

CIPHERGEN BIOSYSTEMS INC
Form 424B3
October 17, 2003

[QuickLinks](#) -- Click here to rapidly navigate through this document

Filed Pursuant to Rule 424(b)(3)
Registration No. 333-109556

PROSPECTUS

\$30,000,000

CIPHERGEN BIOSYSTEMS, INC.

4.50% Convertible Senior Notes Due 2008 and the Common Stock Issuable Upon Conversion of the Notes

We issued the notes in a private placement in August 2003. This prospectus will be used by selling security holders to resell their notes and the common stock issuable upon conversion of their notes. We will not receive any proceeds from this offering.

We will pay interest on the notes on March 1 and September 1 of each year. The first interest payment will be made on March 1, 2004.

You may convert the notes into shares of our common stock at an initial conversion rate of 108.8329 shares per \$1,000 principal (representing an initial conversion price of approximately \$9.19 per share), subject to adjustment as set forth in this prospectus.

On or after September 1, 2006, we may redeem the notes, in whole or in part, at the prices described in the indenture, plus accrued and unpaid interest, if any, to the date of redemption. We may redeem the notes only if the closing price of our common stock equals or exceeds 150% of the conversion price for at least 20 trading days in the consecutive 30-day trading period ending on the trading day prior to the date notice of redemption is given. You may require us to repurchase the notes at prices described in the prospectus herein upon a "change of control."

The notes will rank on parity in right of payment to our existing and future senior unsecured debt. The notes are effectively subordinated to our secured debt and the liabilities of our subsidiaries.

The notes are not listed on any securities exchange or included in any automated quotation system. Our common stock is quoted on the Nasdaq National Market under the symbol "CIPH." On October 15, 2003, the last reported sale price for our common stock on the Nasdaq National Market was \$13.08 per share. The notes are eligible for the PORTAL market.

Investing in the securities offered with this prospectus involves certain risks. See "Risk Factors" beginning on page 7.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is October 17, 2003.

TABLE OF CONTENTS

| | Page |
|---|-------------|
| Summary | 2 |
| The Offering | 3 |
| Ratio of Earnings to Fixed Charges | 6 |
| Risk Factors | 7 |
| Forward-Looking Statements | 19 |
| Use of Proceeds | 20 |
| Description of the Notes | 21 |
| United States Federal Income Tax Consequences | 35 |
| Selling Securityholders | 41 |
| Plan of Distribution | 43 |
| Legal Matters | 45 |
| Experts | 45 |
| Incorporation of Certain Information by Reference | 45 |
| Where You Can Find More Information | 45 |

SUMMARY

The following summary is qualified in its entirety by the more detailed information, including our consolidated financial statements and related notes, included in this prospectus and incorporated in this prospectus by reference. You should carefully consider the information set forth under "Risk Factors." Unless the context otherwise requires, the terms "CIPHERGEN," "the Company," "the registrant," "we," "us" and "our" refer to CIPHERGEN Biosystems, Inc., a Delaware corporation.

CIPHERGEN Biosystems, Inc.

CIPHERGEN develops, manufactures and sells ProteinChip® Systems, which consist of ProteinChip Readers, ProteinChip Software and related accessories used in conjunction with consumable ProteinChip Arrays, for life science researchers. These products are sold primarily to biologists at pharmaceutical and biotechnology companies, and academic and government research laboratories. The Company also provides services through its Biomarker Discovery Centers® and chromatography sorbents used for protein purification. The Company's principal executive offices are located at 6611 Dumbarton Circle, Fremont, California, 94555 and the telephone number at that address is (510) 505-2100.

THE OFFERING

Securities Offered \$30,000,000 principal amount of 4.50% Convertible Senior Notes due 2008.

| | |
|------------------------------|--|
| Maturity Date | September 1, 2008. |
| Ranking | <p>The notes:</p> <ul style="list-style-type: none">will be our senior unsecured obligations;will rank on parity in right of payment with all of our existing and future senior unsecured debt; andwill rank senior to all of our existing and future debt that expressly provides that it is subordinated to the notes. <p>The notes are also effectively subordinated in right of payment to our existing and future secured debt, to the extent of such security, and to our subsidiaries' liabilities. At June 30, 2003, the aggregate principal amount of liabilities of our subsidiaries was approximately \$7.2 million. The indenture under which the notes are issued does not prevent us or our subsidiaries from incurring additional debt or other obligations.</p> |
| Interest | We will pay 4.50% per annum on the principal amount of notes, payable semiannually on March 1 and September 1, beginning March 1, 2004. |
| Conversion | The notes are convertible, at your option, at any time on or before the close of business on the business day immediately preceding the maturity date of the notes, unless previously redeemed or repurchased, into shares of our common stock initially at a conversion rate of 108.8329 shares per \$1,000 principal amount of notes, which is equal to a conversion price of approximately \$9.19 per share. Notwithstanding the foregoing, any holder of a note who (together with such holder's affiliates) purchased more than \$10 million in aggregate principal amount of notes in the initial resale by the initial purchaser shall not have the right to convert its note to the extent that, after giving effect to such conversion, such holder (together with the holder's affiliates) would beneficially own in excess of 4.99% of the total number of shares of our common stock outstanding immediately after giving effect to such conversion. |
| Conversion Price Adjustments | <p>The conversion price, and hence the conversion rate, are subject to adjustment upon the occurrence of events described in this prospectus, including:</p> <ul style="list-style-type: none">subject to the exceptions described in this prospectus, subdivisions and combinations of our common stock; |
| Redemption | <p>distributions to all holders of our common stock of cash, shares of our common stock, or rights or warrants to purchase (or securities convertible into) our common stock at less than (or having a conversion price less than) the current market price of our common stock;</p> <ul style="list-style-type: none">subject to the exceptions described in this prospectus, distributions to all holders of our capital stock of evidences of our indebtedness or assets; orsubject to the exceptions described in this prospectus, purchases of our common stock pursuant to a tender offer or exchange offer made by us or any of our subsidiaries to all holders of our common stock. <p>The notes will not be redeemable before September 1, 2006. We may redeem all or a portion of the notes at our option on or after September 1, 2006 at the redemption prices listed in this prospectus, plus accrued and unpaid interest, provided that the notes will only be redeemable if the closing price of our common stock equals or exceeds 150% of the conversion price then in effect for at least 20 trading days within a period of 30 consecutive</p> |

Edgar Filing: CIPHERGEN BIOSYSTEMS INC - Form 424B3

trading days ending on the trading day before the date of the notice of the optional redemption. You will be able to convert the notes called for redemption up to and including the business day immediately preceding the date of redemption.

Change of Control Repurchase

Upon a change of control, as that term is defined in the indenture, each holder of the notes may require us to repurchase some or all of its notes at the purchase prices listed in this prospectus plus accrued and unpaid interest.

Use of Proceeds

We will not receive any of the proceeds of the resale by the selling security holders of the notes or common stock into which they may be converted.

Registration Rights

We agreed to file this shelf registration statement with the SEC covering the resale of the notes and the underlying common stock. We have also agreed to use our reasonable efforts to keep the shelf registration statement effective, subject to specified black-out periods, until the earlier of the following has occurred:

all securities covered by the registration statement have been sold;

the holders of the notes and the shares of our common stock issuable upon conversion of the notes that are not affiliates of the Company are able to sell all such securities immediately pursuant to Rule 144(k) under the Securities Act;

the date when all of the notes and shares of common stock issuable upon conversion have ceased to be outstanding; or

August 22, 2005.

4

Trading

We do not intend to list the notes on any national securities exchange. The notes are eligible for The PORTALSM Market. We provide no assurance as to the liquidity of, or trading markets for, the notes.

Nasdaq National Market Symbol of our Common Stock

CIPH

5

RATIO OF EARNINGS TO FIXED CHARGES

The computation of the ratio of earnings to fixed charges includes CIPHERGEN Biosystems, Inc. and its consolidated subsidiaries. The ratio of earnings to fixed charges is computed by dividing:

loss before taxes adjusted for fixed charges and minority interest, by

fixed charges, which includes interest expense and the portion of interest expense under operating leases deemed by us to be representative of the interest.

For our fiscal years ended December 31, 2002, 2001 and 2000, earnings were inadequate to cover fixed charges by \$29.0 million, \$25.7 million and \$20.2 million, respectively. For the six months ended June 30, 2003 and 2002, earnings were inadequate to cover fixed charges by \$24.1 million and \$14.4 million, respectively.

6

RISK FACTORS

Our future operating results may vary substantially from period to period due to a number of factors, many of which are beyond our control. The following discussion highlights some of these factors and the possible impact of these factors on future results of operations. You should carefully consider these factors before making an investment decision. If any of the following factors actually occur, our business, financial condition or results of operations could be harmed. In that case, the price of our common stock could decline, and you could experience losses on your investment.

Risks Related to Our Business

We expect to continue to incur net losses in 2003 and at least the early part of 2004. If we are unable to significantly increase our revenues, we may never achieve profitability.

From our inception in December 1993 through June 30, 2003, we have generated cumulative revenue of approximately \$103.8 million and have incurred cumulative net losses of approximately \$128.6 million. We have experienced significant operating losses each year since our inception and expect these losses to continue for at least the next year. For example, we experienced net losses of approximately \$29.1 million in 2002, \$25.8 million in 2001 and \$20.3 million in 2000. For the first six months of 2003, we had a net loss of \$24.8 million. Our losses have resulted principally from costs incurred in research and development, sales and marketing, litigation, and general and administrative costs associated with our operations. These costs have exceeded our revenue, which, to date, has been generated principally from product sales. We expect to incur additional operating losses and these losses may be substantial as a result of increases in expenses for manufacturing, marketing and sales, research and product development, and general and administrative costs. We may never achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis.

If we are unable to further establish the utility of our products, our products and services may not achieve market acceptance.

The commercial success of our ProteinChip Systems and Arrays and chromatography sorbents depends upon validating their utility for important biological applications and increasing their market acceptance by researchers in pharmaceutical and biotechnology companies, academic and government research centers and clinical reference laboratories. If our products are not demonstrated to be more effective in providing commercially useful protein information than other existing technologies, it could seriously undermine market acceptance of our products and reduce the likelihood that we will ever achieve profitability.

If we are unable to attract additional clients for our Biomarker Discovery Centers and satisfy these clients, we may not be successful in furthering adoption of our products and technology and achieving profitability.

An element of our business strategy is to operate Biomarker Discovery Centers in part through partnerships with academic and government research centers and pharmaceutical and biotechnology companies. Although we are currently in negotiation with potential partners and clients, to date we have entered into only a few such arrangements. Failure to enter into additional arrangements or expand existing relationships could limit adoption of our products and prevent us from achieving profitability.

If we fail to successfully expand sales of our ProteinChip Systems, and develop new versions of proteomic systems or leverage our chromatography products expertise to expand sales of other products, our revenue will not increase, we will not achieve profitability, and we may not be able to successfully maintain and grow a profitable business.

Our success depends on our ability to continue to expand commercial sales of our ProteinChip Systems, including our ProteinChip Arrays, and develop new, higher performance, easier to use versions of proteomics systems. We may encounter difficulties in developing or producing our proteomic systems on a timely basis, we may not be able to produce them economically, we may fail to achieve expected performance levels, or we may fail to gain industry acceptance of such products. We also may be unable to leverage our chromatography product expertise in conjunction with our ProteinChip technology to expand commercial sales of our ProteinChip Systems and chromatography products.

If we fail to continue to develop the technologies on which we base our products, we may not be able to successfully foster further adoption of our products and services as an industry standard, develop new product offerings or generate revenue by obtaining commercial rights related to biomarker discoveries.

The technologies we use for our ProteinChip Systems and for our chromatographic sorbents are new and complex technologies which are subject to change as new discoveries are made. New discoveries and further progress in our field are essential if we are to maintain and expand the adoption of our product offerings. Development of these technologies remains a substantial risk to us due to various factors including the scientific challenges involved, our ability to find and collaborate with others working in our field, and competing technologies which may prove more successful than ours.

If we are unable to maintain our licensed rights to the SELDI technology, we may lose the right to produce ProteinChip Systems and products based on the SELDI technology and the right to provide services and information related thereto.

Our commercial success depends on our ability to maintain our sublicenses to the SELDI technology. Pursuant to the settlement of the litigation between CIPHERGEN, Molecular Analytical Systems, LumiCyte and T. Williams Hutchens, MAS cannot terminate CIPHERGEN's rights under the sublicenses. However, Baylor College of Medicine has the right to terminate its license with MAS in case of material breach by MAS. If the agreements between Baylor College of Medicine and MAS were terminated and we were unable to obtain a license to these rights from Baylor College of Medicine, we would be precluded from selling any SELDI-based products within the scope of the Baylor SELDI patents, we would no longer generate revenue from the sale of these products and we would have to revise our business direction and strategy.

If we are unable to provide our customers with software that enables the integration and analysis of large volumes of data, the acceptance and use of our products may be limited.

The successful commercial research application of our products requires that they enable researchers to process and analyze large volumes of data and to integrate the results into other phases of their research. The nature of our software enables a level of integration and analysis that is adequate for many projects. However, if we do not continue to develop and improve the capabilities of our ProteinChip Software to perform more complex analyses of customer samples and to meet increasing customer expectations, our products may not increase their market acceptance, we may lose our current customers and we may be unable to develop a profitable business.

8

If our BioSeptra Process Division fails to develop new products, we may not be able to grow or maintain this operation in the face of larger entrenched competitors.

Customers using chromatographic processes to separate proteins have traditionally been slow to adopt new technologies, even when those new technologies offer considerable advantages over existing, proven approaches. BioSeptra will need to develop new products with superior performance in order to expand its business. Even if BioSeptra chromatography products and services are more efficient and of higher quality than alternatives, customers may favor established products and companies.

Our quarterly operating results may fluctuate significantly due to a number of causes outside our control.

Because the timing of our product orders can vary, we may not be able to reliably predict future revenue and profitability based on quarterly earnings. Our operating results can also vary substantially in any period depending on the mix of products sold. Our quarterly sales and operating results have become highly dependent on the volume and timing of orders received during the quarter, as well as the seasonal and cyclical nature of our markets. Historically, a relatively large percentage of our sales have arrived in the last month of each quarter, and often towards the end of such month. Accordingly, a short delay in receiving an order, shipping product, or recognizing revenue from such order may result in substantial quarterly fluctuations in revenue and earnings.

A significant portion of our operating expenses is relatively fixed in nature due to our significant sales, research and development and manufacturing costs. If we cannot adjust spending quickly enough to compensate for a revenue shortfall, this may magnify the adverse impact of such revenue shortfall on our results of operations. As a result, our quarterly operating results could fluctuate, and such fluctuation could cause the market price of our common stock and the notes to decline. Results from one quarter should not be used as an indication of future performance.

If we are unable to reduce our lengthy sales cycle, our ability to become profitable will be harmed.

Our ability to obtain customers for our products depends in significant part upon the perception that our products and services can help enable protein biomarker discovery, characterization and assay development. From the time we make initial contact with a potential customer until we receive a binding purchase order typically takes between a few weeks to a year or more. Our sales effort requires the effective demonstration of the benefits of our products and may require significant training, sometimes of many different departments within a potential customer. These departments might include research and development personnel and key management. In addition, we may be required to

negotiate agreements containing terms unique to each customer. We may expend substantial funds and management effort and may not be able to successfully sell our products or services in a short enough time to achieve profitability.

We may need to raise additional capital in the future, and if we are unable to secure adequate funds on terms acceptable to us, we may be unable to execute our business plan.

We currently believe that current cash resources, together with our core reserves, will be sufficient to meet our anticipated financial needs for at least the next two years. However, we may need to raise additional capital sooner in order to develop new or enhanced products or services, increase our Biomarker Discovery Center activities undertaken for our own account, or acquire complementary products, businesses or technologies to respond to competitive pressures. If we are unable to obtain financing, or to obtain it on acceptable terms, we may be unable to successfully execute our business plan.

9

If we do not effectively manage growth, management attention could be diverted and our ability to increase revenue and achieve profitability could be harmed.

We are rapidly and significantly expanding our operations, which places a significant strain on our financial, managerial and operational resources. For example, over the last three years we have increased our worldwide sales force and other personnel significantly, with plans for further expansion, and have established Biomarker Discovery Centers with plans to expand their scope and volume of activity. These changes could divert management attention or otherwise disrupt our operations. In order to achieve and manage this growth effectively, we must continue to improve and expand our operational and financial management capabilities and resources. Moreover, we will need to effectively train, integrate, motivate and retain our employees. Our failure to manage our growth effectively could damage our ability to increase revenue and become profitable.

Because our business is highly dependent on key executives and scientists, our inability to recruit and retain these people could hinder our business expansion plans.

We are highly dependent on our executive officers, senior scientists and engineers. Our product development and marketing efforts could be delayed or curtailed if we lose the services of any of these people. To expand our research, product development and sales efforts, we need additional people skilled in areas such as bioinformatics, biochemistry, information services, manufacturing, sales, marketing and technical support. Competition for qualified employees is intense. We will not be able to expand our business if we are unable to hire, train and retain a sufficient number of qualified employees.

If we are unable to successfully expand our limited manufacturing capacity for ProteinChip Readers and Arrays and BioSeptra sorbents, we may encounter manufacturing and quality control problems as we increase our efforts.

We currently have only one manufacturing facility at which we produce limited quantities of our ProteinChip Arrays and ProteinChip Readers, and one manufacturing facility at which we produce chromatography sorbents. Some aspects of our manufacturing processes may not be easily scalable to allow for production in larger volumes, resulting in higher than anticipated material, labor and overhead costs per unit. As a result, manufacturing and quality control problems may arise as we increase our level of production. We may not be able to increase our manufacturing capacity in a timely and cost-effective manner and we may experience delays in manufacturing new products. If we are unable to consistently manufacture our products on a timely basis because of these or other factors, we will not be able to meet anticipated demand. As a result, we may lose sales and fail to generate increased revenue and become profitable.

We may experience failure rates for our ProteinChip Systems and Arrays, and for related accessories, that are higher than we anticipated, particularly for newer products being introduced.

Our products and the components used in our products are based on complex technologies. If the failure rates for our products are higher than anticipated, we may experience increased warranty claim activity and increased costs associated with servicing those claims, resulting in a decreased gross profit.

We rely on single-source suppliers for many components of our ProteinChip Systems, processing services for our ProteinChip Arrays and raw materials for our chromatography sorbents, and if we are unable to obtain these components, services and raw materials, we would be harmed and our operating results would suffer.

We depend on many single-source suppliers for the necessary raw materials and components required to manufacture our products. We also rely on some single-source subcontractors for certain

outsourced manufacturing services. Some of these suppliers are small companies without extensive financial resources. Because of the limited quantities of products we currently manufacture, it is not economically feasible to qualify and maintain alternate vendors for most components of our ProteinChip Readers, processing services for our ProteinChip Arrays and many raw materials for our chromatography sorbents. We have occasionally experienced delays in receiving raw materials, components and services, resulting in manufacturing delays. If we are unable to procure the necessary raw materials, components or services from our current vendors, we will have to arrange new sources of supply and our raw materials and components shipments could be delayed, harming our ability to manufacture our products, and our ability to sustain or increase revenue could be harmed. As a result, our costs could increase and our profitability could be harmed.

We face intense competition in our current and potential markets and if our competitors develop new technologies or products, our products may not achieve market acceptance and may fail to capture market share.

Competition in our existing and potential markets is intense and we expect it to increase. Currently, our principal competition comes from other technologies that are used to perform many of the same functions for which we market our ProteinChip System. The major technologies that compete with our ProteinChip System are liquid chromatography-mass spectrometry and 2D-gel electrophoresis-mass spectrometry. In the life science research market, protein research tools and services are currently provided by a number of companies. In the large-scale chromatography market, there are several larger direct competitors. In many instances, CIPHERGEN's competitors may have substantially greater financial, technical, research and other resources and larger, more established marketing, sales, distribution and service organizations. Additionally, our potential customers may internally develop competing technologies. If we fail to compete effectively with these technologies and products, or if competitors develop significant improvements in protein detection systems, develop systems that are easier to use, or introduce comparable products that are less expensive, our products may not achieve market acceptance and our sales may decrease.

If the government grants a license to the SELDI technology to others, it may harm our business.

Some of the inventions covering the SELDI technology were developed under a grant from an agency of the U.S. government and therefore, pursuant to the Bayh-Dole Act and regulations promulgated thereunder, the government has a paid-up, nonexclusive nontransferable license to those inventions and will be able in limited circumstances to grant a license to others on reasonable terms. We are not aware of any basis for the government to exercise such rights, but if circumstances change and the government exercises such rights, our business could be harmed.

If a competitor infringes upon our proprietary rights, we may lose any competitive advantage we may have as a result of diversion of management time, enforcement costs and the loss of the exclusivity of our proprietary rights.

Our commercial success depends in part on our ability to maintain and enforce our proprietary rights. We rely on a combination of patents, trademarks, copyrights and trade secrets to protect our technology and brand. In addition to our licensed SELDI technology, we also have submitted patent applications directed to subsequent technological improvements and application of the SELDI technology. Our patent applications may not result in additional patents.

If competitors engage in activities that infringe our proprietary rights, our management's focus will be diverted and we may incur significant costs in asserting our rights. We may not be successful in asserting our proprietary rights, which could result in our patents being held invalid or a court holding that the competitor is not infringing, either of which would harm our competitive position. We cannot be sure that competitors will not design around our patented technology.

We also rely upon the skills, knowledge and experience of our technical personnel. To help protect our rights, we require all employees and consultants to enter into confidentiality agreements that prohibit the disclosure of confidential information. These agreements may not provide adequate protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure.

If others successfully assert their proprietary rights against us, we may be precluded from making and selling our products or we may be required to obtain licenses to use their technology.

Our success also depends on avoiding infringing on the proprietary technologies of others. We are aware of third parties whose business involves the use of mass spectrometry for the analysis of proteins and DNA, and third parties whose business involves providing chromatography sorbents and media. Certain of these parties have brought their patents to our attention. If these parties assert claims that we are violating their patents, we may incur substantial costs defending ourselves in lawsuits against charges of patent infringement or other unlawful use of another's proprietary technology. Any such lawsuit may not be decided in our favor, and if we are found liable, we may be subject to monetary damages or injunction against using their technology. We also may be required to obtain licenses under their patents and such licenses may not be available on commercially reasonable terms, if at all.

If we are unsuccessful in obtaining a federal registration for the SELDI trademark and we are successfully sued for trademark infringement, we may be required to license the mark or cease using this particular descriptor of the technology and incur associated costs.

MAS has opposed our trademark application for the SELDI mark on the basis of alleged earlier use of SELDI. The outcome of that opposition remains pending. As a result, we may not be successful in obtaining a federal registration for the mark and may be sued by MAS for trademark infringement based on MAS' claimed prior use rights to the SELDI mark. If MAS is successful, we will have to license rights to the mark or not use the term "SELDI" to describe our technology, and we may be subjected to costs and damages.

We utilize technology in our ProteinChip Tandem MS Interfaces on which Applied Biosystems/MDS Sciex has patent rights.

We license certain patents and other technology owned by Applied Biosystems/MDS Sciex pursuant to an agreement which expires February 27, 2004. If we are unable to extend the agreement, we will not be able to continue to sell our ProteinChip Tandem MS Interfaces after February 27, 2004, which contributed approximately 3% of our revenue in 2002 and 3% of our revenue in the first six months of 2003.

If there are reductions in research funding, the ability of our existing and prospective customers to purchase our products could be seriously harmed.

A significant portion of our products are sold to universities, government research laboratories, private foundations and other institutions where funding is dependent upon grants from government agencies, such as the National Institutes of Health. Government funding for research and development has fluctuated significantly in the past due to changes in congressional appropriations. Research funding by the government may be significantly reduced in the future. Any such reduction may seriously harm the ability of our existing and prospective research customers to purchase our products or reduce the number of ProteinChip Arrays used. Limitations in funding for commercial, biotechnology and pharmaceutical companies and academic institutions that are the potential customers for our ProteinChip Systems and Arrays, and general cost containment pressures for biomedical research may limit our ability to sell our products and services.

Business interruptions could limit our ability to operate our business.

Our operations as well as those of the collaborators on which we depend are vulnerable to damage or interruption from computer viruses, human error, natural disasters, power shortages, telecommunication failures, international acts of terror and similar events. We have not established a formal disaster recovery plan and our back-up operations and our business interruption insurance may not be adequate to compensate us for losses we may suffer. A significant business interruption could result in losses or damages incurred by us and require us to cease or curtail our operations.

Our business is subject to risks from international operations.

We conduct business globally. Accordingly, our future results could be materially adversely affected by a variety of uncontrollable and changing factors including, among others, regulatory, political, or economic conditions in a specific country or region; trade protection measures and other regulatory requirements; and natural disasters. Any or all of these factors could have a material adverse impact on our future international business.

We are exposed to fluctuations in the exchange rates of foreign currency.

Edgar Filing: CIPHERGEN BIOSYSTEMS INC - Form 424B3

As a global concern, we face exposure to adverse movements in foreign currency exchange rates. With the acquisition of BioSeptra and our increased ownership interest in CIPHERGEN Biosystems KK, a significant percentage of our net sales are exposed to foreign currency risk. These exposures may change over time as business practices evolve and could have a material adverse impact on our financial results. The use of the euro as a common currency for members of the European Union could impact our foreign exchange exposure. We will monitor our exposure and may hedge against this and any other currencies as necessary.

Consolidation in the pharmaceutical and biotechnology industries may reduce the size of our target market and cause a decrease in our revenue.

Consolidation in the pharmaceutical and biotechnology industries is generally expected to occur. Planned or future consolidation among our current and potential customers could decrease or slow sales of our technology and reduce the markets our products target. Any such consolidation could limit the market for our products and seriously harm our ability to achieve or sustain profitability.

We may not successfully resolve problems encountered in connection with any future acquisitions or strategic investments.

In July 2001, we acquired the BioSeptra process chromatography business from Invitrogen Corporation. In August 2002, we increased our ownership interest in CIPHERGEN Biosystems KK, the Japanese joint venture we formed with Sumitomo Corporation in 1999, from 30% to 70%. In the event of any future acquisitions, joint ventures and other strategic investments, we could:

issue stock that would dilute the ownership of our then-existing stockholders;

incur debt, which debt could be senior to the notes;

assume liabilities, which liabilities could be subject to security interests with a priority over the notes issued in our recent convertible debt offering;

incur charges for the impairment of the value of investments or acquired assets; or

incur amortization expense related to intangible assets.

13

If we fail to achieve the financial and strategic benefits of past and future acquisitions or strategic investments, our operating results will suffer. Acquisitions and strategic investments involve numerous other risks, including:

difficulties integrating the acquired operations, technologies or products with ours;

failure to achieve targeted synergies;

unanticipated costs and liabilities;

diversion of management's attention from our core business;

adverse effects on our existing business relationships with suppliers and customers or those of an acquired organization; and

potential loss of key employees, particularly those of an acquired organization.

We are subject to environmental laws and potential exposure to environmental liabilities.

We are subject to various federal, state and local environmental laws and regulations that govern our operations, including the handling and disposal of nonhazardous and hazardous wastes, and emissions and discharges into the environment. Failure to comply with such laws and regulations could result in costs for corrective action, penalties or the imposition of other liabilities. We also are subject to laws and regulations that impose liability and clean-up responsibility for releases of hazardous substances into the environment. Under certain of these laws and regulations, a current or previous owner or operator of property may be liable for the costs of remediating hazardous substances or petroleum products on or from its property, without regard to whether the owner or operator knew of, or caused, the contamination, as well as incur liability to third parties impacted by such contamination. The presence of, or failure to remediate properly, such substances could adversely affect the value and the ability to transfer or encumber such property. Based on currently available information, although there can be no assurance, we believe that such costs and liabilities have not had and will not have a material adverse impact on our financial results.

Anti-takeover provisions in our charter, bylaws and Stockholder Rights Plan and under Delaware law could make a third party acquisition of us difficult.

Our certificate of incorporation, bylaws and Stockholder Rights Plan contain provisions that could make it more difficult for a third party to acquire us, even if doing so might be deemed beneficial by our stockholders. These provisions could limit the price that investors might be willing to pay in the future for shares of our common stock. We are also subject to certain provisions of Delaware law that could delay, deter or prevent a change of control of us.

The rights issued pursuant to our Stockholder Rights Plan will become exercisable the tenth day after a person or group announces acquisition of 15% or more of our common stock or announces commencement of a tender or exchange offer the consummation of which would result in ownership by the person or group of 15% or more of our common stock. If the rights become exercisable, the holders of the rights (other than the person acquiring 15% or more of our common stock) will be entitled to acquire in exchange for the rights' exercise price, shares of our common stock or shares of any company in which we are merged, with a value equal to twice the rights' exercise price.

Risks Related to the Notes

Substantial leverage and debt service obligations may adversely affect our cash flows.

We have substantial amounts of indebtedness, primarily from equipment financing, capital lease obligations and the outstanding notes. As a result of this indebtedness, our principal and interest

payment obligations have increased substantially. The degree to which we will be leveraged could, among other things:

make it difficult for us to make payments on the notes;

make it difficult for us to obtain financing for working capital, acquisitions or other purposes on favorable terms, if at all;

make us more vulnerable to industry downturns and competitive pressures; and

limit our flexibility in planning for, or reacting to, changes in our business.

Our ability to meet our debt service obligations will depend upon our future performance, which will be subject to financial, business and other factors affecting our operations, many of which are beyond our control.

The notes are unsecured, and future indebtedness could effectively rank senior to the notes.

The notes are unsecured and rank equal in right of payment with our existing and future unsecured and unsubordinated indebtedness. The notes are also effectively subordinated to any of our secured debt to the extent of the value of the assets that secure the indebtedness. The notes are also "structurally subordinated" to all indebtedness and other liabilities, including trade payables and lease obligations, of our existing and future subsidiaries. In the event of our bankruptcy, liquidation or reorganization or upon acceleration of the notes, payment on the notes could be less, ratably, than on any secured indebtedness. We may not have sufficient assets remaining to pay amounts due on any or all of the notes then

outstanding.

The indenture governing the notes does not prohibit or limit us or our subsidiaries from incurring additional indebtedness and other liabilities, or from pledging assets to secure such indebtedness and liabilities. The incurrence of additional indebtedness and in particular the granting of a security interest to secure the indebtedness, could adversely affect our ability to pay our obligations on the notes. We anticipate that from time to time we may incur additional indebtedness in the future.

The notes are not protected by restrictive covenants, including financial covenants.

Neither we nor our subsidiaries are restricted from incurring additional debt, including senior debt, or liabilities under the indenture. In addition, the indenture does not restrict us or any of our subsidiaries from paying dividends or issuing or repurchasing securities. If we or our subsidiaries were to incur additional debt or liabilities, our ability to pay our obligations on the notes could be adversely affected.

We may be unable to repay, repurchase or redeem the notes.

At maturity, the entire outstanding principal amount of the notes will become due and payable by us. Upon a change of control, as defined in the prospectus, the purchaser of the notes may require us to repurchase all or a portion of the notes. We may not have enough funds or be able to arrange for additional financing to pay the principal at maturity or to repurchase the notes upon a change of control. Future credit agreements or other agreements relating to our indebtedness may restrict the redemption or repurchase of the notes and provide that a change of control constitutes an event of default. If the maturity date or a change of control occurs at a time when we are prohibited from repaying or repurchasing the notes, we could seek the consent of our lenders to purchase the notes or could attempt to refinance this debt. If we do not obtain the necessary consents or cannot refinance the debt on favorable terms, if at all, we will be unable to repay or repurchase the notes. Our failure to repay the notes at maturity or repurchase tendered notes would constitute an event of default under the indenture, which might constitute a default under the terms of our other debt and could ultimately

15

result in our insolvency. Our obligation to offer to purchase the notes upon a change of control would not necessarily afford protection in the event of a highly leveraged transaction, reorganization, merger or similar transaction involving us.

There may not be an active public market for the notes and our common stock.

There is no established public trading market for the notes. The notes are eligible for the PORTALSM Market. We do not intend to apply for listing of the notes on any securities exchange. At the time of the original issuance of the notes, SG Cowen Securities Corporation advised us that as initial purchasers of the notes, they intended to make a market in the notes. However, as the initial purchaser, it is not obligated to make a market. In addition, any market-making activity by the initial purchaser will be subject to the limits imposed by the Securities Act and the Exchange Act. As a result, a market for the notes may not develop or, if one does develop, it may not be maintained. If an active market for the notes fails to develop or is not sustained, the trading price of the notes could decline significantly.

There is no guarantee that an active trading market for our common stock will be maintained on the Nasdaq Stock Market's National Market. Investors may not be able to sell their shares quickly or at the latest market price if trading in our stock is not active.

The notes and the common stock issuable upon conversion of the notes may be subject to restrictions on resale.

If the effectiveness of the shelf registration statement covering the resale of the notes and common stock is not maintained, the liquidity and price of the notes and common stock issuable upon conversion of the notes would be adversely affected and you could lose all or part of your investment.

The price at which our common stock may be purchased on the Nasdaq National Market may be currently lower than the conversion price of the notes at the time a note holder elects to convert.

Prior to electing to convert notes, the note holder should compare the price at which our common stock is trading in the market to the conversion price of the notes. Our common stock trades on the Nasdaq National Market under the symbol "CIPH." On October 15, 2003, the last reported bid price of our common stock was \$13.08 per share. The initial conversion price of the notes is approximately \$9.19 per share. The market prices of our securities are subject to significant fluctuations. Such fluctuations, as well as economic conditions generally, may adversely affect the market price of our securities, including our common stock and the notes.

The notes may not be rated or may receive a lower rating than anticipated.

We believe it is unlikely that the notes will be rated. However, if one or more rating agencies rates the notes and assigns the notes a rating lower than the rating expected by investors, reduces their rating in the future or indicates that it will have their ratings on the notes under surveillance or review with possible negative implications, the market price of the notes and our common stock would be harmed. In addition, a ratings downgrade could adversely affect our ability to access capital.

Our stock price has been highly volatile, and an investment in our stock could suffer a decline in value, adversely affecting the value of the notes or the shares into which those notes may be converted.

The trading price of our common stock has been highly volatile and could continue to be subject to wide fluctuations in price in response to various factors, many of which are beyond our control, including:

actual or anticipated period-to-period fluctuations in financial results;

16

litigation or threat of litigation;

failure to achieve, or changes in, financial estimates by securities analysts;

announcements of new products or services or technological innovations by us or our competitors;

publicity regarding actual or potential discoveries of biomarkers by others;

comments or opinions by securities analysts or major stockholders;

conditions or trends in the pharmaceutical, biotechnology and life science industries;

announcements by us of significant acquisitions, strategic partnerships, joint ventures or capital commitments;

additions or departures of key personnel;

sales of our common stock;

economic and other external factors or disasters or crises;

limited daily trading volume; and

developments regarding our patents or other intellectual property or that of our competitors.

In addition, the stock market in general, and the Nasdaq National Market and the market for technology companies in particular, have experienced significant price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Further, there has been significant volatility in the market prices of securities of life science companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been instituted. A securities class

action suit against us could result in substantial costs, potential liabilities and the diversion of management's attention and resources.

We have broad discretion to use our core reserves, and how we invest these reserves may not yield a favorable return.

As of the date of this prospectus, we have no specific plans to use our core reserves other than for general corporate purposes, including working capital, capital expenditures, research and development, and potential acquisitions. We have no agreements or understandings with respect to any potential acquisitions. Accordingly, our management will retain broad discretion to allocate our core reserves, and there can be no assurance that those proceeds can or will yield a significant return.

Future sales of our common stock in the public market could adversely affect the trading price of our common stock, the value of the notes and our ability to raise funds in new stock offerings.

Future sales of substantial amounts of our common stock in the public market, or the perception that such sales are likely to occur, could affect prevailing trading prices of our common stock and the value of the notes. As of June 30, 2003, we had:

28,789,296 shares of common stock outstanding;

4,160,225 shares of common stock reserved for issuance upon exercise of options outstanding under our stock option plans with a weighted average exercise price of \$5.08 per share;

in addition to the shares reserved for issuance upon the exercise of options referred to in the preceding bullet point, 704,653 shares reserved for future issuance under our stock option plans and employee stock purchase plan; and

17

96,750 shares of common stock are potentially issuable to Stanford Research Systems, Inc. under a development contract if certain milestones are met.

The figures above include 1,250,000 shares of our common stock that we issued to LumiCyte in connection with the settlement that we reached on May 28, 2003; those shares have recently been registered and are freely tradeable in the public market.

Because the notes are convertible into common stock only at a conversion price in excess of the recent trading price, a decline in our common stock price may cause the value of the notes to decline.

18

FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated herein by reference contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended and Section 21E of the Exchange Act. Words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates," variations of such words and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict. Therefore, actual results could differ materially from those expressed or forecasted in any such forward-looking statements as a result of certain factors, including those set forth in "Risk Factors," as well as those noted in the documents incorporated herein by reference. In connection with forward-looking statements that appear in these disclosures, investors should carefully review the factors set forth in this prospectus under "Risk Factors."

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Risks and uncertainties that may affect our results include, among others:

fluctuations in timing and volumes of customer demand;

our achievement of revenue objectives and other financial targets;

the development of new products;

the timing and success of new product introductions;

the continued availability of appropriate levels of manufacturing capacity;

the realization of benefits from our strategic relationships;

competing technologies, R&D investments, products and other competitive factors;

disruptions in general economic activity due to worsening global business and geopolitical conditions; and

the unpredictability of the economy and other factors beyond our control.

19

USE OF PROCEEDS

We will not receive any of the proceeds from the sale by any selling securityholder of the notes or the underlying common stock issuable upon conversion of the notes.

20

DESCRIPTION OF THE NOTES

The 4.50% Convertible Senior Notes due 2008 were issued under an indenture dated as of August 22, 2003 between us and U.S. Bank National Association, as trustee. The following summarizes some, but not all, of the provisions of the notes, indenture and registration rights agreement. The following description is only a summary of portions of the indenture and the registration rights agreement. The indenture and the registration rights agreement have been filed as exhibits to this registration statement. We urge you to read these documents in their entirety because they, and not this description, define your rights as holders of the notes.

General

The notes are:

limited to \$30,000,000 aggregate principal amount;

general, unsecured, senior obligations, and are effectively subordinated to all our secured debt, to the extent of the security, and liabilities of our subsidiaries;

Edgar Filing: CIPHERGEN BIOSYSTEMS INC - Form 424B3

convertible into our common stock at an initial rate of 108.8329 shares per \$1,000 principal amount of notes, which is equal to a conversion price of approximately \$9.19 per share, subject to adjustment upon certain events as described under "Conversion Rights";

redeemable at our option, from time to time and in whole or in part, on or after September 1, 2006 at the redemption prices set forth under and subject to the conditions described under the caption "Optional Redemption," plus accrued and unpaid interest to, but excluding, the redemption date;

subject to repurchase by us at your option if a change of control, as defined in this prospectus, occurs; and

due on September 1, 2008, unless earlier converted, redeemed by us at our option or repurchased by us at your option.

The notes are in denominations of \$1,000 and integral denominations of \$1,000 in fully registered form.

The notes bear interest at an annual rate of 4.50% on the principal amount from August 22, 2003 or from the most recent date to which interest has been paid. We will pay interest in arrears on March 1 and September 1 of each year, commencing on March 1, 2004. Interest will be payable to holders of record at the close of business on the February 15 and August 15 (whether or not a business day) immediately preceding each respective interest payment date, except that interest payable upon redemption, unless the date of redemption is an interest payment date, will be payable to persons to whom principal is payable. Each payment of interest on the notes will include interest accrued through the day prior to the applicable interest payment date or the date of maturity (or earlier purchase, redemption or, in some circumstances, conversion), as the case may be. Any payment of principal and interest scheduled to be made on any day that is not a business day will be made on the next succeeding business day. Interest will be computed on the basis of a 360-day year composed of twelve 30-day months.

We will pay principal, interest and premium, if any, on global notes to Depository Trust Company ("DTC") in immediately available funds. We will pay interest prior to maturity on:

definitive notes having an aggregate principal amount of \$5,000,000 or less by check mailed to the holders of these notes; and

21

definitive notes having an aggregate principal amount of more than \$5,000,000 by wire transfer in immediately available funds at the election of the holders of these notes.

We will pay principal, premium, if any, and interest at maturity on definitive notes at our office or agency in New York City, which initially will be the office or agency of the trustee in New York City.

The indenture does not generally restrict us from paying dividends, incurring senior debt or any other indebtedness or issuing or repurchasing our other securities. The indenture also does not protect you in the event of a highly leveraged transaction or a change of control of CIPHERGEN, except to the extent described under "Repurchase at Option of Holders Upon a Change of Control" below.

You may present definitive notes for conversion, registration of transfer and exchange, without service charge, at our office or agency in New York City, which shall initially be the office or agency of the trustee in New York City. For information regarding conversion, registration of transfer and exchange of global notes, see "Form, Denomination and Registration" below.

Conversion Rights

You may convert your notes into shares of common stock at any time on or prior to the close of business on the business day immediately preceding the maturity date unless your notes are called for redemption, in which case you may convert your notes at any time before the close of business on the last business day prior to the redemption date. You may convert notes only in denominations of \$1,000 principal amount and integral multiples of \$1,000 principal amount.

Edgar Filing: CIPHERGEN BIOSYSTEMS INC - Form 424B3

The initial conversion rate for the notes is 108.8329 shares per \$1,000 principal amount of notes, which is equivalent to a conversion price of approximately \$9.19 per share. The conversion price and, as a result, the conversion rate are subject to adjustment in certain events, as described below. A holder otherwise entitled to a fractional share of common stock upon conversion of notes will receive cash in an amount equal to the market value of that fractional share based upon the closing sale price of our common stock on the business day immediately preceding the conversion date.

Owners who hold beneficial interests in the notes through participants or indirect participants who desire to convert their interests into common stock should contact their brokers or the participants or indirect participants through whom they hold such beneficial interests to obtain information on procedures, including proper forms and cut-off times, for submitting requests for conversion. If you hold certificated notes, you may convert all or part of any note by delivering the note to the office of the trustee in the Borough of Manhattan, The City of New York, accompanied by a duly signed and completed conversion notice, a copy of which may be obtained by the trustee. The conversion date will be the date on which the note and the duly signed and completed conversion notice are so delivered.

As promptly as practicable on or after the conversion date, we will issue and deliver to the trustee a certificate or certificates for the number of full shares of common stock issuable upon conversion. The certificate will then be sent by the trustee to the conversion agent for delivery to the holder. The shares of our common stock issuable upon conversion will be fully paid and nonassessable and will rank equally with the other shares of our common stock. We will not issue fractional shares of common stock upon conversion of the notes. Instead, we will pay cash based on the closing market price of our common stock at the close of business on the last trading date preceding the conversion date.

Except as provided below, you will not receive any interest that has accrued on your notes if you convert your notes into common stock on any day other than an interest payment date. By delivering to you the number of shares issuable upon conversion, together with a cash payment, if any, in lieu of fractional shares, we will satisfy our obligation with respect to the notes. Thus, accrued but unpaid interest will be deemed to be paid in full rather than canceled, extinguished or forfeited. If you convert your notes after a record date for an interest payment but prior to the corresponding interest payment date, you will receive on the interest payment date interest accrued and paid on such notes,

22

notwithstanding the conversion of such notes prior to such interest payment date, because you will have been the holder of record on the corresponding record date. However, at the time you surrender such notes for conversion, you must pay us an amount equal to the interest that will be paid on the notes being converted on the interest payment date. The preceding sentence does not apply to notes that are converted after being called by us for redemption. If we call your notes for redemption on a date that is after a record date for an interest payment but prior to the corresponding interest payment date, and prior to the redemption date you choose to convert your notes, you will not be required to pay us at the time you surrender such notes for conversion the amount of interest on such notes you will receive on the date that has been fixed for redemption. Accrued but unpaid interest will be payable upon any conversion of notes made concurrently with or after acceleration of the notes following an event of default described under "Events of Default" below.

You will not be required to pay any taxes or duties relating to the issuance or delivery of our common stock if you exercise your conversion rights, but you will be required to pay any tax or duty which may be payable relating to any transfer involved in the issuance or delivery of the common stock in a name other than yours. Certificates representing shares of common stock will be issued or delivered only after all applicable taxes and duties, if any, payable by you have been paid.

To convert interests in a Rule 144A global note, you must deliver to DTC the appropriate instruction form for conversion pursuant to DTC's conversion program. To convert a definitive note, you must:

complete and execute the conversion notice on the back of the note (or a facsimile thereof);

deliver the completed conversion notice and the notes to be converted to the specified office of the conversion agent;

pay all funds required, if any, relating to interest on the notes to be converted to which you are not entitled, as described in the second preceding paragraph; and

pay all taxes or duties, if any, as described in the preceding paragraph.

Edgar Filing: CIPHERGEN BIOSYSTEMS INC - Form 424B3

The conversion date will be the date on which all of the foregoing requirements have been satisfied. The notes will be deemed to have been converted immediately prior to the close of business on the conversion date. A certificate for the number of shares of common stock into which the notes are converted (and cash in lieu of any fractional shares) will be delivered as soon as practicable on or after the conversion date.

We will adjust the initial conversion price for certain events, including:

- (1) issuances of our common stock as a dividend or distribution on our common stock;
- (2) certain subdivisions and combinations of our common stock;
- (3) issuances to all holders of our common stock of certain rights or warrants to purchase our common stock (or securities convertible into our common stock) at less than (or having a conversion price per share less than) the current market price of our common stock;
- (4) distributions to all holders of our common stock of shares of our capital stock (other than the rights and warrants referred to in clause (3) or our common stock), evidences of our indebtedness or assets (including securities, but excluding:
 - (A) any dividends and distributions in connection with a reclassification, consolidation, merger, combination, sale or conveyance resulting in a change in the conversion consideration pursuant to the second succeeding paragraph or
 - (B) any dividends or distributions paid exclusively in cash;

23

- (5) distributions consisting exclusively of cash to all holders of our common stock; and
- (6) purchases of our common stock pursuant to a tender or exchange offer made by us to all holders of our common stock or any of our subsidiaries to the extent that the same involves an aggregate consideration that, together with any cash and the fair market value of any other consideration paid in any other tender or exchange offer by us or any of our subsidiaries for our common stock made to all holders of our common stock expiring within the 12 months preceding such tender offer for which no adjustment has been made exceeds 10% of our market capitalization on the expiration of such tender or exchange offer.

However, adjustment is not necessary if holders may participate in the transactions otherwise giving rise to an adjustment on a basis and with notice that our board of directors determines to be fair and appropriate, or in some other cases specified in the indenture.

To the extent that we have a rights plan in effect upon conversion of the notes into common stock, you will receive, in addition to the common stock, the rights under the rights plan whether or not the rights have separated from the common stock at the time of conversion, subject to limited exceptions and no adjustments to the conversion price will be made, except in limited circumstances.

We will not make an adjustment in the conversion price unless such adjustment would require a change of at least 1% in the conversion price in effect at such time. We will carry forward and take into account in any subsequent adjustment any adjustment that would otherwise be required to be made. Except as stated above, we will not adjust the conversion price for the issuance of our common stock or any securities convertible into or exchangeable for our common stock or carrying the right to purchase any of the foregoing.

If we:

Edgar Filing: CIPHERGEN BIOSYSTEMS INC - Form 424B3

reclassify or change our common stock (other than changes resulting from a subdivision or combination but including as a result of a compulsory share exchange), or

consolidate or combine with or merge into any person or sell or convey to another person all or substantially all of our property and assets, and the holders of our common stock receive stock, other securities or other property or assets (including cash or any combination thereof) with respect to or in exchange for their common stock,

the holders of the notes may convert the notes into the consideration they would have received if they had converted their notes immediately prior to such reclassification, change, consolidation, combination, merger, sale or conveyance. We may not become a party to any such transaction unless its terms are consistent with the foregoing.

If a taxable distribution to holders of our common stock or other transaction occurs which results in any adjustment of the conversion price, including an adjustment at our option, you may, in certain circumstances, be deemed to have received a distribution subject to U.S. income tax as a dividend. In certain other circumstances, the absence of an adjustment may result in a taxable dividend to the holders of our common stock. For a discussion of the tax consequences of an investment in the notes see "United States Federal Income Tax Consequences" below.

We may, from time to time and to the extent permitted by law, reduce the conversion price of the notes by any amount for any period of at least 20 days, in which case, we will give at least 15 days' notice of such decrease, if our board of directors has made the determination that such decrease would be in our best interests, which determination shall be conclusive. We may make such reductions in the conversion price, in addition to those set forth above, as we deem advisable to avoid or diminish any income tax to holders of our common stock resulting from any dividend or distribution of stock (or rights to acquire stock) or from any event treated as such for income tax purposes. No such decreases

24

will be taken into account when calculating the conversion price for purposes of determining whether the closing price of our common stock exceeds 150% of the conversion price in connection with our optional redemption of the notes as described in "Optional Redemption" below.

Notwithstanding the foregoing, any holder of a note who (together with such holder's affiliates) purchased more than \$10 million in aggregate principal amount of notes in the initial resale by the initial purchaser shall not have the right to convert the note to the extent that, after giving effect to such conversion, the holder (together with the holder's affiliates) would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to such conversion. For purposes of the foregoing sentence, the number of shares of our common stock beneficially owned by the holder and its affiliates shall include the number of shares of our common stock issuable upon conversion of the note in question but shall exclude the number of shares of our common stock which would be issuable upon (a) conversion of the remaining, nonconverted portion of the note beneficially owned by the holder or any of its affiliates and (b) exercise of conversion of the unexercised or nonconverted portion of any other of our securities (including any other notes) subject to limitation on conversion or exercise analogous to this limitation beneficially owned by the holder or any of its affiliates. Except as set forth in the preceding sentence, beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended. In determining the number of outstanding shares of our common stock, the holder may rely on the number of outstanding shares of our common stock as reflected in our then most recent Quarterly Report on Form 10-Q or Annual Report on Form 10-K, as the case may be, (y) a more recent public announcement by us or (z) any other notice by us or our transfer agent setting forth the number of shares of our common stock outstanding. Upon the written or oral request of a holder, we shall promptly confirm in writing to the holder the number of shares of our common stock then outstanding. In any case, the number of outstanding shares of our common stock shall be determined after giving effect to the conversion or exercise of our securities, including the note, by the holder or its affiliates since the date as of which such number of outstanding shares of our common stock was reported.

Optional Redemption

We may not redeem the notes before September 1, 2006. On or after September 1, 2006 we may redeem the notes on at least 30 days', but not more than 60 days', notice to the holders of the notes, in whole at any time or in part from time to time, at the following redemption prices (expressed in percentages of the principal amount), together with accrued and unpaid interest to, but excluding, the redemption date:

| Period | Redemption Price |
|--------------------------------------|-------------------------|
| September 1, 2006 to August 31, 2007 | 101.80% |
| September 1, 2007 to August 31, 2008 | 100.90% |

provided, however, we may only redeem the notes if the closing price of our common stock equals or exceeds 150% of the conversion price then in effect for at least 20 trading days within a period of any 30 consecutive trading days ending on the trading day before the date of the notice of the optional redemption.

If we do not redeem all of the notes, the trustee will select the notes to be redeemed in principal amounts of \$1,000 or whole multiples of \$1,000 by lot or on a pro rata basis. If any notes are to be redeemed in part only, we will issue a new note or notes in principal amount equal to the unredeemed principal portion thereof. If a portion of your notes is selected for partial redemption and you convert a portion of your notes, the converted portion will be deemed to be taken from the portion selected for redemption.

Repurchase at Option of Holders Upon a Change of Control

If a change of control (as defined below) occurs at any time prior to the maturity of the notes, you will have the right to require us to repurchase, in integral multiples of \$1,000 of principal amount, any or all of your notes not previously called for redemption. Upon a change of control, we may repurchase the notes at the following prices (expressed in percentages of the principal amount to be repurchased), plus interest accrued and unpaid to, but excluding, the repurchase date:

| Period | Redemption Price |
|--------------------------------------|------------------|
| Prior to August 31, 2004 | 110.0% |
| September 1, 2004 to August 31, 2005 | 107.5% |
| September 1, 2005 to August 31, 2008 | 105.0% |

If the repurchase date falls after an interest record date and before the corresponding interest payment date, interest will be paid to the record holder of the notes. The repurchase date must be within 45 days after the date we give notice of a change of control.

We will mail to you a notice of the occurrence of a change of control and of your resulting repurchase right arising as a result of the change of control within 30 days following our becoming aware of the occurrence of a change of control. To exercise the repurchase right, you must deliver on or before the 1st day before the repurchase date irrevocable written notice to the trustee of your exercise of your repurchase right, together with the notes with respect to which your right is being exercised.

A "change of control" means an event or series of events in which:

any "person," including any syndicate or group deemed to be a "person" under Section 13(d)(3) of the Exchange Act of 1934, acquires beneficial ownership, directly or indirectly, of shares of our capital stock entitling that person to exercise more than 50% of the total voting power of all shares of our capital stock entitled to vote generally in elections of directors, other than any acquisition by us, any of our subsidiaries or any of our employee benefit plans, or

we (1) consolidate with or merge into any other corporation or business entity or convey or transfer or lease all or substantially all of our assets to any other person, corporation or business entity or any other corporation or business entity merges into us, and (2) our shareholders immediately before the such transaction own, directly or indirectly, less than 50% of the combined voting power of the outstanding voting securities of the corporation or business entity resulting from such transaction,

provided that a change of control shall not be deemed to occur if either:

the closing price per share of the common stock for any five trading days within the period of 10 consecutive trading days commencing immediately after the announcement of such change of control shall equal or exceed 105% of the conversion price of the notes in effect on each trading day; or

at least 90% of the consideration in the change of control transaction consists of shares of common stock traded on a national securities exchange or quoted on the Nasdaq National Market, and as a result the notes become convertible solely into such

common stock.

Beneficial ownership shall be determined in accordance with Rules 13d-3 and 13d-5 promulgated by the SEC under the Exchange Act (except that a person will be deemed to have beneficial ownership of all shares that such person has the right to acquire, either immediately or with the passage of time). The term "person" includes any syndicate or group which would be deemed to be a "person" under Section 13(d)(3) of the Exchange Act.

26

No quantitative or other established meaning has been given to the phrase "all or substantially all," which appears in the definition of change of control, by courts that have interpreted this phrase in various contexts. In interpreting this phrase, courts, among other things, make a subjective determination as to the portion of assets conveyed, considering such factors as the value of assets conveyed, the proportion of an entity's income derived from the assets conveyed and the significance of those assets to the ongoing business of the entity. To the extent the meaning of such phrase is uncertain, uncertainty will exist as to whether or not a change of control may have occurred and, accordingly, as to whether or not holders of the notes will have the right to require us to repurchase their notes.

Rule 13e-4 under the Exchange Act requires the dissemination of certain information to security holders if an issuer tender offer occurs and may apply if the repurchase option becomes available to holders of the notes. We will comply with this rule to the extent applicable at that time. The foregoing provisions would not necessarily protect holders of the notes if highly leveraged or other transactions involving us occur that may adversely affect holders.

Our ability to repurchase notes upon the occurrence of a change of control is subject to important limitations. The occurrence of a change of control could cause an event of default under, or be prohibited or limited by, the terms of other senior debt that we have incurred or that we may incur in the future. We do not assure you that we would have the financial resources, or would be able to arrange financing, to pay the repurchase price for all the notes that might be delivered by holders of notes seeking to exercise the repurchase right. Any failure by us to repurchase the notes when required following a change of control would result in an event of default under the indenture. Any such default may, in turn, cause a default under other senior debt that we have incurred or that we may incur in the future.

We may, to the extent permitted by applicable law, at any time purchase the notes in the open market or by tender at any price or by private agreement. Any note so purchased by us may, to the extent permitted by applicable law, be reissued or resold or may be surrendered to the trustee for cancellation. Any notes surrendered to the trustee may not be reissued or resold and will be canceled promptly.

Ranking

The notes:

are our senior unsecured obligations;

rank on parity in right of payment with all of our existing and future senior unsecured debt; and

rank senior to all of our existing and future debt that expressly provides that it is subordinated to the notes.

The notes are also effectively subordinated in right of payment to our existing and future secured debt, to the extent of such security, and to all existing and future indebtedness (including trade payables) of our subsidiaries. The indenture does not limit our ability to incur debt or the amount of indebtedness or other liabilities our subsidiaries may incur. Our ability to make required interest, principal, repurchase or redemption payments on the notes may be impaired as a result of the obligations of our subsidiaries. Our subsidiaries are separate and distinct legal entities and have no obligation, contingent or otherwise, to pay any amounts due pursuant to the notes or to make any funds available therefor, whether by dividends, loans or other payments. Any right we have to receive assets of any of our future subsidiaries upon the latter's liquidation or reorganization (and the consequent right of the holders of the notes to participate in those assets) will be effectively subordinated to the claims of that subsidiary's creditors, except to the extent that we are ourselves recognized as a creditor of that subsidiary, in which case our claims would still be subordinate to any

27

security interests in the assets of that subsidiary and any indebtedness of that subsidiary senior to that held by us. At June 30, 2003, our subsidiaries had aggregate indebtedness and other liabilities (excluding obligations that would not appear on a consolidating balance sheet of any of our subsidiaries or that are inter-company in nature) of approximately \$7.2 million.

We are obligated to pay reasonable compensation to the trustee and to indemnify the trustee against any losses, liabilities or expenses incurred by it in connection with its duties relating to the notes. The trustee's claims for such payments will be senior to those of holders of the notes in respect of all funds collected or held by the trustee.

Events of Default

Each of the following constitutes an event of default under the indenture:

- (1) our failure to pay when due the principal of or premium, if any, on any of the notes at maturity, upon redemption or exercise of a repurchase right or otherwise;
- (2) our failure to pay an installment of interest (or liquidated damages, if any, as defined in the registration rights agreement discussed below) on any of the notes for 30 days after the date when due;
- (3) our failure to perform or observe any other term, covenant or agreement contained in the notes or the indenture for a period of 60 days after written notice of such failure, requiring us to remedy the same, shall have been given to us by the trustee or to us and the trustee by the holders of at least 25% in aggregate principal amount of the notes then outstanding;
- (4) a default under any indebtedness for money borrowed by us or any of our subsidiaries that is a "significant subsidiary" (within the meaning of Rule 1-02 of Regulation S-X promulgated by the Securities and Exchange Commission), the aggregate outstanding principal amount of which is in an amount in excess of \$10 million, which default:

is caused by a failure to pay when due principal on such indebtedness by the end of the applicable grace period, if any, unless such indebtedness is discharged or

results in the acceleration of such indebtedness, unless such acceleration is waived, cured, rescinded or annulled;
- (5) certain events of bankruptcy or reorganization with respect to us or any of our subsidiaries that is a significant subsidiary; and
- (6) our failure to provide notice required upon a change of control.

The indenture will provide that the trustee shall, within 90 days of the occurrence of a default, give to the registered holders of the notes notice of all uncured defaults known to it, but the trustee shall be protected in withholding such notice if it, in good faith, determines that the withholding of such notice is in the best interest of such registered holders, except in the case of a default in the payment of the principal of, or premium, if any, or interest on, any of the notes when due or in the payment of any redemption or repurchase obligation.

If an event of default specified in clause (5) above occurs and is continuing with respect to CIPHERGEN, then automatically the principal of all the notes and the interest thereon shall become immediately due and payable. If an event of default shall occur and be continuing, other than with respect to clause (5) above with respect to CIPHERGEN (the default not having been cured or waived as provided under "Modifications, Amendments, Waivers and Meetings" below), the trustee or the holders of at least 25% in aggregate principal amount of the notes then outstanding may declare the notes due and payable at their principal amount together with accrued interest, and thereupon the trustee may, at its discretion, proceed to protect and enforce the rights of the holders of notes by appropriate judicial

proceedings. Except as provided below, such declaration may be rescinded or annulled either with the written consent of the holders of a majority in aggregate principal amount of the notes then outstanding or a majority in aggregate principal amount of the notes represented at a meeting at which a quorum (as specified under "Modifications, Amendments, Waivers and Meetings" below) is present, in each case upon the conditions provided in the indenture.

No holder of any note will have any right to pursue any remedy with respect to the indenture or the notes unless, among other things,

the holders of at least 25% in aggregate principal amount of the outstanding notes have made a written request to the trustee to pursue the relevant remedy; and

the holders of a majority in aggregate principal amount of the outstanding notes have not given the trustee a direction inconsistent with that request within 60 days after receipt of that request.

However, the right of any holder to bring suit for the enforcement of any payment of principal, any redemption or repurchase amounts or interest in respect of those notes held by that holder on or after the respective due dates expressed in the notes, or the right to convert will not be impaired or adversely affected without that holder's consent. Accrued but unpaid interest will be payable upon any conversion of notes made concurrently with or after acceleration of the notes following an event of default.

The indenture contains a provision entitling the trustee, subject to the duty of the trustee during default to act with the required standard of care, to be indemnified by the holders of notes before proceeding to exercise any right or power under the indenture at the request of such holders. The indenture provides that the holders of a majority in aggregate principal amount of the notes then outstanding through their written consent, or the holders of a majority in aggregate principal amount of the notes then outstanding represented at a meeting at which a quorum is present by a written resolution, may direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred upon the trustee.

We are required to furnish annually to the trustee a statement as to the fulfillment of our obligations under the indenture.

Consolidation, Merger or Assumption

We shall not consolidate with or merge with or into, or convey, transfer or lease all or substantially all our assets, whether in a single transaction or series of related transactions to any person unless:

we are the resulting, surviving or transferee person (the "Successor Company") or the Successor Company is a corporation organized and existing under the laws of the United States or any state thereof or the District of Columbia, and the Successor Company (if not CIPHERGEN) expressly assumes by a supplemental indenture, executed and delivered to the Trustee, in form satisfactory to the Trustee, all of our obligations under the indenture and the notes, including the conversion rights;

immediately after giving effect to such transaction no event of default has happened and is continuing; and

we deliver to the trustee an officers' certificate and an opinion of counsel, each stating that such consolidation, merger or transfer and such supplemental indenture, if any, comply with the indenture and the notes.

Modifications, Amendments, Waivers and Meetings

The indenture (including the terms and conditions of the notes) may be modified or amended by us and the trustee, without the consent of the holder of any note, for the purposes of, among other things:

Edgar Filing: CIPHERGEN BIOSYSTEMS INC - Form 424B3

adding to our covenants for the benefit of the holders of notes;

surrendering any right or power conferred upon us;

providing for conversion rights of holders of notes if any reclassification or change of our common stock or any consolidation, merger or sale of all or substantially all of our assets occurs;

providing for the assumption of our obligations to the holders of notes in the case of a merger, consolidation, conveyance, transfer or lease;

reducing the conversion price, provided that the reduction will not adversely affect the interests of the holders of notes;

complying with the requirements of the SEC in order to effect or maintain the qualification of the indenture under the Trust Indenture Act of 1939, as amended;

making any changes or modifications necessary in connection with the registration of the notes under the Securities Act of 1933 as contemplated in the registration rights agreement; provided that such change or modification does not, in the good faith opinion of our board of directors and the trustee, adversely affect the interests of the holders of notes in any material respect;

curing any ambiguity or correcting or supplementing any defective provision contained in the indenture; provided that such modification or amendment does not, in the good faith opinion of our board of directors and the trustee, adversely affect the interests of the holders of notes in any material respect; or

adding or modifying any other provisions with respect to matters or questions arising under the indenture which we and the trustee may deem necessary or desirable and which will not adversely affect the interests of the holders of notes.

The indenture (including the terms and conditions of the notes) may also be modified or amended, and past defaults by us may be waived (other than a default of any payment on the notes, which may only be waived with the consent of each affected holder of notes), either:

with the written consent of the holders of at least a majority in aggregate principal amount of the notes then outstanding; or

by the adoption of a resolution at a meeting of holders by at least a majority in aggregate principal amount of the notes represented at such meeting. The quorum at any meeting called to adopt a resolution will be persons holding or representing a majority in aggregate principal amount of the notes at the time outstanding.

However, without the consent or the affirmative vote of each holder affected thereby, no modification or amendment to the indenture (including the terms and conditions of the notes) shall:

change the maturity of the principal of or any installment of interest on any note (including any payment of liquidated damages);

reduce the principal amount of, or any premium or interest on (including any payment of liquidated damages), any note;

change the currency of payment of any note or interest thereon;

impair the right to institute suit for the enforcement of any payment on or with respect to any note;

modify our obligations to maintain an office or agency in New York City;

amend the repurchase option of holders upon a change of control after the occurrence of a change of control or the conversion rights of holders of the notes in a manner adverse to the holders; provided, however, that the execution of a supplemental indenture solely to permit a successor company to assume the Company's obligations under the Notes shall not be deemed to be adverse to the holders;

modify the redemption provisions of the indenture in a manner adverse to the holders of notes;

reduce the percentage in aggregate principal amount of notes outstanding necessary to modify or amend the indenture or to waive any past default; or

reduce the percentage in aggregate principal amount of notes outstanding required for the adoption of a resolution or the quorum required at any meeting of holders of notes at which a resolution is adopted.

Satisfaction and Discharge

We may satisfy and discharge our obligations under the indenture:

by delivering to the trustee for cancellation all outstanding notes, or

by depositing with the trustee, after the notes have become due and payable, whether at stated maturity or any other redemption date, or upon conversion or otherwise, cash or common stock (as applicable under the terms of the indenture) sufficient to pay all of the outstanding notes and all other sums payable by us under the indenture.

Governing Law

The indenture and the notes will be governed by, and construed in accordance with, the laws of the State of New York.

Information Concerning the Trustee

U.S. Bank National Association, as trustee under the indenture, has been appointed by us as paying agent, conversion agent, registrar and custodian with regard to the notes. Continental Stock Transfer & Trust Company is the transfer agent and registrar for our common stock. The trustee or its affiliates may from time to time in the future provide banking and other services to us in the ordinary course of their business.

Registration Rights

In connection with the initial placement of the notes, we entered into a registration rights agreement with the initial purchaser. In the registration rights agreement, we agreed to file a shelf registration statement with the SEC covering resale of the registrable securities within 60 days after the closing date. We also agreed to use our reasonable efforts to cause the shelf registration statement to become effective within 180 days of the closing date and that we would use our reasonable efforts to keep the shelf registration statement effective until the earliest of:

the date when all of the registrable securities have been sold pursuant to the shelf registration statement or Rule 144 under the Securities Act, or any similar provision then in force, but not Rule 144A;

the expiration of the holding period under Rule 144(k) under the Securities Act applicable to holders that are not affiliates of CIPHERGEN;

the date when all of the notes and the shares of our common stock issuable upon conversion of the notes have ceased to be outstanding (whether as a result of repurchase and cancellation, conversion or otherwise); and

August 22, 2005.

When we use the term "registrable securities" in this section, we are referring to the notes and the common stock issuable upon conversion of the notes until the earliest of:

the effective registration under the Securities Act and the resale of the securities in accordance with the registration statement;

the expiration of the holding period under Rule 144(k) under the Securities Act for holders that are not affiliates of CIPHERGEN; and

the sale to the public pursuant to Rule 144 under the Securities Act, or any similar provision then in force, but not Rule 144A.

We may suspend the use of the prospectus under certain circumstances relating to pending corporate developments, public filings with the SEC and similar events. Any suspension period shall not:

exceed an aggregate of 30 days for all suspensions in any 3-month period; or

exceed an aggregate of 90 days for all suspensions in any 12-month period.

We will pay predetermined additional interest if the shelf registration statement is not timely filed or made effective or if the prospectus is unavailable for periods in excess of those permitted above.

Additional interest will be paid semiannually in arrears, with the first semiannual payment due on the first March 1 or September 1 to occur after the date on which such liquidated damages begin to accrue, and will accrue at a rate per year equal to:

0.25% of the aggregate principal amount of the note per annum to and including the 90th day after the registration default; and

0.50% of the principal amount of a note per annum from and after the 91st day after such registration default until such default is cured.

In no event will additional interest accrue at a rate per year exceeding 0.50%. If a holder has converted some or all of its notes into shares of our common stock, and if those shares of common stock continue to be registrable securities, the holder will be entitled to receive equivalent amounts based on the conversion price in effect during the period of default. We will have no other liabilities for monetary damages with respect to our registration obligations. A holder will not be entitled to additional interest during the period of registration default resulting from the unavailability of the prospectus for a period exceeding the suspension periods described above unless it has provided all information requested by the questionnaire prior to the deadline.

A holder who elects to sell registrable securities pursuant to the shelf registration statement will be required to:

be named as a selling securityholder in the related prospectus;

deliver a prospectus to purchasers; and

be subject to the provisions of the registration rights agreement, including indemnification provisions.

32

Under the registration rights agreement we agreed to:

pay all expenses of the shelf registration statement;

provide each registered holder copies of the prospectus;

notify holders when the shelf registration statement has become effective; and

take other reasonable actions as are legally required to permit unrestricted resales of the registrable securities in accordance with the terms and conditions of the registration rights agreement.

This summary of the registration rights agreement is not complete. This summary is subject to, and is qualified in its entirety by reference to, all the provisions of the registration rights agreement.

Rule 144A Information Request

We will make available to the holders or beneficial holders of the notes or the underlying common stock and prospective purchasers, upon their request, the information required under Rule 144A(d)(4) under the Securities Act until such time as such securities are no longer "restricted securities" within the meaning of Rule 144 under the Securities Act, assuming these securities have not been owned by an affiliate of ours.

Form, Denomination and Registration

Denomination and Registration. The notes will be issued in fully registered form, without coupons, in denominations of \$1,000 principal amount and whole multiples of \$1,000.

Global Notes: Book-Entry Form. Except as provided below, notes sold to "qualified institutional buyers" as defined in Rule 144A under the Securities Act, whom we refer to as QIBs, will be evidenced by one or more global notes. We will deposit the global note or notes with DTC and register the notes in the name of Cede & Co. as DTC's nominee. Except as set forth below, a note may be transferred, in whole or in part, only to another nominee of DTC or to a successor of DTC's or its nominee.

QIBs may hold their interests in a note directly through DTC if such holder is a participant in DTC, or indirectly through organizations that are participants in DTC (called "participants"). Transfers between participants will be effected in the ordinary way in accordance with DTC's rules and will be settled in clearing house funds. The laws of some states require that certain persons take physical delivery of securities in definitive form. As a result, the ability to transfer beneficial interests in the note to such persons may be limited.

QIBs who are not participants may beneficially own interests in a note held by DTC only through participants, or certain banks, brokers, dealers, trust companies and other parties that clear through or maintain a custodial relationship with a participant, either directly or indirectly (called "indirect participants").

So long as Cede & Co., as the nominee of DTC, is the registered owner of a note, Cede & Co. for all purposes will be considered the sole holder of such note. Except as provided below, owners of beneficial interests in a note will:

Edgar Filing: CIPHERGEN BIOSYSTEMS INC - Form 424B3

not be entitled to have certificates registered in their names;

not receive physical delivery of certificates in definitive registered form; and

not be considered holders of the note.

We will pay liquated damages as described above under "Registration Rights," if any, and interest payments on the global notes and the repurchase price of a note to Cede & Co., as the registered owner of the note, by wire transfer of immediately available funds on each interest payment date, if

33

any, or the repurchase date, as the case may be. Neither we, the trustee nor any paying agent will be responsible or liable:

for the records relating to, or payments made on account of, beneficial ownership interests in a note; or

for maintaining, supervising or reviewing any records relating to the beneficial ownership interests.

We have been informed that DTC's practice is to credit participants' accounts on that payment date with payments in amounts proportionate to their respective beneficial interests in the principal amount represented by a global note as shown in the records of DTC, unless DTC has reason to believe that it will not receive payment on that payment date. Payments by participants to owners of beneficial interests in the principal amount represented by a global note held through participants will be the responsibility of the participants, as is now the case with securities held for the accounts of customers registered in "street name."

Because DTC can only act on behalf of participants, who in turn act on behalf of indirect participants, the ability of a person having a beneficial interest in the principal amount represented by the global note to pledge such interest to persons or entities that do not participate in the DTC system, or otherwise take actions in respect of such interest, may be affected by the lack of a physical certificate evidencing its interest.

Neither we, the trustee, registrar, paying agent nor conversion agent will have any responsibility for the performance by DTC or its participants or indirect participants of their respective obligations under the rules and procedures governing their operations. DTC has advised us that it will take any action permitted to be taken by a holder of notes, including the presentation of notes for conversion as described below, only at the direction of one or more participants to whose account with DTC interests in the note are credited, and only in respect of the principal amount of the notes represented by the note as to which the participant or participants has or have given such direction.

DTC has advised us that it is:

a limited purpose trust company organized under the laws of the State of New York, and a member of the Federal Reserve System;

a "clearing corporation" within the meaning of the Uniform Commercial Code; and

a "clearing agency" registered pursuant to the provisions of Section 17A of the Exchange Act.

DTC was created to hold securities for its participants and to facilitate the clearance and settlement of securities transactions between participants through electronic book-entry changes to the accounts of its participants. Participants include securities brokers, dealers, banks, trust companies and clearing corporations and other organizations. Some of the participants or their representatives, together with other entities, own DTC. Indirect access to the DTC system is available to others such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a participant, either directly or indirectly.

DTC has agreed to the foregoing procedures to facilitate transfers of interests in a note among participants. However, DTC is under no obligation to perform or continue to perform these procedures, and may discontinue these procedures at any time. If DTC is at any time unwilling or unable to continue as depository and a successor depository is not appointed by us within 90 days, we will issue notes in certificated form in exchange for notes.

Definitive Notes. Definitive notes may be issued in exchange for notes represented by the global notes if we do not appoint a successor depository as set forth above under "Global Notes: Book Entry Form" or in certain other circumstances set forth in the indenture.

UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

The following is a general discussion of certain U.S. federal income tax considerations relevant to holders of the notes and common stock into which the notes may be converted. This discussion is based upon the Internal Revenue Code of 1986, as amended (the "Code"), Treasury Regulations, Internal Revenue Service ("IRS") rulings and judicial decisions now in effect, all of which are subject to change (possibly, with retroactive effect) or different interpretations. There can be no assurance that the IRS will not challenge one or more of the tax consequences described herein, and we have not obtained, nor do we intend to obtain, a ruling from the IRS with respect to the U.S. federal income tax consequences of acquiring or holding notes or common stock. This discussion does not purport to deal with all aspects of U.S. federal income taxation that may be relevant to a particular holder in light of the holder's circumstances (for example, persons subject to the alternative minimum tax provisions of the Code or a holder whose "functional currency" is not the U.S. dollar). Also, it is not intended to be wholly applicable to all categories of investors, some of which (such as dealers in securities or currencies, traders in securities that elect to use a mark-to-market method of accounting, banks, thrifts, regulated investment companies, insurance companies, tax-exempt organizations, and persons holding notes or common stock as part of a hedging or conversion transaction or straddle or persons deemed to sell notes or common stock under the constructive sale provisions of the Code) may be subject to special rules. The discussion also does not discuss any aspect of state, local or foreign law, or U.S. federal estate and gift tax law as applicable to the holders of the notes and common stock into which the notes may be converted. In addition, this discussion is limited to initial purchasers of notes who acquire the notes at their original issue price within the meaning of Section 1273 of the Code, and who will hold the notes and common stock as "capital assets" within the meaning of Section 1221 of the Code (generally, for investment).

All prospective purchasers of the notes are urged to consult their tax advisors regarding the U.S. federal, state, local and foreign tax consequences of the purchase, ownership and disposition of the notes and the common stock in their particular situations.

U.S. Holders

As used herein, the term "U.S. Holder" means a beneficial holder of a note or common stock that for U.S. federal income tax purposes is (i) a citizen or resident (as defined in Section 7701(b) of the Code) of the United States (unless such person is not treated as a resident of the U.S. under an applicable income tax treaty), (ii) a corporation created or organized under the laws of the United States or any political subdivision thereof, (iii) an estate the income of which is subject to U.S. federal income taxation regardless of its source and (iv) in general, a trust subject to the primary supervision of a court within the United States and the control of a U.S. person as described in Section 7701(a)(30) of the Code. A "Non-U.S. Holder" is any holder of a note or common stock other than a U.S. Holder or a foreign or domestic partnership.

If a partnership (including for this purpose any entity, domestic or foreign, treated as a partnership for U.S. tax purposes) or flow-through entity is a beneficial owner of the notes or common stock into which the notes may be converted, the U.S. tax treatment of a partner in the partnership or an owner of the flow-through entity generally will depend on the status of the partner or owner and the activities of the partnership or flow-through entity. As a general matter, income earned through a foreign or domestic partnership or flow-through entity is attributed to its partners or owners. A holder of the notes or common stock into which the notes may be converted that is a partnership or flow-through entity, and partners in such partnership or owners of such flow-through entity, is urged to consult their individual tax advisors about the U.S. federal income tax consequences of holding and disposing of the notes and the common stock into which the notes may be converted.

Edgar Filing: CIPHERGEN BIOSYSTEMS INC - Form 424B3

U.S. Holders will be required to recognize as ordinary income any interest paid or accrued on the notes in accordance with their regular method of accounting. In addition, if we do not comply with our obligations under the registration rights agreement, such non-compliance may result in the payment of predetermined additional amounts referred to as liquidated damages in the manner described under the caption "Description of the Notes." If the amount or timing of any liquidated damages on a note is contingent, the note could be subject to special rules that apply to debt instruments that provide for contingent payments ("contingent debt instruments"). These rules generally require a holder to accrue interest income at a rate higher than the stated interest rate on the note and to treat as ordinary income, rather than capital gain, any gain recognized on a sale, exchange or retirement of a note before the resolution of the contingencies. We believe that the possibility of liquidated damages is remote and, accordingly, the notes should not be treated as contingent debt instruments. Therefore, for purposes of filing tax or information returns with the IRS, we will not treat the notes as contingent debt instruments or as having original issue discount. Our position in this regard is binding on each U.S. Holders (but not the IRS) unless such U.S. Holder explicitly discloses a contrary position on a statement attached to its timely filed U.S. federal income tax return for the year in which the note is acquired. If the notes were treated as contingent debt instruments, the consequences described above would apply. In the event that we pay liquidated damages, the holders would be required to recognize liquidated damages income, which would be taxable as ordinary income.

Conversion of Notes Into Common Stock

A U.S. Holder generally will not recognize any income, gain or loss upon conversion of a note into common stock except with respect to cash received in lieu of a fractional share of common stock. Cash received in lieu of a fractional share of common stock should generally be treated as a payment in exchange for such fractional share rather than as a dividend. Gain or loss recognized on the receipt of cash paid in lieu of such fractional share generally will equal the difference between the amount of cash received and the amount of tax basis allocable to the fractional share. The adjusted basis of shares of common stock received on conversion will equal the adjusted basis of the note converted (reduced by the portion of adjusted basis allocated to any fractional share of common stock exchanged for cash). The holding period of such common stock received on conversion will generally include the period during which the converted notes were held prior to conversion. To the extent the common stock received is attributable to accrued interest, the fair market value of such stock will be taxable as ordinary interest income. Your tax basis in such shares generally will equal the amount of accrued interest included in income, and the holding period for such shares will begin on the date of conversion.

The conversion rate of the notes is subject to adjustment under certain circumstances. Section 305 of the Code and the Treasury Regulations issued thereunder may treat the holders of the notes as having received a constructive distribution, resulting in a taxable dividend (subject to a possible dividends received deduction in the case of corporate holders) to the extent of our current and/or accumulated earnings and profits, if, and to the extent that certain adjustments in the conversion rate, which may occur in limited circumstances (particularly an adjustment to reflect a taxable dividend to holders of common stock), increase the proportionate interest of a holder of notes in the fully diluted common stock, whether or not such holder ever exercises its conversion privilege. Therefore, U.S. Holders may recognize dividend income in the event of a deemed distribution even though they may not receive any cash or property. Moreover, if there is not a full adjustment to the conversion ratio of the notes to reflect a stock dividend or other event increasing the proportionate interest of the holders of outstanding common stock in our assets or earnings and profits, then such increase in the proportionate interest of the holders of the common stock generally will be treated as a distribution to such holders, taxable as a dividend (subject to a possible dividends received deduction in the case of

corporate holders) to the extent of our current and/or accumulated earnings and profits. Adjustments to the conversion rate made pursuant to a bona fide reasonable adjustment formula, which has the effect of preventing dilution in the interest of the holders of the debt instruments, however, will generally not be considered to result in a constructive dividend distribution.

Sale, Exchange, Redemption or Retirement of the Notes

Each U.S. Holder generally will recognize gain or loss upon the sale, exchange (other than by exercise of the conversion privilege), redemption, retirement or other disposition of notes measured by the difference (if any) between (i) the amount of cash and the fair market value of any property received (other than any amount attributable to accrued but unpaid stated interest) and (ii) such holder's adjusted tax basis in the notes. A U.S. Holder's adjusted tax basis in a note generally will equal the cost of the note to such holder less any principal payments received by such holder. Any such gain or loss recognized on the sale, exchange, redemption, retirement or other disposition of a note should be capital gain or loss and will generally be longterm if the note has been held for more than one year at the time of the sale or exchange. Generally, longterm capital gain for individuals is eligible for a reduced rate of taxation. Capital gain that is not long-term capital gain is taxed at ordinary income rates. The deductibility of capital losses is subject to certain limitations.

The Common Stock

Edgar Filing: CIPHERGEN BIOSYSTEMS INC - Form 424B3

Distributions (including constructive distributions), if any, paid on the common stock that a U.S. Holder receives upon conversion of a note generally will constitute a taxable dividend to the extent made from our current and/or accumulated earnings and profits as determined under U.S. federal income tax principles. Any distribution in excess of our current and accumulated earnings and profits will be treated first as a tax-free return of capital, which will reduce the U.S. Holder's adjusted tax basis in the shares (but not below zero). To the extent such a distribution exceeds the U.S. Holder's adjusted tax basis in the shares, the distribution will be taxable as capital gain. Dividends received by a corporate U.S. Holder may be eligible for a dividend-received deduction. For taxable years beginning after December 31, 2002 and before January 1, 2009, subject to certain exceptions, dividends received by non-corporate shareholders (including individuals) from domestic corporations generally are taxed at the same preferential rates that apply to long-term capital gain.

Gain or loss realized on the sale or exchange of common stock will equal the difference between the amount realized on such sale or exchange and the U.S. Holder's adjusted tax basis in such common stock. Such gain or loss will generally be long-term if the holder has held or is deemed to have held the common stock for more than one year. Generally, long-term capital gain of non-corporate shareholders is eligible for a reduced rate of taxation. The deductibility of capital losses is subject to certain limitations.

Non-U.S. Holders

The following discussion is limited to the U.S. federal income tax consequences relevant to a Non-U.S. Holder (as defined above).

For purposes of the following discussion, interest, dividends and gain on the sale, exchange or other disposition of a note or common stock will be considered to be "U.S. trade or business income" if such income or gain is (i) effectively connected with the conduct of a U.S. trade or business and (ii) in the case of a Non-U.S. Holder eligible for the benefits of an applicable U.S. bilateral income tax treaty, attributable to a permanent establishment (or, in the case of an individual, a fixed base) in the United States.

37

Interest

Payments of interest to nonresident persons or entities are generally subject to U.S. federal income tax at a rate of 30 percent, collected by means of withholding by the payor. Payments of interest on the notes to most Non-U.S. Holders, however, will qualify as "portfolio interest," and thus will be exempt from the withholding tax, if the holders certify their nonresident status as described below. The portfolio interest exception will not apply to payments of interest to a Non-U.S. Holder that:

owns, directly or indirectly, at least 10 percent of our voting stock; or

is a "controlled foreign corporation" that is related to us.

Even if the portfolio interest exception does not apply, payments of interest to a nonresident person or entity might not be subject to withholding tax at a 30 percent rate, or might be subject to withholding tax at a reduced rate, under the terms of an applicable income tax treaty between the United States and the Non-U.S. Holder's country of residence.

The portfolio interest exception and entitlement to treaty benefits apply only if the holder certifies its nonresident status. A Non-U.S. Holder can meet this certification requirement by providing a Form W-8BEN or appropriate substitute form to us or our paying agent. If the holder holds the note through a financial institution or other agent acting on the holder's behalf, the holder will be required to provide appropriate documentation to the agent. The holder's agent will then be required to provide certification to us or our paying agent, either directly or through other intermediaries. Special certification procedures are provided for payments through partnerships, other flow-through entities, and qualified intermediaries.

Interest that is U.S. trade or business income is generally subject to U.S. federal income tax at regular income tax rates. Any U.S. trade or business income received by a Non-U.S. Holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30 percent rate or such lower rate as may be applicable under an income tax treaty.

Dividends

In general, dividends paid to a Non-U.S. Holder of common stock will be subject to withholding of U.S. federal income tax at a 30 percent rate unless such rate is reduced by an applicable income tax treaty. Dividends that are U.S. trade or business income are generally subject to U.S.

federal income tax at regular income tax rates, but are not generally subject to the 30 percent withholding tax or treaty-reduced rate if the Non-U.S. Holder files a properly executed Form W-8ECI (or appropriate substitute form), as applicable with the payor. Any U.S. trade or business income received by a Non-U.S. Holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30 percent rate or such lower rate as may be applicable under an income tax treaty. A non-U.S. Holder of common stock who wishes to claim the benefit of an applicable treaty rate must provide a properly executed IRS Form W-8BEN (or appropriate substitute form), as applicable. In addition, a Non-U.S. Holder may under certain circumstances be required to obtain a U.S. taxpayer identification number and make certain certifications to us. Special certification procedures are provided for payments through partnerships, other flow-through entities, and qualified intermediaries. A Non-U.S. Holder of common stock that is eligible for a reduced rate of U.S. withholding tax pursuant to an income treaty may obtain a refund of amounts withheld at a higher rate by filing an appropriate claim for a refund with the IRS.

Conversion

A Non-U.S. Holder generally will not be subject to U.S. federal income tax on the conversion of notes into common stock.

38

Sale, Exchange, Retirement or Redemption of Notes or Common Stock

Except as described below and subject to the discussion concerning backup withholding, any gain realized by a Non-U.S. Holder on the sale, exchange, retirement or redemption of a note or common stock generally will not be subject to U.S. federal income tax, unless (i) such gain is U.S. trade or business income, (ii) subject to certain exceptions, the Non-U.S. Holder is an individual who holds the note or common stock as a capital asset and is present in the United States for 183 days or more in the taxable year of the disposition, (iii) the Non-U.S. Holder is subject to tax pursuant to the provisions of U.S. tax law applicable to certain U.S. expatriates (including certain former citizens or residents of the United States), or (iv) we are a United States real property holding corporation within the meaning of Section 897 of the Code. We do not believe that we are currently a "United States real property holding corporation" within the meaning of Section 897 of the Code, or that we will become one in the future.

Backup Withholding and Information Reporting

The Code and the Treasury Regulations require those who make specified payments to report the payments to the IRS. Among the specified payments are dividends and proceeds paid by brokers to their customers. The required information returns enable the IRS to determine whether the recipient properly included the payments in income. This reporting regime is reinforced by "backup withholding" rules. These rules require the payors to withhold tax from payments subject to information reporting if the recipient fails to cooperate with the reporting regime by failing to provide his taxpayer identification number to the payor, furnishing an incorrect identification number, or failing to report interest or dividends on his returns. The backup withholding rate is currently 28%. The information reporting and backup withholding rules do not apply to payments to corporations, whether domestic or foreign.

Payments of dividends to individual U.S. Holders of notes or common stock will generally be subject to information reporting, and will be subject to backup withholding, unless the holder provides us or our paying agent with a correct taxpayer identification number and complies with certain certification procedures.

These information reporting and backup withholding rules do not apply to payments that are subject to the 30 percent withholding tax on dividends paid to nonresidents, or to payments that are exempt from that tax by application of a tax treaty or special exception. Therefore, payments to Non-U.S. Holders of dividends on common stock will generally not be subject to these information reporting or backup withholding rules. To avoid backup withholding, a Non-U.S. Holder will have to certify its nonresident status.

Payments made to U.S. Holders by a broker upon a sale of notes or common stock will generally be subject to information reporting and backup withholding. If the sale is made through a foreign office of a foreign broker, the sale will generally not be subject to either information reporting or backup withholding. This exception may not apply, however, if the foreign broker is owned or controlled by U.S. persons, or is engaged in a U.S. trade or business.

Payments made to Non-U.S. Holders by a broker upon a sale of notes or common stock will not be subject to information reporting or backup withholding as long as the Non-U.S. Holder certifies its foreign status. However, we may be required to report annually to the IRS and to you the amount of, and the tax withheld with respect to, any interest or dividends paid to you, regardless of whether tax was actually withheld. Copies of these information returns may be made available to the tax authorities of the country in which you reside.

39

Any amounts withheld from a payment to a holder of notes or common stock under the backup withholding rules can be credited against any U.S. federal income tax liability of the holder and may entitle the holder to a refund, provided that the required information is furnished to the IRS.

The preceding discussion of certain U.S. federal income tax consequences is for general information only and is not tax advice. Accordingly, each investor is urged to consult its tax adviser as to particular tax consequences to it of purchasing, holding and disposing of the notes and the common stock, including the applicability and effect of any state, local or foreign tax laws, and of any proposed changes in applicable laws.

40

SELLING SECURITYHOLDERS

We originally issued the notes in a private placement to the initial purchaser, SG Cowen Securities Corporation, in August 2003. The initial purchaser resold the notes to purchasers, including the selling securityholders listed below, in transactions exempt from registration pursuant to Rule 144A. Selling securityholders may offer and sell the notes and the underlying common stock pursuant to this prospectus.

The following table contains information as of October 1, 2003 with respect to the selling securityholders and the principal amount of notes and the underlying common stock beneficially owned by each selling securityholder.

| Name | Principal Amount at Maturity of Notes Beneficially Owned that May be Sold | Percentage of Notes Outstanding | Number of Shares of Common Stock that May be Sold(1) | Total Shares Beneficially Owned(1)(5) |
|---|---|---------------------------------|--|---------------------------------------|
| Highbridge International LLC | \$ 20,000,000 | 66.67% | 2,176,279 | 2,176,279 |
| Deerfield Management Co., L.P. | \$ 5,000,000 | 16.67% | 544,070 | 1,344,070 |
| Fidelity Financial Trust: Fidelity Convertible Securities Fund(4) | \$ 5,000,000 | 16.67% | 544,070 | 544,070 |

Any other holder of Notes or future transferee, pledgee, donee or successor of any holder (2)(3)

- (1) Assumes conversion of all of the holder's notes at a conversion rate of 108.8329 shares per \$1,000 principal amount of the notes (representing an initial conversion price of approximately \$9.19 per share of common stock). However, this conversion price will be subject to adjustment as described above under "Description of the Notes Conversion Rights" see pages 23 and 24. As a result, the amount of common stock issuable upon conversion of the notes may increase or decrease in the future.
- (2) Information about other selling security holders will be set forth in prospectus supplements, if required.
- (3) Assumes that any other holders of notes, or any future transferees, pledgees, donees or successors of or from any such other holders of notes, do not beneficially own any common stock other than the common stock issuable upon conversion of the notes at the initial conversion rate.
- (4) The entity is either an investment company or a portfolio of an investment company registered under Section 8 of the Investment Company Act of 1940, as amended, or a private investment account advised by Fidelity Management & Research Company ("FMR Co."). FMR Co. is a Massachusetts corporation and an investment advisor registered under Section 203 of the Investment Advisers

Edgar Filing: CIPHERGEN BIOSYSTEMS INC - Form 424B3

Act of 1940, as amended, and provides investment advisory services to each of such Fidelity entities identified above, and to other registered investment companies and to certain other funds which are generally offered to a limited group of investors. FMR Co. is a wholly-owned subsidiary of FMR Corp. ("FMR"), a Delaware corporation.

(5)

Any holder of a note who (together with such holder's affiliates) purchased more than \$10 million in aggregate principal amount of notes in the initial resale by the initial purchaser shall not have the right to convert the note to the extent that, after giving effect to such conversion, the holder (together with the holder's affiliates) would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to such conversion.

41

We prepared this table based on the information supplied to us by the selling securityholders named in the table.

The selling securityholders listed in the above table may have sold or transferred, in transactions exempt from the registration requirements of the Securities Act of 1933, some or all of their notes since the date on which the information in the above table is presented. Information about the selling securityholders may change from over time. Any changed information with respect to which we are given notice will be set forth in prospectus supplements.

Because the selling securityholders may offer all or some of their notes or the underlying common stock from time to time, we cannot estimate the amount of the notes or underlying common stock that will be held by the selling securityholders upon the termination of any particular offering. See the section entitled "Plan of Distribution" for further information.

42

PLAN OF DISTRIBUTION

We will not receive any of the proceeds of the sale of the notes and the underlying common stock offered by this prospectus. The notes and the underlying common stock may be sold from time to time to purchasers:

directly by the selling securityholders;

through underwriters, broker-dealers or agents who may receive compensation in the form of discounts, concessions or commissions from the selling securityholders or the purchasers of the notes and the underlying common stock.

The selling securityholders and any such broker-dealers or agents who participate in the distribution of the notes and the underlying common stock may be deemed to be "underwriters." As a result, any profits on the sale of the notes and underlying common stock by selling securityholders and any discounts, commissions or concessions received by any such broker-dealers or agents might be deemed to be underwriting discounts and commissions under the Securities Act. If the selling securityholders are deemed to be underwriters, the selling securityholders may be subject to certain statutory liabilities of, including, but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Exchange Act.

If the notes and underlying common stock are sold through underwriters or broker-dealers, the selling securityholders will be responsible for underwriting discounts or commissions or agent's commissions.

The notes and underlying common stock may be sold in one or more transactions at:

fixed prices;

prevailing market prices at the time of sale;

varying prices determined at the time of sale; or

negotiated prices.

These sales may be effected in transactions:

on any national securities exchange or quotation service on which the notes and underlying common stock may be listed or quoted at the time of the sale, including the Nasdaq National Market in the case of the common stock;

in the over-the-counter market;

in transactions otherwise than on such exchanges or services or in the over-the-counter market; or

through the writing of options.

These transactions may include block transactions or crosses. Crosses are transactions in which the same broker acts as an agent on both sides of the trade.

In connection with sales of the notes and underlying common stock or otherwise, the selling securityholders may enter into hedging transactions with broker-dealers. These broker-dealers may in turn engage in short sales of the notes and underlying common stock in the course of hedging their positions. The selling securityholders may also sell the notes and underlying common stock short and deliver notes and underlying common stock to close out short positions, or loan or pledge notes and underlying common stock to broker-dealers that in turn may sell the notes and underlying common stock.

To our knowledge, there are currently no plans, arrangements or understandings between any selling securityholders and any underwriter, broker-dealer or agent regarding the sale of the notes and the underlying common stock by the selling securityholders. Selling securityholders may sell any or all of the notes and the underlying common stock offered by them pursuant to this prospectus. In addition, we cannot assure you that any such selling securityholder will not transfer, devise or gift the notes and the underlying common stock by other means not described in this prospectus.

Our common stock is quoted on the Nasdaq National Market under the symbol "CIPH." We do not intend to apply for listing of the notes on any securities exchange or for quotation through Nasdaq. Accordingly, we cannot assure you that the notes will be liquid or that any trading market for the notes will develop.

There can be no assurance that any selling securityholder will sell any or all of the notes or underlying common stock pursuant to this prospectus. In addition, any notes or underlying common stock covered by this prospectus that qualify for sale pursuant to Rule 144 or Rule 144A of the Securities Act may be sold under Rule 144 or Rule 144A rather than pursuant to this prospectus.

The selling securityholders and any other person participating in such distribution will be subject to the Exchange Act. The Exchange Act rules include, without limitation, Regulation M, which may limit the timing of purchases and sales of any of the notes and the underlying common stock by the selling securityholders and any other such person. In addition, Regulation M of the Exchange Act may restrict the ability of any person engaged in the distribution of the notes and the underlying common stock to engage in market-making activities with respect to the particular notes and the underlying common stock being distributed for a period of up to five business days prior to the commencement of such distribution. This may affect the marketability of the notes and the underlying common stock and the ability of any person or entity to engage in market-making activities with respect to the notes and the underlying common stock.

Other than with respect to SG Cowen Securities Corporation, the initial purchaser, these securityholders purchased their notes in the open market, not directly from us, and we are not aware of any underwriting plan or agreement, underwriters' or dealers' compensation, or passive market making or stabilizing transactions involving the purchase or distribution of these securities by these securityholders. To our knowledge,

Edgar Filing: CIPHERGEN BIOSYSTEMS INC - Form 424B3

none of the selling securityholders who are affiliates of broker-dealers purchased the notes outside of the ordinary course of business or, at the time of the purchase of the notes, had any agreement or understanding, directly or indirectly, with any person to distribute the securities.

Pursuant to the registration rights agreement filed as an exhibit to this registration statement, we and the selling securityholders will be indemnified by the other against certain liabilities, including certain liabilities under the Securities Act or will be entitled to contribution in connection with these liabilities.

We have agreed to pay substantially all of the expenses incidental to the registration, offering and sale of the notes and underlying common stock to the public other than commissions, fees and discounts of underwriters, brokers, dealers and agents.

44

LEGAL MATTERS

Certain legal matters relating to the validity of the securities offered hereby will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California.

EXPERTS

The financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2002 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and later information filed with the SEC will update and supersede this information. We incorporate by reference the documents listed below and any future filings made by us with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 until our offering is completed.

Our annual report on Form 10-K for our fiscal year ended December 31, 2002.

Our quarterly reports on Form 10-Q for our fiscal quarters ended March 31, 2003 and June 30, 2003.

Our definitive proxy statement filed with the Securities and Exchange Commission for our Annual Meeting of Stockholders held on June 5, 2003.

Our reports on Form 8-K filed on March 11, 2002 and June 11, 2003 and on Form 8-K/A filed on August 1, 2003 and August 4, 2003.

The description of our common stock contained in our registration statements on Form 8-A (incorporating by reference to Description of Capital Stock and Shares Eligible for Future Sales sections on pages 58 to 62 of the Registrant's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 20, 2000, as amended (file number 333-32812)) dated September 22, 2000 and March 21, 2002.

WHERE YOU CAN FIND MORE INFORMATION

Edgar Filing: CIPHERGEN BIOSYSTEMS INC - Form 424B3

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy any document we file at the SEC's Public Reference Rooms in Washington, D.C., New York, New York and Chicago, Illinois. The Public Reference Room in Washington, D.C. is located at 450 Fifth Street, N.W. Please call the SEC at 1-800-SEC-0330 for further information on the public conference rooms. Our SEC filings are also available to the public from the SEC's web site at <http://www.sec.gov>.

You may request a copy of any or all of the information that has been incorporated in this prospectus but that has not been delivered, at no cost, by writing or telephoning us at the following address or phone number:

Ciphergen Biosystems, Inc.
6611 Dumbarton Circle
Fremont, California 94555
(510) 505-2100

45

You should rely only on the information incorporated by reference or provided in this prospectus or the prospectus supplement. We have authorized no one to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus or the prospectus supplement is accurate as of any date other than the date on the front of the document.

No person has been authorized to give any information or to make any representations other than those contained in this prospectus in connection with our recent convertible debt offering made hereby, and if given or made, such information or representations must not be relied upon as having been authorized by us, any selling stockholder or by any other person. Neither the delivery of this prospectus nor any sale made hereunder shall, under any circumstances, create any implication that information herein is correct as of any time subsequent to the date hereof. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any security other than the securities covered by this prospectus, nor does it constitute an offer to or solicitation of any person in any jurisdiction in which such offer or solicitation may not lawfully be made.

46

Prospective investors may rely only on the information contained in this prospectus. Neither Ciphergen nor any selling stockholder has authorized anyone to provide prospective investors with information different from that contained in this prospectus. This prospectus is not an offer to sell nor is it seeking an offer to buy the shares in any jurisdiction where the offer or sale is not permitted. The information contained in this prospectus is correct only as of the date of this prospectus, regardless of the time of the delivery of this prospectus or any sale of the shares.

Ciphergen Biosystems, Inc.

\$30,000,000

PROSPECTUS

October 17, 2003

TABLE OF CONTENTS

SUMMARY

THE OFFERING

RATIO OF EARNINGS TO FIXED CHARGES

RISK FACTORS

FORWARD-LOOKING STATEMENTS

USE OF PROCEEDS

DESCRIPTION OF THE NOTES

UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

SELLING SECURITYHOLDERS

PLAN OF DISTRIBUTION

LEGAL MATTERS

EXPERTS

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

WHERE YOU CAN FIND MORE INFORMATION