

INTRABIOTICS PHARMACEUTICALS INC /DE

Form 424B3

October 10, 2003

Table of Contents

Filed pursuant to Rule 424(B)(3)

Registration File No.: 333-105288

PROSPECTUS

2,762,103 Shares

IntraBiotics Pharmaceuticals, Inc.

Common Stock

We are registering our common stock for resale by the selling stockholders identified in this prospectus. We will not receive any of the proceeds from the sale of shares by the selling stockholders. Our common stock is listed on the Nasdaq National Market under the symbol IBPI. On October 9, 2003, the last reported sales price for our common stock was \$12.47 per share.

Investing in our common stock involves a high degree of risk. See Risks Factors, beginning on page 3.

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 8, 2003.

TABLE OF CONTENTS

SUMMARY

RISK FACTORS

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

USE OF PROCEEDS

WHERE YOU CAN FIND MORE INFORMATION

SELLING STOCKHOLDERS

PLAN OF DISTRIBUTION

LEGAL MATTERS

EXPERTS

Table of Contents

TABLE OF CONTENTS

	Page
SUMMARY	1
RISKS FACTORS	3
DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS	10
USE OF PROCEEDS	10
WHERE YOU CAN FIND MORE INFORMATION	11
SELLING STOCKHOLDERS	12
PLAN OF DISTRIBUTION	15
LEGAL MATTERS	17
EXPERTS	17

Table of Contents

SUMMARY

*This summary highlights what we believe is the most important information about IntraBiotics and the transaction. To fully understand our business, this offering and its consequences to you, you should read the entire prospectus carefully, including the *Risks Related to Our Business* section and the documents that we incorporate by reference into this prospectus, before making an investment decision.*

INTRABIOTICS PHARMACEUTICALS, INC.

IntraBiotics Pharmaceuticals, Inc. is a biopharmaceutical company focused on developing an oral solution of iseganan hydrochloride, or iseganan HCl, for the prevention of ventilator-associated pneumonia, or VAP. Iseganan HCl is an antimicrobial drug, or a drug capable of destroying microorganisms that cause disease, including bacteria and fungi, and is effective against many drug-resistant, disease-causing bacteria and fungi. VAP is a bacterial pneumonia that can develop in patients receiving mechanical (artificial) ventilation and is the most common infection occurring in intensive care units.

In 2002, we were primarily developing iseganan HCl for the prevention of ulcerative oral mucositis, a complication that develops in cancer patients receiving chemotherapy or radiation that results in painful ulcer-like sores in the mouth and throat. We were evaluating whether an infectious component of oral mucositis could be prevented or reduced by our drug candidate. We concluded two large studies, one in patients receiving radiation therapy to the head and neck, and a second in patients undergoing aggressive chemotherapy. In the radiation therapy study, there was no difference between iseganan HCl and placebo, and in the chemotherapy study, differences in favor of iseganan HCl were insufficient to achieve statistical significance. Iseganan HCl appears to be safe when applied to the oral cavity. We are not pursuing further development of iseganan HCl to prevent oral mucositis, and instead we are now developing iseganan HCl to prevent VAP.

A phase I/IIa trial of iseganan HCl oral solution evaluating safety and antimicrobial activity in mechanically-ventilated patients was completed in February 2001. A phase I/IIa trial attempts to obtain preliminary indicators of safety and efficacy of the drug candidate in a smaller patient population. Single doses of iseganan HCl reduced the level of bacteria in the oral cavity by more than 100-fold compared to pre-treatment baseline levels in patients who required mechanical ventilation. In this study, we also selected the optimal formulation and dosage strength of iseganan HCl. The phase I/IIa study demonstrated that administration of iseganan HCl every four hours progressively reduced the level of bacteria in the oral cavity.

We have met with members of our Steering Committee and Data Monitoring Committee, which are comprised of doctors and statisticians who are experienced in the care of mechanically-ventilated patients and/or the design of clinical trials. Together, we designed a pivotal study to test the effectiveness of iseganan HCl in preventing VAP. A pivotal study attempts to establish the safety and efficacy of a drug candidate in an expanded patient population.

In September 2003, we reached a Special Protocol Assessment, or SPA, agreement with the FDA on the design of our pivotal trials to be conducted in support of registration of iseganan HCl for use in patients receiving mechanical ventilation to reduce the risk of VAP. The SPA letter from the FDA documents the agreed upon terms and conditions under which we will conduct and analyze the data from two identical pivotal, randomized, double-blind, placebo-controlled, multinational clinical trials. These pivotal trials are designed to assess the safety and efficacy of iseganan HCl and to demonstrate iseganan HCl's ability to reduce the incidence of pneumonia in patients who are receiving mechanical ventilation. In each trial, approximately 900 patients will be enrolled and will be randomized to receive either iseganan or placebo six times per day as part of routine oral hygiene for up to 14 days while patients are mechanically ventilated. To complete these clinical trials, we will need to raise additional capital. We expect to begin enrollment in the first trial by the end of September and to complete that trial and announce its results by the end of 2004. The FDA has granted iseganan HCl fast-track designation for this development program. We cannot be certain that iseganan HCl oral solution will prove to be safe or effective in the prevention of VAP, or will receive regulatory approvals.

Since commencing operations in 1994, we have not generated any revenue from product sales, and we have funded our operations primarily through the private sale of equity securities, funds received from a terminated collaboration agreement, the proceeds of equipment financing arrangements and our initial public

Table of Contents

offering of common stock in March 2000. On May 1, 2003, in a private placement transaction, we sold shares of a newly created Series A convertible preferred stock and warrants to purchase common stock resulting in gross cash proceeds of \$3.5 million. We will need to raise additional funds in the future to continue our operations.

Our executive offices are located at 2483 East Bayshore Road, Suite 100, Palo Alto, CA 94303, and our telephone number is (650) 526-6800.

Table of Contents

RISK FACTORS

An investment in our shares being offered in this prospectus involves a high degree of risk. In deciding whether to purchase shares of our common stock, you should carefully consider the following risk factors. If any of the events or circumstances described in the following risks actually occurs, our business, financial condition, or results of operations could be materially adversely affected and the trading price of our common stock could decline.

We expect to continue to incur future operating losses and may never achieve profitability.

We have never generated revenue from product sales, and we have incurred significant net losses in each year since inception. We incurred net losses applicable to our common stockholders of \$34.5 million in 2002 and \$5.7 million in the six-month period ended June 30, 2003. As of June 30, 2003, our accumulated deficit was approximately \$206.0 million. We expect to continue to incur substantial additional losses for the foreseeable future, and we may never become profitable. To date, we have financed our operations primarily through the private sale of equity securities, funds received from a terminated collaboration agreement, the proceeds of equipment financing arrangements, and our initial public offering of common stock in March 2000.

In the first quarter of 2003, we commenced preparations for a new pivotal trial of iseganan HCl oral solution for the prevention of VAP. We may also develop iseganan HCl for other indications in the future or acquire or license other products. We will receive product revenues only if we complete clinical trials with respect to one or more products, receive regulatory approvals and successfully commercialize such products. We do not know whether we will be successful in developing iseganan HCl for our currently planned VAP indication or other indications, or in acquiring or licensing other products.

We depend on the outcome of our clinical trial for the prevention of VAP and any future clinical trials for other indications for iseganan HCl or for products that we may license or acquire, and if they are unsuccessful, we will not be able to commercialize any products and may be forced to cease operations.

We had only one late stage lead product, iseganan HCl for the treatment of ulcerative oral mucositis, which failed in the phase III trial conducted on patients with head and neck cancer receiving radiotherapy and the phase III trial conducted on patients with cancer receiving aggressive chemotherapy. Our other indications for iseganan HCl are in earlier stages of clinical development. In September 2003, we reached a SPA agreement with the FDA on the design of our pivotal trials to be conducted in support of registration of iseganan HCl for use in patients receiving mechanical ventilation to reduce the risk of VAP. We expect to begin enrollment in the first trial by the end of September and to complete that trial and announce its results by the end of 2004. If this pivotal trial fails to meet its primary endpoint, and we do not acquire or license any additional product candidates, we may not be able to commercialize any products and we may be forced to cease operations. In addition, as a result of our focus on the VAP trial and the delay in clinical development of any other drug candidates, our ability to generate product revenue will be delayed, and we do not expect to generate product revenue in the near term.

We must raise capital to continue our operations, and if we fail to obtain the capital necessary to fund our operations, we will be unable to develop our drug candidates and may have to cease operations.

For the year ended December 31, 2002 and the six-month period ended June 30, 2003, net cash used for operating activities was \$26.3 million and \$4.6 million, respectively. At June 30, 2003, our cash and cash equivalents, including short-term investments, were \$11.9 million, which included restricted cash of \$250,000. In order to complete our clinical trials as contemplated under our SPA agreement with the FDA, we will need to raise additional capital.

Our future liquidity and capital requirements will depend on many factors, including the timing, cost, and progress of our current VAP trial, our evaluation of, and decisions with respect to, our strategic alternatives, costs associated with the regulatory approvals, securing in-licensing opportunities, purchasing additional

Table of Contents

products or drug candidates and conducting pre-clinical research and clinical development of those drug candidates.

We believe that additional financing will be required in the future to fund our operations, conduct any other possible trials of iseganan HCl, or commercialize our current and any future product candidates. We do not know whether additional financing will be available when needed or on acceptable terms, if at all. If we are unable to raise additional financing when necessary, we may have to delay our product development efforts or any product acquisitions or be forced to cease operations.

If we raise additional capital by issuing securities or through collaboration and licensing arrangements, our existing stockholders may experience dilution or we may be required to relinquish rights to our technologies or product candidates.

We may raise additional financing through public or private equity offerings, debt financings or additional corporate collaboration and licensing arrangements. To the extent we raise additional capital by issuing equity securities, our stockholders may experience dilution. To the extent that we raise additional funds through collaboration and licensing arrangements, it may be necessary to relinquish some rights to our technologies or product candidates, or grant licenses on terms that are not favorable to us.

If our contract research organizations assisting in our clinical trials fail to appropriately manage our clinical trial, the trial could be delayed or could fail.

We rely on contract research organizations to assist us in managing and monitoring our clinical trial. We have entered into agreements with Amarex, LLC, Orion Clinical Services, Ltd., Icon Laboratories, Inc., Patheon Inc., Fisher Scientific International Inc. and Advanced Clinical Trials, Inc., among others, to provide clinical research services. The FDA may inspect some of our clinical investigational sites, our contract research organizations' records and our facility and files to determine if the clinical trial is conducted according to good clinical practices. If the FDA determines that the trial is not in compliance with good clinical practices, we may be required to repeat the clinical trial. If our contract research organizations fail to perform under our agreements with them, we may face delays in completing our clinical trial or failure of our clinical program.

If we fail to obtain FDA approvals for any future products that we develop, acquire or license, we will be unable to commercialize our drug candidates.

We do not have a drug approved for sale in the U.S. or any foreign market. We must obtain approval from the FDA in order to sell our drug candidate in the U.S. and from foreign regulatory authorities in order to sell our drug candidate in other countries. We must successfully complete pivotal clinical trials and demonstrate manufacturing capability before we can file with the FDA for approval to sell our products. The FDA could require us to repeat clinical trials as part of the regulatory review process. Delays in obtaining or failure to obtain regulatory approvals may:

- delay or prevent the successful commercialization of our drug candidate;
- diminish our competitive advantage; and
- defer or decrease our receipt of revenues or royalties.

The regulatory review and approval process is lengthy, expensive and uncertain. Extensive pre-clinical and clinical data and supporting information must be submitted to the FDA for each indication to establish safety and effectiveness in order to secure FDA approval. A number of new drugs for certain indications, iseganan HCl for the prevention of oral mucositis included, have shown promising results in early clinical trials, but subsequently failed to establish sufficient safety and efficacy data to obtain necessary regulatory approvals. A number of companies have suffered significant setbacks in advanced clinical trials, even after promising results in earlier trials. We have limited experience in obtaining such approvals, and cannot be certain when, if ever, we will receive these regulatory approvals. If we are unable to demonstrate the safety and

Table of Contents

efficacy of our drug candidate, we will be unable to obtain the required regulatory approvals and we will be unable to commercialize the drug candidate and generate product revenue.

In addition to initial regulatory approval, our drug candidate will be subject to extensive and rigorous ongoing domestic and foreign government regulation. Any approvals, once obtained, may be withdrawn if compliance with regulatory requirements is not maintained or safety problems are identified. Failure to comply with these requirements may subject us to stringent penalties.

Development and commercialization of competitive products could reduce or prevent sales of any future products that we develop, acquire or license.

We may be unable to compete successfully if other companies develop and commercialize competitive products that are less expensive, more effective, have fewer side effects or are easier to administer than drug candidates which we develop, acquire or license. If we are unable to compete successfully with any future drug candidate, physicians may not recommend and patients may not buy our drug.

We are not aware of any products that compete with iseganan HCl for the prevention of VAP. However, pharmaceutical companies and biotechnology companies may develop products in the future that compete with iseganan HCl for the prevention of VAP. Many of these companies have substantially greater experience, financial resources and larger research and development staffs than we do. In addition, many of these companies, either alone or together with their collaborative partners, have significantly greater experience than we do in developing drugs, obtaining regulatory approvals and manufacturing and marketing products. We also compete with these organizations and other companies for in-licensing opportunities for future drug candidates, and for attracting scientific and management personnel.

If we are unable to adequately protect our intellectual property, we may be unable to sell our products or to compete effectively.

We rely on a combination of patents, trade secrets and contractual provisions to protect our intellectual property. If we fail to adequately protect our intellectual property, other companies or individuals may prevent us from selling our products or may develop competing products based on our technology. Our success depends in part on our ability to:

obtain patents;

protect trade secrets;

operate without infringing upon the proprietary rights of others; and

prevent others from infringing on our proprietary rights.

We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary rights are covered by valid and enforceable patents or are effectively maintained as trade secrets.

We expect to protect our proprietary position by filing U.S. and foreign patent applications related to our proprietary technology, inventions and improvements that are important to the development of our business. For example, we own or have rights to nine patents and six pending patent applications in the U.S. However, the patent position of biopharmaceutical companies involves complex legal and factual questions. We cannot predict the enforceability or scope of any issued patents or those that may issue in the future. Patents, if issued, may be challenged, invalidated or circumvented. Consequently, if any patents that we own or license from third parties do not provide sufficient protection, our competitive position would be weakened. Furthermore, others may independently develop similar technologies or duplicate any technology that we have developed. In addition, we may not be issued patents for our pending patent applications, those we may file in the future or those we may license from third parties.

In addition to patents, we rely on trade secrets and proprietary know-how. Our contract manufacturers perform the manufacturing processes covered by these trade secrets. Accordingly, our contract manufacturers

Table of Contents

and we must maintain confidentiality. We have confidentiality and proprietary information agreements with our contract manufacturers and with our employees. These agreements may not provide meaningful protection or adequate remedies for our technology in the event of unauthorized use or disclosure of confidential and proprietary information.

We may be subject to intellectual property litigation that could be costly and time-consuming.

The biotechnology and pharmaceutical industries have been characterized by extensive litigation regarding patents and other intellectual property rights. Although we are not currently a party to any lawsuits, third parties may assert infringement or other intellectual property claims against us. We may have to pay substantial damages, including treble damages for past infringement if it is ultimately determined that our products infringe a third party's proprietary rights. The defense and prosecution of intellectual property suits, U.S. Patent and Trademark Office interference proceedings and related legal and administrative proceedings in the U.S. and internationally are costly and time-consuming to pursue and their outcome is uncertain. If we become involved in any of these proceedings, we will incur substantial expense, and the efforts of our technical and management personnel will be significantly diverted. An adverse determination may result in the invalidation of our patents, subject us to significant liabilities or require us to seek licenses that may not be available from third parties on satisfactory terms, or at all. Our stock price could decline because of litigation or interference proceedings initiated or threatened against us.

If physicians and patients do not accept our products, we may be unable to generate significant revenue, if any.

Any future drug candidate that we develop, acquire or license may not gain market acceptance among physicians, patients and the medical community. If any future drug candidate fails to achieve market acceptance, we may be unable to successfully market and sell the product, which would limit our ability to generate revenue. The degree of market acceptance of any drug candidate depends on a number of factors, including:

demonstration of clinical efficacy and safety;

cost-effectiveness;

convenience and ease of administration;

potential advantage over alternative treatment methods; and

marketing and distribution support.

Physicians will not recommend our products until such time as clinical data or other factors demonstrate the safety and efficacy of our drugs as compared to other treatments. In practice, competitors may be more effective in marketing their drugs. Even if the clinical safety and efficacy of our product is established, physicians may elect not to recommend its use. For example, physicians may be reluctant to prescribe widespread use of our product because of concern about developing bacterial strains that are resistant to our drugs, or because of the cost of our drug.

The failure to recruit and retain key personnel may delay our ability to execute our business plan.

We are highly dependent on our management and technical staff. Competition for personnel is intense. If we lose the services of any of our senior management or technical staff, we may be unable to successfully complete our planned clinical trial for VAP. In particular, the loss of the services of Henry J. Fuchs, our President and Chief Executive Officer, or Steven Ketchum, our Vice President, Regulatory Affairs, could significantly impede our research and development efforts, our relations with potential collaborators and completion of our planned clinical trial for VAP. We do not have employment agreements with Mr. Fuchs or Mr. Ketchum. We do not maintain key person life insurance and do not have employment agreements with our other members of management and technical staff. In October 2002, we completed a restructuring that included a reduction in force of approximately 70% of our workforce. Since then, we have further reduced our

Table of Contents

staff, and as of June 30, 2003, we had nine full-time employees. In order to pursue any future product development, marketing and commercialization, we will need to hire additional qualified scientific personnel to perform research and development and personnel with expertise in clinical testing, government regulation, manufacturing, marketing and finance. We may not be able to attract and retain personnel on acceptable terms given the competition for such personnel among biotechnology, pharmaceutical and other companies.

In addition, we rely on consultants to assist us in formulating our research and clinical development strategy. All of these consultants are employed by other entities. They may have commitments to, or relationships with, other entities that may limit their availability to us. The loss of the services of these personnel may delay our research and development efforts.

Directors, executive officers, principal stockholders and affiliated entities beneficially own approximately 58% of our capital stock and may be able to exert control over our activities.

As of June 30, 2003, our directors, executive officers, principal stockholders and affiliated entities beneficially own, in the aggregate, approximately 58% of our outstanding common stock. These stockholders, if acting together, will be able to control the outcome of any matter requiring approval by our stockholders, including the election of directors and the approval of mergers or other business combination transactions.

Anti-takeover provisions in our charter documents and under Delaware law may make an acquisition of us more difficult.

Provisions of our certificate of incorporation and bylaws could make it more difficult for a third party to acquire us, even if doing so would be beneficial to our stockholders. These provisions:

provide for a classified board of directors of which approximately one third of the directors will be elected each year;

allow the authorized number of directors to be changed only by resolution of the board of directors;

require that stockholder actions must be effected at a duly called stockholder meeting and prohibit stockholder action by written consent;

establish advance notice requirements for nominations to the board of directors or for proposals that can be acted on at stockholder meetings; and

limit who may call stockholder meetings.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may prohibit large stockholders from consummating a merger with, or acquisition of us. These provisions may prevent a merger or acquisition that would be attractive to stockholders and could limit the price that investors would be willing to pay in the future for our common stock.

If we are unable to maintain our Nasdaq National Market listing, the liquidity of our common stock would be seriously impaired and we would become subject to various statutory requirements and contractual provisions, which would likely harm our business.

On November 12, 2002, we received a letter from Nasdaq advising us that our common stock had not met Nasdaq's minimum bid price requirement for 30 consecutive trading days and that, if we were unable to demonstrate compliance with this requirement during the 90 calendar days ending on February 10, 2003, our common stock may be subject to delisting from the Nasdaq National Market. On March 19, 2003, we received an additional letter from Nasdaq advising us that our grace period for regaining compliance had been extended in accordance with Nasdaq's new rules, until May 12, 2003. On April 10, 2003, we effected a 1-for-12 reverse stock split to regain compliance with this listing requirement and, on May 16, 2003, we received a letter from Nasdaq stating that we had regained compliance and the matter was closed. However, we cannot assure that the stock split will be sufficient to maintain our stock price on a sustainable basis.

Table of Contents

The Nasdaq National Market further requires maintenance of a minimum market value of publicly held shares of \$5 million. Publicly held shares are defined as total shares outstanding less any shares held by officers, directors or beneficial owners of 10% or more of our outstanding shares of common stock. We cannot assure that we will be able to comply with these requirements.

The Nasdaq National Market also requires maintenance of minimum stockholders' equity of \$10 million. On May 1, 2003, we raised an additional \$3.5 million in equity financing before issuance costs. However, as we expend capital resources on our clinical trial, it is likely that our stockholders' equity will fall below the \$10 million minimum during 2003 if we do not raise additional funding.

If we are unable to meet the Nasdaq National Market requirements, at the discretion of Nasdaq, our common stock may be transferred to the Nasdaq SmallCap Market. Transferring to the Nasdaq SmallCap Market would provide us with an additional grace period to satisfy the minimum bid price requirement provided that we meet the Nasdaq SmallCap Market's other listing requirements, including the maintenance of stockholders' equity of at least \$5 million. In such event we would still be required to satisfy various listing maintenance standards for our common stock to be quoted on the Nasdaq SmallCap Market, including the minimum bid price requirement after expiration of any grace periods. If we fail to meet such standards, our common stock would likely be delisted from the Nasdaq SmallCap Market and it would trade on the over-the-counter bulletin board, commonly referred to as the "pink sheets". Such alternatives are generally considered as less efficient markets and would seriously impair the liquidity of our common stock and limit our potential to raise future capital through the sale of our common stock, which could materially harm our business.

If we are delisted from the Nasdaq National Market, we will face a variety of legal and other consequences that will likely negatively affect our business including, without limitation, the following:

we may lose our exemption from the provisions of Section 2115 of the California Corporations Code, which imposes aspects of California corporate law on certain non-California corporations operating within California. As a result, (i) our board of directors would no longer be classified and our stockholders would elect all of our directors at each annual meeting, (ii) our stockholders would be entitled to cumulative voting, and (iii) we would be subject to more stringent stockholder approval requirements and more stockholder-favorable dissenters' rights in connection with certain strategic transactions;

the state securities law exemptions available to us would be more limited and, as a result, future issuances of our securities may require time-consuming and costly registration statements and qualifications;

due to the application of different securities law exemptions and provisions, we may be required to amend our stock option and stock purchase plans and comply with time-consuming and costly administrative procedures;

the exercise price on the warrants issued in conjunction with the issuance of Series A Preferred Stock would be reduced by 50%; and

we may lose current or potential investors.

We may become subject to the SEC's penny stock rules, which may decrease the liquidity of our common stock and negatively impact the ability of purchasers of our common stock to sell our common stock in the secondary market.

SEC rules place restrictions on the ability of brokers or dealers to sell securities that are defined as "penny stocks", which include securities priced under five dollars, unless an exception to the penny stock rules applies. We are not currently subject to the penny stock rules because our common stock currently qualifies for two separate exceptions to the SEC's penny stock rules. The first exception for which we qualify renders the penny stock rules inapplicable if our securities are traded on Nasdaq. As discussed in the immediately preceding risk factor, our common stock is currently traded on the Nasdaq, but we may be delisted from the Nasdaq if we do not continue to meet the Nasdaq's listing requirements. In addition, the penny stock rules do not apply to securities of companies that have been in continuous operation for at least three years and have

Table of Contents

net tangible assets (total assets less intangible assets minus liabilities, based on audited financial statements) in excess of \$2.0 million. We have been in continuous operation for more than three years, and, based on audited financial statements as of December 31, 2002, we had net tangible assets of approximately \$15.5 million. Therefore, our common stock also qualifies for this exception to the penny stock rules. However, as we expend capital resources on our clinical trial, our net tangible assets will continue to decrease and we may not be able to continue to qualify for this exemption, unless we raise additional funding.

If we were to become subject to the SEC's penny stock rules, brokers or dealers would generally be required to provide a purchaser of our common stock with a disclosure document stating, among other things:

that penny stocks are risky and informing the customer of his or her right to pricing information relating to our common stock and to information regarding the compensation to be received by the salesperson and the brokerage firm for effecting a trade in our common stock;

that the broker must send its customer a written statement for the customer to sign that accurately describes the customer's financial situation, investment experience, and investment goals, and that contains a statement as to why the brokerage firm decided penny stocks are a suitable investment for its customer; and

the purchaser's possible legal remedies in the event our common stock is sold to the purchaser in violation of the penny stock rules.

If we were to become subject to the SEC's penny stock rules, the restrictions noted above may make it less likely that brokers or dealers would effect transactions in our common stock and therefore may decrease the liquidity of our common stock and the ability of purchasers of our common stock to sell our common stock in the secondary market.

Our stock price may be volatile, and the value of your investment may decline.

The market prices for securities of biotechnology companies in general have been highly volatile and our stock may be subject to volatility. After accounting for the effect of our 1-for-12 reverse stock split on April 10, 2003, during 2002 our closing stock prices ranged from a low of \$3.24 to a high of \$57.60, and ranged from a low of \$1.71 to a high of \$5.73 during the six-month period ended June 30, 2003. The following factors, in addition to the other risk factors described in this section, may have a significant impact on the market price of our common stock:

announcements regarding strategic alternatives, including a merger or sale of the company or acquisition or license of products or product candidates;

publicity regarding actual or perceived adverse events in our clinical trial or relating to products under development by us or our competitors;

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

developments concerning proprietary rights;

regulatory developments in the United States or foreign countries;

litigation;

significant short selling in our common stock;

economic and other external factors; and

period-to-period fluctuations in our financial results and changes in analysts' recommendations.

Table of Contents

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference, contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Any statements about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and may be forward-looking. These statements are often, but not always, made through the use of words or phrases like anticipate, estimate, plans, projects, continuing, ongoing, expects, management believe, believe, we intend and similar words or phrases. Accordingly, these statements involve estimates, assumptions and uncertainties, which could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed in this prospectus or incorporated by reference.

Because the factors discussed in this prospectus or incorporated by reference could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements made by us or on behalf of the company, you should not place undue reliance on any such forward-looking statements. Further, any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement or statements to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for us to predict which will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

USE OF PROCEEDS

We will not receive any proceeds from the resale of the shares of common stock offered by the selling stockholders.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a resale registration statement on Form S-3 to register the common stock offered by this prospectus. However, this prospectus does not contain all of the information contained in the registration statement and the exhibits and schedules to the registration statement. We strongly encourage you to carefully read the registration statement and the exhibits and schedules to the registration statement.

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference rooms in Washington, D.C., New York, NY and Chicago, IL. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference rooms. Our SEC filings are also available at the SEC's Web site at <http://www.sec.gov>.

We incorporate by reference the documents listed below and any future filings we will make with the SEC under Section 13 (a), 13(c), 14 or 15 (d) of the Securities Exchange Act:

our Annual Report on Form 10-K (File No. 000-29993) for the year ended December 31, 2002, filed with the SEC on March 31, 2003 and amended by Form 10-K/A filed with the SEC on June 25, 2003;

our Current Reports on Form 8-K (File No. 000-29993), filed with the SEC on April 30, 2003 and September 23, 2003;

the information specifically incorporated by reference into our Annual Report on Form 10-K for the fiscal year ended December 31, 2002 from our definitive proxy statement on Schedule 14A, filed with the SEC on April 30, 2003;

our Quarterly Report on Form 10-Q (File No. 000-29993) for the quarter ended March 31, 2003, filed with the SEC on May 14, 2003 and amended by Form 10-Q/A filed with the SEC on June 25, 2003;

our Quarterly Report on Form 10-Q (File No. 000-29993) for the quarter ended June 30, 2003, filed with the SEC on August 13, 2003; and

the description of our common stock contained in our registration statement on Form 8-A (relating to File No. 333-95461), filed with the SEC on March 17, 2000.

We will furnish without charge to you, upon written or oral request, a copy of any or all of the documents described above, except for exhibits, unless the exhibits are specifically incorporated by reference into the documents. You should direct your requests to the following address or telephone number:

IntraBiotics Pharmaceuticals, Inc.

2483 East Bayshore Road, Suite 100
Palo Alto, CA 94303
Attn: Investor Relations
(650) 526-6800

WE HAVE AUTHORIZED NO ONE TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATIONS NOT CONTAINED IN THIS PROSPECTUS. YOU SHOULD RELY ONLY ON THE INFORMATION PROVIDED IN THIS PROSPECTUS OR INCORPORATED BY REFERENCE THEREIN. YOU MUST NOT RELY ON ANY UNAUTHORIZED INFORMATION.

THIS PROSPECTUS DOES NOT OFFER TO SELL OR BUY ANY SHARES OF COMMON STOCK IN ANY JURISDICTION WHERE IT IS UNLAWFUL. YOU SHOULD NOT ASSUME THAT THE INFORMATION IN THIS PROSPECTUS IS ACCURATE AS OF ANY DATE OTHER THAN THE DATE ON THE FRONT OF THIS DOCUMENT.

Table of Contents**SELLING STOCKHOLDERS**

We issued 350 shares of Convertible Series A preferred stock and warrants to purchase up to 920,699 shares of our common stock in a private placement transaction. Pursuant to the terms of the private placement transaction the 350 shares of Series A Preferred Stock, as of September 16, 2003, are convertible into 1,841,404 shares of common stock. We are registering for resale 2,762,103 shares (the total of the shares of common stock issuable upon exercise of the warrants and the shares of common stock issuable upon conversion of the Series A preferred stock) on behalf of the selling stockholders named in the table below. The term "selling stockholders" includes the stockholders listed below and their transferees, pledgees, donees or other successors. We agreed to register all of the above referenced shares of common stock for resale in connection with the terms and conditions of the private placement transaction.

The following table sets forth:

the name of the selling stockholders;

the number and percent of shares of our common stock that the selling stockholders beneficially owned prior to the offering for resale of any of the shares of our common stock being registered by the registration statement of which this prospectus is a part;

the number of shares of our common stock that may be offered for resale for the account of the selling stockholders pursuant to this prospectus; and

the number and percent of shares of our common stock to be held by the selling stockholders after the offering of the resale shares (assuming all of the resale shares are sold by the selling stockholders).

This information is based upon information provided by each respective selling stockholder, schedules 13G and other public documents filed with the SEC, and assumes the sale of all of the shares issuable upon exercise of the warrants and all of the shares issuable upon conversion of the Series A preferred stock by the selling stockholders. The applicable percentages of ownership are based on an aggregate of 3,284,503 shares of common stock issued and outstanding as of September 16, 2003, plus the shares of common stock issuable upon exercise of the warrants and the shares of common stock issuable upon conversion of the Series A preferred stock beneficially held by the respective selling stockholder.

Selling Stockholders	Shares Beneficially Owned Prior to Offering		Number of Shares Being Offered	Shares Beneficially Owned After Offering	
	Number	Percent		Number	Percent
Gerald S. Frey 900 Old Gulph Road Bryn Mawr, PA 19010	422,293(1)	12.1%	197,293	225,000	6.5%
Tang Capital Partners, L.P. c/o Tang Capital Management, LLC 4401 Eastgate Mall San Diego, CA 92121	1,473,041(2)	32.3%	1,278,462	194,579	4.3%
Baker Bros. Investments, L.P. 655 Madison Avenue 19th Floor New York, NY 10021	1,142,744(3)	26.1%	39,457	53,689	1.2%
Baker Bros. Investments II, L.P. 655 Madison Avenue 19th Floor New York, NY 10021	1,142,744(4)	26.1%	47,349	53,689	1.2%
Baker/Tisch Investments, L.P. 655 Madison Avenue, 19th Floor New York, NY 10021	1,142,744(5)	26.1%	63,133	53,689	1.2%
Baker Biotech Fund I, L.P. 655 Madison Avenue 19th Floor New York, NY 10021	1,142,744(6)	26.1%	441,937	53,689	1.2%

Table of Contents

Selling Stockholders	Shares Beneficially Owned Prior to Offering		Number of Shares Being Offered	Shares Beneficially Owned After Offering	
	Number	Percent		Number	Percent
Baker Biotech Fund II, L.P. 655 Madison Avenue 19th Floor New York, NY 10021	1,142,744(7)	26.1%	441,937	53,689	1.2%
Baker Biotech Fund II (Z), L.P. 655 Madison Avenue 19th Floor New York, NY 10021	1,142,744(8)	26.1%	55,242	53,689	1.2%
New England Partners Capital, L.P. One Boston Place, Suite 3630 Boston, MA 02108	223,334(9)	6.4%	197,293	26,041	*
Total Number of Shares Being Offered			2,762,103		

* Less than 1%

- (1) Includes 225,000 shares held by Delaware Management Company. Mr. Frey may be deemed to beneficially own the 225,000 shares held by Delaware Management Company, for which Mr. Frey acts as Managing Director. In addition, includes 131,529 shares issuable upon conversion of the Series A preferred stock and 65,764 shares issuable upon exercise of a warrant.
- (2) Includes 194,579 shares held by Tang Capital Partners, L.P. In addition, includes 852,308 shares issuable upon conversion of the Series A preferred stock and 426,154 shares issuable upon exercise of a warrant.
- (3) Includes: (a) 54,031 shares held by Baker Bros. Investments II, L.P.; (b) 67,093 shares held by Baker/ Tisch Investments, L.P.; (c) 461,872 shares held by Baker Biotech Fund I, L.P.; (d) 465,049 shares held by Baker Biotech Fund II, L.P.; and (e) 55,242 shares held by Baker Biotech Fund II (Z), L.P. In addition, includes 26,305 shares issuable upon conversion of the Series A preferred stock and 13,152 shares issuable upon exercise of a warrant.
- (4) Includes: (a) 39,457 shares held by Baker Bros. Investments, L.P.; (b) 67,093 shares held by Baker/ Tisch Investments, L.P.; (c) 461,872 shares held by Baker Biotech Fund I, L.P.; (d) 465,049 shares held by Baker Biotech Fund II, L.P.; and (e) 55,242 shares held by Baker Biotech Fund II (Z), L.P. In addition, includes 31,566 shares issuable upon conversion of the Series A preferred stock, 15,783 shares issuable upon exercise of a warrant and 6,682 shares held directly.
- (5) Includes: (a) 39,457 shares held by Baker Bros. Investments, L.P.; (b) 54,031 shares held by Baker Bros. Investments II, L.P.; (c) 461,872 shares held by Baker Biotech Fund I, L.P.; (d) 465,049 shares held by Baker Biotech Fund II, L.P.; and (e) 55,242 shares held by Baker Biotech Fund II (Z), L.P. In addition, includes 42,089 shares issuable upon conversion of the Series A preferred stock, 21,044 shares issuable upon exercise of a warrant and 3,960 shares held directly.
- (6) Includes: (a) 39,457 shares held by Baker Bros. Investments, L.P.; (b) 54,031 shares held by Baker Bros. Investments II, L.P.; (c) 67,093 shares held by Baker/ Tisch Investments, L.P.; (d) 465,049 shares held by Baker Biotech Fund II, L.P.; and (e) 55,242 shares held by Baker Biotech Fund II (Z), L.P. In addition, includes 294,625 shares issuable upon conversion of the Series A preferred stock, 147,312 shares issuable upon exercise of a warrant and 19,935 shares held directly.
- (7) Includes: (a) 39,457 shares held by Baker Bros. Investments, L.P.; (b) 54,031 shares held by Baker Bros. Investments II, L.P.; (c) 67,093 shares held by Baker/ Tisch Investments, L.P.; (d) 461,872 shares held by Baker Biotech Fund I, L.P.; and (e) 55,242 shares held by Baker Biotech Fund II (Z), L.P. In addition, includes 294,625 shares issuable upon conversion of the Series A preferred stock, 147,312 shares issuable upon exercise of a warrant and 23,112 shares held directly.
- (8) Includes: (a) 39,457 shares held by Baker Bros. Investments, L.P.; (b) 54,031 shares held by Baker Bros. Investments II, L.P.; (c) 67,093 shares held by Baker/ Tisch Investments, L.P.; (d) 461,872 shares held by Baker Biotech Fund I, L.P.; and (e) 465,049 shares held by Baker Biotech Fund II, L.P. In addition,

Table of Contents

includes 36,828 shares issuable upon conversion of the Series A preferred stock and 18,414 shares issuable upon exercise of a warrant.

- (9) Includes 26,041 shares held by New England Partners Capital, L.P. In addition, includes 131,529 shares issuable upon conversion of the Series A preferred stock and 65,764 shares issuable upon exercise of a warrant.

Except for Kevin C. Tang, none of the selling stockholders nor any of their affiliates, officers, directors or principal equity holders has held any position or office or has had any material relationship with us within the past three years. Pursuant to the terms of the private placement transaction completed on May 1, 2003, Kevin C. Tang was elected as a member of our Board of Directors. The selling stockholders purchased the shares on May 1, 2003 in a private placement transaction exempt from the registration requirements of the Securities Act. These shares were restricted securities under the Securities Act prior to this registration. Information concerning the selling stockholders may change from time to time and any changed information will be set forth in supplements to this prospectus if and when necessary.

Table of Contents

PLAN OF DISTRIBUTION

The selling stockholders and their successors, including their transferees, pledgees or donees or their successors, may sell the shares directly to purchasers or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions from the selling stockholders or the purchasers. These discounts, concessions or commissions as to any particular underwriter, broker-dealer or agent may be in excess of those customary in the types of transactions involved.

The shares may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market prices, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions:

on any national securities exchange or U.S. inter-dealer system of a registered national securities association on which our common stock may be listed or quoted at the time of sale, including the Nasdaq National Market;

in the over-the-counter market;

in transactions otherwise than on these exchanges or systems or in the over-the-counter market;

through the writing of options, whether the options are listed on an options exchange or otherwise; or

through the settlement of short sales.

In connection with the sale of the shares, or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the shares in the course of hedging the positions they assume. The selling stockholders may also sell the shares short and deliver these securities to close out their short positions, or loan or pledge the shares to broker-dealers that in turn may sell these securities.

The aggregate proceeds to the selling stockholders from the sale of the shares offered by them will be the purchase price of the shares less discounts and commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of shares to be made directly or through agents. We will not receive any of the proceeds from this offering.

In order to comply with the securities laws of some states, if applicable, the shares may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the shares may not be sold unless they have been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the shares may be underwriters within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are underwriters within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

In addition, any shares covered by this prospectus that qualify for sale pursuant to Rule 144 of the Securities Act may be sold under Rule 144 rather than pursuant to this prospectus. A selling stockholder may transfer, devise or gift these securities by other means not described in this prospectus.

To the extent required, the specific shares to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agent, dealer or underwriter, and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement of which this prospectus is a part.

We entered into preferred stock and warrant purchase agreements with the selling stockholders which require us to register their shares under applicable federal and state securities laws under specific circum-

Table of Contents

stances and at specific times. We have agreed to indemnify the selling stockholders (including their affiliates, trustees, officers, investment advisers and controlling persons) against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

If required, we will distribute a supplement to this prospectus to describe material changes in the terms of the offering.

We will pay all costs and expenses associated with the registration of the resale shares. These expenses include the SEC's filing fees and fees under state securities or blue sky laws. The selling stockholders will pay all underwriting discounts, commissions, transfer taxes and other expenses associated with any sale of these shares by them.

Table of Contents

LEGAL MATTERS

Cooley Godward LLP will pass upon the validity of the issuance of the common stock offered by this prospectus.

EXPERTS

Ernst & Young LLP, independent auditors, have audited our financial statements included in our Annual Report on Form 10-K/ A for the year ended December 31, 2002, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

Table of Contents

We have not authorized any dealer, salesperson or other person to give any information or represent anything not contained in this prospectus. You should rely only on the information provided or incorporated by reference in this prospectus. You should not rely on any unauthorized information. This prospectus does not offer to sell or buy any shares in any jurisdiction, in which it is unlawful. The information in this prospectus is current as of the date on the cover.

2,762,103 Shares

Common Stock

IntraBiotics Pharmaceuticals, Inc.

PROSPECTUS

October 8, 2003
