to the Registration Statement on Form S-1 (No. 333-45996).

/s/ KPMG LLP

Boston, Massachusetts
January 17, 2001

INDEPENDENT AUDITOR'S CONSENT

We hereby consent to the use in this Registration Statement on Form S-8 of our reports dated February 26, 1998 (for the year ended December 31, 1997) and April 9, 1999 (for the year ended December 31, 1998), except for the US GAAP reconciliation as described in Note 24 which is at September 15, 2000, relating to the financial statements and financial statement schedules of Pharmacia & Upjohn (Cambridge) Limited, included in Amendment No. 6 to the Registration Statement on Form S-1 (No. 333-45996).

/s/ PricewaterhouseCoopers

PricewaterhouseCoopers
Cambridge, England
January 17, 2001