

HARVARD BIOSCIENCE INC  
Form S-4/A  
September 17, 2002

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As filed with the Securities and Exchange Commission on September 17, 2002 Registration No. 333-98927

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**SECURITIES AND EXCHANGE COMMISSION**

WASHINGTON, D.C. 20549

AMENDMENT NO. 1 TO

**FORM S-4**

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

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**HARVARD BIOSCIENCE, INC.**

(Exact Name of Registrant as Specified in Its Charter)

**Delaware**  
(State or Other Jurisdiction of  
Incorporation or Organization)

**3826**  
(Primary Standard Industrial  
Classification Code Number)  
**84 October Hill Road**  
**Holliston, Massachusetts 01746**  
**(508) 893-8999**

**04-3306140**  
(I.R.S. Employer Identification Number)

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

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**Chane Graziano**  
**Chief Executive Officer**  
**Harvard Bioscience, Inc.**  
**84 October Hill Road**  
**Holliston, Massachusetts 01746**  
**(508) 893-8999**

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

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**Copies to:**

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**One Woodward Avenue, Suite 2400**  
**Detroit, Michigan 48226**  
**(313) 961-8380**

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**Approximate date of commencement of proposed sale of the securities to the public:** As soon as possible after the effective date of this registration statement and the consummation of the merger described in this registration statement.

If the securities being registered on this form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement number for the same offering.

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If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

**The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.**

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**GENOMIC SOLUTIONS INC.  
4355 Varsity Drive, Suite E  
Ann Arbor, Michigan 48108**

Dear Stockholders:

The Board of Directors of Genomic Solutions Inc. has adopted and approved an agreement and plan of merger, dated as of July 17, 2002, which provides for the merger of Genomic Solutions with and into HAG Acq. Corp., a wholly-owned subsidiary of Harvard Bioscience, Inc. If the merger is completed, each outstanding share of Genomic Solutions common stock will be converted into the right to receive a combination of Harvard Bioscience common stock and cash. The aggregate purchase price for all of the outstanding shares of Genomic Solutions common stock is fixed at 3,200,000 shares of Harvard Bioscience common stock and \$9,000,000 in cash, subject to adjustment in limited circumstances. The per share conversion ratio for Genomic Solutions common stock and the per share cash consideration will be determined based on the number of shares of Genomic Solutions common stock outstanding at the completion of the merger. Based on the number of outstanding shares of Genomic Solutions common stock on September 16, 2002, the most recent practicable date prior to the date of this proxy statement and prospectus, and assuming that all in-the-money options to purchase Genomic Solutions common stock as of September 16, 2002 are exercised prior to the merger, each share of Genomic Solutions common stock would be exchanged for approximately 0.1016 of a share of Harvard Bioscience common stock and \$0.2858 in cash. These per share amounts are estimates, however, and may change at the completion of the merger as a result of, among other things, an increase in the number of Genomic Solutions shares of common stock outstanding on the date the merger is completed. You will also receive cash, without interest, rather than a fractional share of Harvard Bioscience common stock that you otherwise would be entitled to receive in the merger.

Harvard Bioscience common stock is traded on the Nasdaq National Market under the trading symbol "HBIO," and on September 16, 2002, the closing price of Harvard Bioscience common stock was \$4.87 per share.

Stockholders of Genomic Solutions will be asked at a special meeting to adopt and approve the merger agreement and approve the merger. The special meeting for Genomic Solutions stockholders will be held on October 24, 2002, at 9:00 a.m., local time, at The Crowne Plaza Hotel, 610 Hilton Boulevard, Ann Arbor, Michigan 48108.

This proxy statement and prospectus provides you with detailed information concerning the merger agreement, the merger, Genomic Solutions and Harvard Bioscience. **You are encouraged to read and consider carefully this proxy statement and prospectus in its entirety. In particular, you should carefully consider the discussion in the section entitled "Risk Factors" beginning on page 21 of this proxy statement and prospectus.** You may also obtain more information about Harvard Bioscience and Genomic Solutions from documents that each of us has filed with the Securities and Exchange Commission.

The Genomic Solutions board of directors has carefully considered the terms and conditions of the merger and has unanimously determined that the merger is advisable, in the best interests of Genomic Solutions' stockholders and on terms that are fair to Genomic Solutions' stockholders. Accordingly, the board of directors has unanimously approved the merger agreement and the merger and recommends that you vote for adoption and approval of the merger agreement and approval of the merger.

Sincerely,

Jeffrey S. Williams  
*President and Chief Executive  
Officer*

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the merger or the shares of Harvard Bioscience common stock to be issued in the merger, or determined if the proxy statement and prospectus is accurate or adequate. Any representation to the contrary is unlawful.

The proxy statement and prospectus is dated September 17, 2002 and was first mailed to Genomic Solutions stockholders on or about September 20, 2002.

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**GENOMIC SOLUTIONS INC.**  
4355 Varsity Drive, Suite E  
Ann Arbor, Michigan 48108

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**NOTICE OF SPECIAL MEETING OF STOCKHOLDERS**  
to be held on October 24, 2002

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To the Stockholders of Genomic Solutions Inc.:

A special meeting of stockholders of Genomic Solutions Inc. will be held on October 24, 2002, at 9:00 a.m., local time, at The Crowne Plaza Hotel, 610 Hilton Boulevard, Ann Arbor, Michigan 48108, for the following purposes:

1. To consider and vote on a proposal to adopt and approve the Agreement and Plan of Merger, dated as of July 17, 2002, by and among Harvard Bioscience, Inc., a Delaware corporation, HAG Acq. Corp., a Delaware corporation and a wholly-owned subsidiary of Harvard Bioscience, and Genomic Solutions Inc., a Delaware corporation, a copy of which is attached as Annex A to the accompanying proxy statement and prospectus, and to approve the merger contemplated by the merger agreement.
2. To transact any other business that may properly come before the special meeting and any adjournment or postponement of the special meeting.

Only stockholders of record of Genomic Solutions common stock at the close of business on September 19, 2002 are entitled to notice of, and will be entitled to vote at, the special meeting or any adjournment or postponement thereof. Adoption and approval of the merger agreement and approval of the merger will require the affirmative vote of the holders of Genomic Solutions common stock representing a majority of the outstanding shares of Genomic Solutions common stock entitled to vote at the special meeting.

**Your vote is important. To assure that your shares are represented at the special meeting, you are urged to complete, date and sign the enclosed proxy card and mail it promptly in the postage-paid envelope provided, whether or not you plan to attend the special meeting in person. You may revoke your proxy in the manner described in the accompanying proxy statement and prospectus at any time before it has been voted at the special meeting. If you attend the special meeting you may vote in person even if you returned a proxy.**

Genomic Solutions stockholders have the right to dissent from the merger and obtain payment in cash of the fair value of their shares of common stock under applicable provisions of Delaware law. In order to perfect appraisal rights, stockholders must give written demand for appraisal of their shares before the taking of the vote on the merger agreement and the merger at the special meeting and must not vote in favor

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of the merger agreement and the merger. A copy of the applicable Delaware statutory provisions is included as Annex C to the accompanying proxy statement and prospectus, and a summary of these provisions can be found under "The Merger and Related Transactions Dissenters' Rights of Appraisal" beginning on page 87 of the accompanying proxy statement and prospectus.

BY ORDER OF THE BOARD OF  
DIRECTORS

Jeffrey S. Williams  
*President and Chief Executive  
Officer*

Ann Arbor, Michigan  
September 20, 2002

**Please do not send your stock certificates at this time. If the merger is completed, you will be sent instructions regarding the surrender of your stock certificates.**

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### ADDITIONAL INFORMATION

This proxy statement and prospectus incorporates important business and financial information about Harvard Bioscience and Genomic Solutions from other documents that are not included in or delivered with this proxy statement and prospectus. This information is available to you without charge upon your written or oral request. You can obtain those documents, which are incorporated by reference in this proxy statement and prospectus, by requesting them in writing or by telephone from the appropriate company at the following addresses and telephone numbers:

Harvard Bioscience, Inc.  
84 October Hill Road  
Holliston, Massachusetts 01746  
(508) 893-8999

Attn: Susan M. Luscinski, Chief Financial Officer

Genomic Solutions Inc.  
4355 Varsity Drive, Suite E  
Ann Arbor, Michigan 48108  
(734) 975-4800

Attn: Gary A. Kendra, Secretary

**If you would like to request documents, you must do so by October 17, 2002 in order to receive them before the special meeting.**

For additional information regarding where you can find information about Harvard Bioscience and Genomic Solutions, please see the section entitled "Where You Can Find Additional Information" beginning on page 140 of this proxy statement and prospectus.

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**QUESTIONS AND ANSWERS ABOUT THE MERGER**

**Q:** Why are Harvard Bioscience and Genomic Solutions proposing to merge? (See pages 56 and 67)

**A:** Harvard Bioscience and Genomic Solutions are proposing the merger because they believe the resulting combined organization will be a stronger, more competitive company capable of achieving greater financial strength, operational efficiencies and growth potential than either company could separately achieve. Harvard Bioscience and Genomic Solutions further believe that the merger will provide the opportunity for each company's stockholders to participate in the potential growth of the combined organization following the merger.

Harvard Bioscience and Genomic Solutions believe that the merger will result in a number of benefits, including:

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the synergies that could be created in leveraging the sales and marketing functions of Harvard Bioscience and Genomic Solutions;

the synergies that could be created in leveraging the distribution channels of Harvard Bioscience and Genomic Solutions;  
and

the synergies that could be created in leveraging the research and development strengths of Harvard Bioscience and Genomic Solutions.

**Q:**

**What will I receive in the merger? (See page 67)**

**A:**

If the merger is completed, each Genomic Solutions stockholder will have the right to receive a combination of Harvard Bioscience common stock and cash in exchange for each of his or her shares of Genomic Solutions common stock. The aggregate purchase price for all of the outstanding shares of Genomic Solutions common stock is fixed at 3,200,000 shares of Harvard Bioscience common stock and \$9,000,000 in cash, subject to adjustment in limited circumstances for extraordinary stock events and to preserve the intended tax free nature of the transaction. The per share conversion ratio for Genomic Solutions common stock and the per share cash consideration will be determined based on the number of shares of Genomic Solutions common stock outstanding at the completion of the merger. The manner in which this conversion ratio will be calculated and the amount of cash you will receive as part of the merger consideration is described in this proxy statement and prospectus. Based on the number of outstanding shares of Genomic Solutions common stock on September 16, 2002, the most recent practicable date prior to the date of this proxy statement and prospectus, and assuming that all in-the-money options to purchase Genomic Solutions common stock as of September 16, 2002 are exercised prior to the merger, each share of Genomic Solutions common stock would be exchanged for approximately 0.1016 of a share of Harvard Bioscience common stock and \$0.2858 in cash. These per share amounts are estimates, however, and may change at the completion of the merger as a result of, among other things, an increase in the number of Genomic Solutions shares of common stock outstanding on the date the merger is completed. You will also receive cash, without interest, rather than a fractional share of Harvard Bioscience common stock that you otherwise would be entitled to receive in the merger.

**Q:**

**Will Genomic Solutions stockholders be able to trade the Harvard Bioscience common stock that they receive in the merger? (See pages 86 and 87)**

**A:**

Yes. The Harvard Bioscience common stock issued in the merger will be registered with the Securities and Exchange Commission and listed on the Nasdaq National Market under the symbol "HBIO." All shares of Harvard Bioscience common stock that you receive in connection with the merger will be freely transferable unless you are deemed to be an affiliate of Genomic

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Solutions prior to the completion of the merger or an affiliate of Harvard Bioscience after the completion of the merger under the Securities Act of 1933, as amended, or your shares are subject to other contractual restrictions. Shares of Harvard Bioscience common stock received by persons deemed to be affiliates in the merger may only be sold in compliance with Rule 145 under the Securities Act or as otherwise permitted under the Securities Act.

**Q:**

**When do Harvard Bioscience and Genomic Solutions expect to complete the merger?**

**A:**

Harvard Bioscience and Genomic Solutions expect to complete the merger when all of the conditions to completion of the merger contained in the merger agreement have been satisfied or waived. Harvard Bioscience and Genomic Solutions are working toward satisfying these conditions and completing the merger as quickly as possible. Harvard Bioscience and Genomic Solutions currently plan to complete the merger in the fourth quarter of 2002 following the special meeting of Genomic Solutions stockholders, assuming the Genomic Solutions stockholders adopt and approve the merger agreement and approve the merger and the other merger conditions are satisfied. However, because the merger is subject to some conditions which are beyond Harvard Bioscience's and Genomic



Solutions' control, the exact timing cannot be predicted.

**Q:**

**What happens if the merger is not completed? (See page 82)**

**A:**

If the merger is not completed, each of Genomic Solutions and Harvard Bioscience will continue as independent companies. In addition, under the terms of the merger agreement, Genomic Solutions may be required to pay Harvard Bioscience a termination fee of \$1,300,000 or to reimburse Harvard Bioscience for out-of-pocket expenses, including legal, accounting, printing and other fees, related to this transaction if the merger is not completed for specified reasons discussed in more detail in this proxy statement and prospectus.

**Q:**

**What vote is required to approve the merger? (See page 46)**

**A:**

Adoption and approval of the merger agreement and approval of the merger requires the affirmative vote of the holders of a majority of the outstanding shares of Genomic Solutions common stock as of the record date. Each of the boards of directors of Harvard Bioscience and Genomic Solutions has already approved the merger.

**Q:**

**Are Harvard Bioscience stockholders voting on the merger?**

**A:**

No. Only Genomic Solutions stockholders are voting on the merger.

**Q:**

**How do I vote on the merger? (See page 48)**

**A:**

First, please review the information contained or incorporated by reference in this proxy statement and prospectus, including the annexes, as it contains important information about Genomic Solutions and Harvard Bioscience. It also contains important information about what each of the boards of directors of Genomic Solutions and Harvard Bioscience, respectively, considered in evaluating the merger. Next, complete and sign the enclosed proxy card, and then mail it in the enclosed return envelope as soon as possible so that your shares can be voted at the special meeting of Genomic Solutions' stockholders at which the merger agreement and the merger will be presented and voted upon. You may also attend the special meeting in person and vote at the special meeting instead of submitting a proxy.

**Q:**

**What happens if I don't indicate how to vote my proxy? (See page 48)**

**A:**

If you sign and send in your proxy, but do not include instructions on how to vote your properly signed proxy card, your shares will be voted FOR adoption and approval of the merger agreement and approval of the merger.

**Q:**

**What happens if I don't return a proxy card? (See page 47)**

**A:**

Not returning your proxy card will have the same effect as voting against adoption and approval of the merger agreement and against approval of the merger.

**Q:**

**Can I change my vote after I have mailed my signed proxy card? (See page 48)**

**A:**

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Yes. You can change your vote at any time before your proxy is voted at the special meeting of Genomic Solutions' stockholders at which the merger agreement and merger will be presented and voted upon. You can do this in one of three ways:

first, you can send a written notice to the Secretary of Genomic Solutions stating that you would like to revoke your proxy;

second, you can complete and submit a later-dated proxy card; or

third, you can attend the special meeting and vote in person. Your attendance at the special meeting alone will not revoke your proxy. You must also vote at the special meeting in order to revoke your previously submitted proxy.

You should send any notice of revocation or your completed new proxy card, as the case may be, to Genomic Solutions at the following address:

Genomic Solutions Inc.  
4355 Varsity Drive, Suite E  
Ann Arbor, MI 48108  
Attn: Gary A. Kendra, Secretary

**Q:**

**Can I submit my proxy by telephone or over the Internet?**

**A:**

If you hold your shares through a bank or brokerage firm, you may be able to submit your proxy by telephone or over the Internet. You should refer to the proxy card included with your materials for instructions about how to vote. If you vote by telephone or over the Internet, you do not need to complete and mail your proxy card. If you hold shares directly, then you may not vote by telephone or over the Internet.

**Q:**

**If my broker holds my shares in "street name," will my broker vote my shares for me? (See page 48)**

**A:**

No. Your broker will not be able to vote your shares without instructions from you. If you do not provide your broker with voting instructions, your shares may be considered present at the special meeting for purposes of determining a quorum, but will not be considered to have been voted in favor of adoption and approval of the merger agreement or approval of the merger and therefore will have the effect of a vote against the merger agreement and against the approval of the merger. If you have instructed a broker to vote your shares and wish to change your vote, you must follow directions received from your broker to change those instructions.

**Q:**

**Should I send my stock certificates now? (See page 69)**

**A:**

No. If the merger is completed, Harvard Bioscience will send you written instructions for exchanging your Genomic Solutions stock certificates for Harvard Bioscience stock certificates and cash. In the meantime, you should retain your certificates as the Genomic Solutions stock certificates are still valid. Please do not send in your stock certificates with your proxy. If you send your stock certificates to either Harvard Bioscience or Genomic Solutions, neither Harvard Bioscience nor Genomic Solutions will assume the risk of loss.

**Q:**

**Am I entitled to appraisal rights? (See pages 48 and 87)**

**A:**

Holders of Genomic Solutions common stock are entitled to appraisal rights under Section 262 of the Delaware General Corporation Law.

**Q:**

**Are there risks I should consider in deciding whether to vote for the merger?**

A: Yes. In the section entitled "Risk Factors" beginning on page 21 of this proxy statement and prospectus, Genomic Solutions and Harvard Bioscience have described a number of risk factors that you

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should consider in connection with the merger.

**Q: What are the tax consequences to me of the merger? (See page 84)**

A: In general, you will recognize capital gain, but not any loss, on the exchange of your Genomic Solutions common stock for Harvard Bioscience common stock and cash to the extent of the lesser of the cash received and the gain realized in the exchange. **This tax treatment may not apply to all Genomic Solutions stockholders. You should consult with your own tax advisor for a full understanding of the merger's tax consequences that are specific to you.**

**Q: Who can help answer my questions about the merger?**

A: You may call Gary A. Kendra, the Secretary of Genomic Solutions, at (734) 975-4800, with any questions you may have about the merger.

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## SUMMARY

The following is a summary of the information contained in this proxy statement and prospectus. This summary may not contain all of the information that is important to you. You should carefully read this entire proxy statement and prospectus and the other documents referred to for a more complete understanding of the merger and related transactions. In particular, you should read the annexes attached to this proxy statement and prospectus, including the merger agreement and the form of voting agreement, which are attached to this proxy statement and prospectus as Annexes A and D, respectively. In addition, Harvard Bioscience incorporates by reference into this proxy statement and prospectus important business and financial information. You may obtain the information incorporated by reference into this proxy statement and prospectus without charge by following the instructions in the section entitled "Where You Can Find Additional Information" beginning on page 140 of this proxy statement and prospectus.

### Parties to the Merger

HARVARD BIOSCIENCE, INC.  
84 October Hill Road  
Holliston, Massachusetts 01746  
[www.harvardbioscience.com](http://www.harvardbioscience.com)

Harvard Bioscience is a global provider of innovative, research enabling tools that solve problems in drug discovery. Harvard Bioscience provides a broad array of tools designed to accelerate the speed and to reduce the cost at which its customers can introduce new drugs. Harvard Bioscience focuses on alleviating bottlenecks in the drug discovery process including target validation, assay development and ADMET (absorption, distribution, metabolism, elimination and toxicology) screening.

To address these critical bottlenecks, Harvard Bioscience has several innovative proprietary tools. For target validation, these tools include novel pipette tips, micro-dialyzers, plate readers and COPAS high throughput/high relevance model organism screening systems. For ADMET screening, these tools include NaviCyte diffusion chambers for drug absorption testing, 96 well equilibrium dialysis plates for drug distribution testing, and COPAS high throughput/high relevance model organism toxicology testing systems. Harvard Bioscience also has an established product base in target validation and ADMET screening. For target validation, this product base consists of DNA/RNA/protein calculators, life science spectrophotometers and amino acid analysis systems. For ADMET screening, this product base includes precision infusion pumps, organ

testing systems, ventilators, cell biology and electrophysiology products.

A key element of Harvard Bioscience's strategy to become the leading provider of innovative, enabling technologies and products for target validation and screening research in the drug discovery process is to acquire businesses that it believes will either strengthen its core business or provide major breakthroughs for drug discovery research.

The company was organized as a Massachusetts corporation in 1996 in connection with the purchase by the current management team of a portion of the assets of Harvard Apparatus, Inc., a business which, with its predecessors, had been in existence since 1901. Harvard Bioscience was reincorporated in Delaware in November 2000.

HAG Acq. Corp. is a newly formed Delaware corporation and a wholly-owned subsidiary of Harvard Bioscience. HAG Acq. Corp. was formed solely to effect the merger and has not conducted any business during any period of its existence.

GENOMIC SOLUTIONS INC.  
4355 Varsity Drive, Suite E  
Ann Arbor, Michigan 48108  
www.genomicsolutions.com

Genomic Solutions develops, manufactures and sells instruments, consumables and software for the life sciences research and drug discovery markets. Its market focus is based on three key areas: genomics, proteomics and microscale liquid handling. These areas comprise three of the major technologies used by researchers in studying disease and developing new drugs.

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Genomic Solutions' products allow researchers to perform high volume experiments, and analyze the resultant data, at lower costs and in less time than with traditional techniques. Genomic Solutions' products are distributed and sold to pharmaceutical and biotechnology companies, government agencies, academic institutions and private research organizations throughout the world.

Genomic Solutions' predecessor, B.I. Systems Corporation, was established in 1994 to acquire a gel electrophoresis imaging and analysis product line from Millipore Corporation used to document and analyze one-dimensional separation of DNA and proteins. In 1997, a new management team redirected the company's efforts to the growing genomic and proteomic markets. In December 1997, the company changed its name to Genomic Solutions Inc.

#### **Voting Requirements for the Merger (See page 46)**

In order to complete the merger, the holders of a majority of the outstanding shares of Genomic Solutions common stock as of the record date must vote to adopt and approve the merger agreement and approve the merger. Each share of Genomic Solutions common stock will be entitled to one vote per share. As a result, you will be entitled to cast one vote per share of Genomic Solutions common stock you owned as of September 19, 2002, the record date for the Genomic Solutions special meeting at which the merger agreement and the merger will be presented and voted upon.

Harvard Bioscience stockholders are not required to vote on the merger agreement or the merger.

#### **Share Ownership of Management (See page 46)**

As of the close of business on September 16, 2002, the most recent practicable date prior to the date of this proxy statement and prospectus, directors and officers of Genomic Solutions (and their respective affiliates) collectively owned approximately 38% of the outstanding shares of Genomic Solutions common stock entitled to vote at the special meeting on the merger agreement and the merger. All of the directors and certain of their affiliates and certain executive officers, who as of September 16, 2002 collectively owned approximately 38% of the outstanding shares of Genomic Solutions common stock entitled to vote at the special meeting, have entered into voting agreements with Harvard Bioscience under which they have agreed, among other things, to vote their shares of Genomic Solutions common stock in favor of adoption and approval of the merger agreement and approval of the merger.

#### **Genomic Solutions' Reasons for the Merger (See page 56)**

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Genomic Solutions' board of directors consulted with senior management and Genomic Solutions' financial and legal advisors and considered a number of factors, including those set forth below, in reaching its decision to approve the merger agreement and the transactions contemplated by the merger agreement, and to recommend that Genomic Solutions stockholders vote FOR adoption and approval of the merger agreement and approval of the merger.

the relative value of the consideration to be received by Genomic Solutions stockholders compared to the historical and recent market prices of Genomic Solutions common stock;

the fairness opinion of Genomic Solutions' financial advisor, U.S. Bancorp Piper Jaffray;

Genomic Solutions' prospects of remaining independent;

the possible effect of the merger on its employees, customers and current facilities;

the ability of Genomic Solutions to respond to a superior acquisition proposal from a third party, in some circumstances, subject to the possible payment of a termination fee;

the limited nature of the closing conditions included in the merger agreement; and

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the relative liquidity of Harvard Bioscience common stock compared to Genomic Solutions common stock.

The foregoing discussion of the information and factors considered by Genomic Solutions' board of directors, while not exhaustive, includes the material factors considered by the Genomic Solutions board of directors. In view of the variety of factors considered in connection with its evaluation of the merger, Genomic Solutions' board of directors did not find it practicable to, and did not, quantify or otherwise assign relative or specific weight or values to any of these factors, and individual directors may have given different weights to different factors.

### **Recommendation of Genomic Solutions' Board of Directors (See page 58)**

After careful consideration, Genomic Solutions' board of directors unanimously determined that the merger is advisable, in the best interests of Genomic Solutions stockholders and on terms that are fair to the stockholders of Genomic Solutions. **Accordingly, Genomic Solutions' board of directors unanimously approved the merger agreement and the merger and recommends that you vote FOR adoption and approval of the merger agreement and approval of the merger.**

### **Opinion of Genomic Solutions' Financial Advisor (See page 58)**

In deciding to approve the merger, the Genomic Solutions board of directors considered an opinion from its financial advisor, U.S. Bancorp Piper Jaffray Inc. On July 16, 2002, Piper Jaffray delivered its written opinion to the board of directors of Genomic Solutions that, as of the date of such opinion, the merger consideration set forth in the merger agreement was fair, from a financial point of view, to the holders of Genomic Solutions common stock.

The full text of the Piper Jaffray written opinion is attached to this proxy statement and prospectus as Annex B. We encourage you to read the opinion carefully as well as the section of this proxy statement and prospectus entitled "Consideration of the Merger by Genomic Solutions' Board of Directors Opinion of Genomic Solutions' Financial Advisor." The opinion of Piper Jaffray does not constitute a recommendation as to how any holder of Genomic Solutions common stock should vote with respect to the merger agreement and the merger.

### **Interests of Genomic Solutions' Directors and Executive Officers in the Merger (See page 64)**

Some of Genomic Solutions' directors and officers have interests in the merger that are different from, or in addition to, those of Genomic Solutions stockholders generally. For instance, the merger agreement provides certain directors and officers of Genomic Solutions with

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continuing indemnification rights and change in control payments. Genomic Solutions' board of directors was aware of these interests and considered them, among other matters, when it approved the merger agreement and the merger.

### **Voting Agreements of Directors and Certain Executive Officers (See page 90)**

Directors and certain of their affiliates and certain executive officers of Genomic Solutions who held an aggregate of approximately 38% of Genomic Solution's total outstanding shares of common stock on July 17, 2002 have agreed to vote their shares in favor of the merger agreement and the merger.

### **Structure and Effects of the Merger (See page 67)**

At the completion of the merger, Genomic Solutions will merge with and into HAG Acq. Corp. and HAG Acq. Corp. will survive as a wholly-owned subsidiary of Harvard Bioscience.

As a result of the merger, each outstanding share of Genomic Solutions common stock will be converted into the right to receive a combination of Harvard Bioscience common stock and cash. The aggregate purchase price for all of the outstanding shares of Genomic Solutions common stock is fixed at 3,200,000 shares of Harvard Bioscience common stock and \$9,000,000 in cash, subject to adjustment in limited circumstances for extraordinary stock events and to preserve the intended tax free nature of the transaction. The per share conversion ratio for Genomic Solutions common

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stock and the per share cash consideration will be determined based on the number of shares of Genomic Solutions common stock outstanding at the completion of the merger. The manner in which this conversion ratio will be calculated and the amount of cash you will receive as part of the merger consideration is described in this proxy statement and prospectus. Based on the number of outstanding shares of Genomic Solutions common stock on September 16, 2002, the most recent practicable date prior to the date of this proxy statement and prospectus, and assuming that all in-the-money options to purchase Genomic Solutions common stock as of September 16, 2002 are exercised prior to the merger, each share of Genomic Solutions common stock would be exchanged for approximately 0.1016 of a share of Harvard Bioscience common stock and \$0.2858 in cash. These per share amounts are estimates, however, and may change at the completion of the merger as a result of, among other things, an increase in the number of Genomic Solutions shares of common stock outstanding on the date the merger is completed. You will also receive cash, without interest, rather than a fractional share of Harvard Bioscience common stock that you otherwise would be entitled to receive in the merger.

At the completion of the merger, holders of Genomic Solutions common stock will hold shares of Harvard Bioscience common stock. As a result, the rights of these holders following the merger will be governed by Harvard Bioscience's certificate of incorporation and bylaws, rather than Genomic Solutions' certificate of incorporation and bylaws.

### **Completion and Effectiveness of the Merger (See page 67)**

Harvard Bioscience and Genomic Solutions expect to complete the merger when all of the conditions to completion of the merger contained in the merger agreement have been satisfied or waived.

Harvard Bioscience and Genomic Solutions are working toward satisfying these conditions and completing the merger as quickly as possible. Harvard Bioscience and Genomic Solutions currently plan to complete the merger in the fourth quarter of 2002 following the special meeting of Genomic Solutions stockholders, assuming the Genomic Solutions stockholders adopt and approve the merger agreement and approve the merger and the other merger conditions are satisfied. However, because the merger is subject to specified conditions, some of which are beyond Harvard Bioscience's and Genomic Solutions' control, the exact timing cannot be predicted.

Assuming the Genomic Solutions stockholders approve the merger and the merger agreement, and the other conditions to completion of the merger have been satisfied or waived, the merger will become effective upon the filing of a certificate of merger with the State of Delaware. Harvard Bioscience and Genomic Solutions expect to file the certificate of merger shortly following the special meeting of Genomic Solutions stockholders at which the merger agreement and the merger will be presented and voted upon.

### **Genomic Solutions Prohibited from Soliciting Other Offers (See page 75)**

Genomic Solutions has agreed that, while the merger is pending, it will not solicit, initiate or encourage, or, subject to some limited exceptions, engage in discussions with any third parties regarding some types of extraordinary transactions, such as a tender offer, merger, consolidation or similar transaction involving Genomic Solutions.

**Conditions to Completion of the Merger (See page 78)**

Harvard Bioscience's and Genomic Solutions' obligations to complete the merger are subject to specified conditions described under "The Merger Agreement Conditions to Completion of the Merger."

**Termination of the Merger Agreement and Payment of Termination Fee (See pages 80 and 82)**

Harvard Bioscience and Genomic Solutions may terminate the merger agreement by mutual

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agreement and under other specified circumstances.

Genomic Solutions and Harvard Bioscience have agreed that if the merger agreement is terminated under certain circumstances described under "The Merger Agreement Payment of Termination Fees and Expenses," Genomic Solutions will pay Harvard Bioscience a fee of \$1,300,000.

Genomic Solutions and Harvard Bioscience have also agreed that if the merger agreement is terminated under certain circumstances, Genomic Solutions will reimburse Harvard Bioscience for its out-of-pocket expenses.

**Material United States Federal Income Tax Consequences of the Merger (See page 84)**

In general, for federal income tax purposes, you will recognize capital gain, but not any loss, on the exchange of your Genomic Solutions common stock for Harvard Bioscience common stock and cash to the extent of the lesser of the cash received and the gain realized in the exchange.

**This tax treatment may not apply to all Genomic Solutions stockholders. Determining the actual tax consequences of the merger to you can be complicated. You should consult your own tax advisor for a full understanding of the merger's tax consequences that are particular to you.**

Genomic Solutions will not be obligated to complete the merger unless it receives a legal opinion from its tax counsel, dated as of the closing date, as to the tax consequences of the merger. If Genomic Solutions' tax counsel is unwilling or unable to render the tax opinion, Harvard Bioscience's tax counsel may render the tax opinion. This opinion will not bind the Internal Revenue Service, which could take a different view.

**Accounting Treatment of the Merger (See page 86)**

The merger will be accounted for under the purchase method of accounting and Harvard Bioscience will be considered the acquiror of Genomic Solutions for accounting purposes. Accordingly, the historical financial statements of Harvard Bioscience will become the historical financial statements of the combined company following the merger.

**Regulatory Approvals Required to Complete the Merger (See page 86)**

Neither Harvard Bioscience nor Genomic Solutions is aware of any material governmental or regulatory approval required for completion of the merger, other than compliance with applicable corporate law of the State of Delaware and federal and state securities laws.

**Dissenters' Rights of Appraisal (See pages 48 and 87)**

Under Section 262 of the Delaware General Corporation Law, record holders of Genomic Solutions common stock are entitled to dissent from the merger, request a judicial appraisal of the fair value of their shares of Genomic Solutions common stock and, if the merger is consummated and all requirements of Section 262 are satisfied by Genomic Solutions stockholders seeking to exercise appraisal rights, to receive payment equal to the fair value of their shares of Genomic Solutions common stock, as determined in the manner set forth under Section 262. The procedures which must be followed in connection with the exercise of appraisal rights by dissenting stockholders are described in the sections entitled "The Special Meeting of Genomic Solutions Stockholders Dissenters' Rights of Appraisal" and "The Merger and Related Transactions Dissenters' Rights of Appraisal," beginning on page 48 and page 87, respectively, of this proxy statement and prospectus. A copy of Section 262 of the Delaware General Corporation Law is attached as Annex C to this proxy statement and prospectus. Failure to strictly follow the procedures set forth in Section 262 on a timely basis may result in a termination or loss of appraisal rights.

**Restrictions on the Ability to Sell Harvard Bioscience Common Stock Received in the Merger (See page 86)**

All shares of Harvard Bioscience common stock that you receive in connection with the merger will be freely transferable unless you are deemed to be an affiliate of Genomic Solutions prior to the completion of the merger or an affiliate of Harvard Bioscience after the completion of the merger under the Securities Act, or your shares are subject to other contractual restrictions. Shares of Harvard Bioscience common stock received by persons deemed to be affiliates in the merger may only be sold in compliance with Rule 145 under the Securities Act.

**Listing of Harvard Bioscience Common Stock (See page 87)**

The shares of Harvard Bioscience common stock issued in connection with the merger will be listed on the Nasdaq National Market under the symbol "HBIO."

**HARVARD BIOSCIENCE SUMMARY SELECTED CONSOLIDATED FINANCIAL DATA**

The following summary selected consolidated statement of operations data of Harvard Bioscience for each of the three years ended December 31, 2001, 2000 and 1999 and the summary selected consolidated balance sheet data as of December 31, 2001 and 2000 set forth below, are derived from the historical audited consolidated financial statements included in Harvard Bioscience's Annual Report on Form 10-K for the year ended December 31, 2001. The summary selected consolidated statement of operations data for each of the two years ended December 31, 1998 and 1997 and the consolidated balance sheet data as of December 31, 1999, 1998 and 1997 are derived from Harvard Bioscience's historical audited financial statements. Harvard Bioscience derived the summary selected consolidated balance sheet and statement of operations data as of and for the six month periods ended June 30, 2002 and 2001 from its unaudited consolidated financial statements. These unaudited consolidated financial statements include, in the opinion of management, all normal and recurring adjustments that are necessary for a fair statement of results. The operating results for the six months ended June 30, 2002 are not necessarily indicative of the results that may be expected for the year ending December 31, 2002. When you read the following summary historical data, it is important that you read it along with the historical consolidated financial statements and related notes in Harvard Bioscience's Annual Report on Form 10-K for the year ended December 31, 2001 and Harvard Bioscience's quarterly reports on Form 10-Q filed with the Securities and Exchange Commission and incorporated by reference into this proxy statement and prospectus, as well as the section of Harvard Bioscience's Annual Report on Form 10-K entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations."

	Years Ended December 31,					Six Months Ended June 30,	
	1997	1998	1999	2000	2001	2001	2002
	(in thousands, except per share data)					(unaudited)	
<b>Consolidated Statement of Operations Data:</b>							
Revenues	\$ 11,464	\$ 12,154	\$ 26,178	\$ 30,575	\$ 40,868	\$ 18,318	\$ 25,692
Costs and Expenses:							
Cost of product revenues	5,128	5,351	13,547	15,833	20,179	9,223	12,405
General and administrative expenses	2,338	2,317	4,147	5,181	7,001	3,332	4,032
Severance and other related costs					460		
Sales and marketing expense	1,672	1,722	2,449	3,186	4,840	2,042	3,297
Research and development	207	325	1,188	1,533	3,179	1,048	2,024
Stock compensation expense			3,283	14,676	2,679	1,541	655
In-process research and development					5,447	5,447	
Amortization of goodwill and other intangibles		27	368	604	1,744	487	612
Operating income (loss)	2,119	2,412	1,196	(10,438)	(4,661)	(4,802)	2,667



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	Years Ended December 31,				Six Months Ended June 30,		
<b>Other (expenses) income:</b>							
Foreign currency (loss) gain	(96)	21	(48)	(324)	(99)	(237)	129
Common stock warrant interest expense	(117)	(1,379)	(29,694)	(36,885)			
Interest (expense) income, net	(222)	(210)	(657)	(756)	1,352	951	187
Amortization of deferred financing costs			(63)	(153)			
Other	106	10	(17)	45	(10)	7	(34)
<b>Other income (expense), net</b>	<b>(329)</b>	<b>(1,558)</b>	<b>(30,479)</b>	<b>(38,073)</b>	<b>1,243</b>	<b>721</b>	<b>282</b>
<b>Income (loss) before income taxes</b>	<b>1,790</b>	<b>854</b>	<b>(29,283)</b>	<b>(48,511)</b>	<b>(3,418)</b>	<b>(4,081)</b>	<b>2,949</b>
<b>Income taxes</b>	<b>682</b>	<b>783</b>	<b>137</b>	<b>1,359</b>	<b>1,790</b>	<b>1,012</b>	<b>1,158</b>
<b>Net income (loss)</b>	<b>1,108</b>	<b>71</b>	<b>(29,420)</b>	<b>(49,870)</b>	<b>(5,208)</b>	<b>(5,093)</b>	<b>1,791</b>
<b>Preferred stock dividends</b>	<b>(122)</b>	<b>(122)</b>	<b>(157)</b>	<b>(136)</b>			
<b>Net income (loss) available to common stockholders</b>	<b>\$ 986</b>	<b>\$ (51)</b>	<b>\$ (29,577)</b>	<b>\$ (50,006)</b>	<b>\$ (5,208)</b>	<b>\$ (5,093)</b>	<b>\$ 1,791</b>
<b>Income (loss) per share:</b>							
Basic	\$	0.13	\$				