

VICURON PHARMACEUTICALS INC
 Form 424B5
 July 11, 2003

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

The information in this prospectus supplement is not complete and may be changed. The registration statement relating to these securities has been filed with the Securities and Exchange Commission and has become effective. This prospectus supplement and the accompanying prospectus are not an offer to sell these securities and we are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Filed Pursuant to Rule 424(b)(5)
 Registration No. 333-105921

PROSPECTUS SUPPLEMENT (Subject to Completion)
 (To Prospectus dated June 23, 2003)

Issued July 11, 2003

5,000,000 Shares

COMMON STOCK

Vicuron Pharmaceuticals Inc. is offering 5,000,000 shares of its common stock.

Our common stock is quoted on the Nasdaq National Market and the Nuovo Mercato stock exchange in Italy under the symbol "MICU." On July 10, 2003, the reported last sale price of our common stock on the Nasdaq National Market was \$14.20 per share.

Investing in our common stock involves risks. See "Risk Factors" beginning on page S-11 of this prospectus supplement.

PRICE \$ A SHARE

	Price to Public	Underwriting Discounts and Commissions	Proceeds to Company
Per Share	\$	\$	\$
Total	\$	\$	\$

Vicuron has granted the underwriters the right to purchase up to an additional 650,000 shares of common stock to cover over-allotments.

The Securities and Exchange Commission and state securities regulators have not approved or disapproved these securities, or determined if this prospectus supplement and the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Morgan Stanley & Co. Incorporated expects to deliver the shares to purchasers on _____, 2003.

MORGAN STANLEY
PACIFIC GROWTH EQUITIES, LLC

*LAZARD**HARRIS NESBITT GERARD*

, 2003

TABLE OF CONTENTS
PROSPECTUS SUPPLEMENT

	Page
Prospectus Supplement Summary	S-3
Risk Factors	S-11
Special Note Regarding Forward-Looking Statements	S-29
Use of Proceeds	S-30
Market Price and Dividends on our Common Stock	S-30
Capitalization	S-31
Dilution	S-32
Underwriting	S-33
Regulation G Disclosure	S-35
Legal Matters	S-40
Notice to Residents of Italy	S-40
Where You Can Find More Information	S-41

PROSPECTUS

	Page
About This Prospectus	ii
Vicuron Pharmaceuticals Inc.	1
Risk Factors	2
Special Note Regarding Forward-Looking Statements	2
Use of Proceeds	2
Unaudited Pro Forma Condensed Consolidated Financial Information	3
Plan of Distribution	9
Legal Matters	11
Experts	11
Where You Can Find More Information	11
Incorporation of Certain Documents by Reference	12

In this prospectus supplement and the accompanying prospectus, unless otherwise indicated, the terms "Vicuron," "we," "us" and "our" refer to Vicuron Pharmaceuticals Inc. and its consolidated subsidiaries.

This document is in two parts. The first part is this prospectus supplement, which describes the terms of this offering of our common stock and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into the accompanying prospectus. The second part is the accompanying prospectus, which gives more general information about the shares of common stock we may offer from time to time under our shelf registration statement. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or any document incorporated by reference therein, on the other hand, the information in this prospectus supplement shall control.

You should rely only on the information contained in this prospectus supplement and contained, or incorporated by reference, in the accompanying prospectus. We have not authorized and none of the underwriters have authorized, anyone to provide you with information that is different. We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus supplement and contained, or incorporated by reference, in the accompanying prospectus is accurate only as of the respective dates thereof, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus, or of any sale of the common stock. It is important for you to read and consider all information contained in this prospectus supplement and the accompanying prospectus, including the documents incorporated by reference therein, in making your investment decision.

You should also read and consider the information in the documents we have referred you to in "Where You Can Find More Information" below.

S-ii

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about us and this offering. This summary is not complete and does not contain all the information you should consider before investing in our common stock. You should carefully read this entire prospectus supplement and the accompanying prospectus, including the "Risk Factors" section contained in this prospectus supplement, and the other documents we refer to and incorporate by reference before making an investment decision. We incorporate by reference important business and financial information into the accompanying prospectus.

Overview

We are a transatlantic biopharmaceutical company focused on the discovery, development, manufacturing and marketing of pharmaceutical products for the treatment of seriously ill patients, primarily in the hospital setting. We focus on seeking to develop antibiotics and antifungals that may have competitive advantages over existing products, such as greater potency, improved effectiveness against difficult to treat strains and reduced toxicity. Because the development process for anti-infective products is relatively efficient and well-defined, we believe the costs and time required to bring new anti-infective products to market can be significantly less than the time required to bring products to market in other major therapeutic categories. We recently filed a new drug application, or NDA, for our lead antifungal product candidate, anidulafungin, with the U.S. Food and Drug Administration, or FDA, which has accepted the application for review. Anidulafungin belongs to the first new class of antifungal agents, called echinocandins, introduced in more than 40 years.

We recently merged with Biosearch Italia S.p.A., a publicly listed company in Italy. Biosearch has used natural product sourcing for the discovery of novel anti-infective drugs and pursues their development and production with a primary commercial emphasis on Europe. We expect that the merger will enhance our capabilities with respect to discovery, pre-clinical and clinical development, and manufacturing, as well as our European market presence and effectiveness. The combined company will have a greater presence in two of the three major pharmaceutical markets (North America and Europe) as well as an enhanced product portfolio for collaborations in Asia. We had previously licensed the North American rights to our lead antibiotic product candidate, dalbavancin, from Biosearch, and by acquiring the global rights we will eliminate potential royalties and manufacturing fees in North America, acquire the full potential of dalbavancin in Europe and the rest of the world and enhance our ability to commercialize our lead antifungal drug, anidulafungin, in both North America and Europe. As a result, we believe all of these benefits will increase our margin and profitability prospects for dalbavancin and anidulafungin upon regulatory approval in North America and Europe. We also believe that we will be able to file for European regulatory approval of dalbavancin and anidulafungin with only a modest increase in the clinical development expenses already planned for our North American filings. On June 30, 2003, we contributed the former assets, liabilities and business of Biosearch to our wholly-owned subsidiary in Italy, Vicuron Pharmaceuticals Italy S.r.l.

We have a two-fold approach to product discovery, development and marketing. Our primary strategy is to focus on the discovery and development of proprietary products, concentrating on injectable antibiotic and antifungal products for the hospital market. We expect to market these products to hospitals in North America and selected European markets through our to be developed direct sales force, which we believe we can accomplish through a targeted and cost-effective sales and marketing infrastructure. Our product candidates target disease indications that represent markets where there is demand for new therapies.

Our secondary strategy is to collaborate with major pharmaceutical companies to discover and develop orally administered antibiotic and antifungal products for the community market. Major pharmaceutical companies are generally better suited to market these products, as these products require substantial expenditures for sales and marketing to reach their full market potential. Under our

S-3

typical collaboration agreements, we are responsible for discovering the compounds and our collaborators are responsible for developing and marketing them. We expect to receive a combination of research funding, milestone payments and equity investments from our collaborators, as well as royalty fees if any products are commercialized.

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

Our discovery platform combines our proprietary expertise in the critical areas of functional genomics, mechanism-based rational drug design, high-throughput screening of our diversified library of microbial extracts, combinatorial chemistry, lead optimization and medicinal chemistry. We intend to leverage our technology platform to discover and supply lead compounds both for internal development and commercialization, in the case of hospital products, and for our pharmaceutical collaborations, in the case of community products.

Our Proprietary Products

Anidulafungin

Our lead antifungal product candidate, anidulafungin, is intended for the intravenous treatment of serious systemic fungal infections. Anidulafungin has potent activity against the principal yeasts, such as *Candida*, and molds, such as *Aspergillus*, that cause serious fungal infections. In addition, anidulafungin has fungicidal activity, which means that it kills the fungus. This is in contrast to many widely-used antifungal agents which only inhibit fungal growth. Because of anidulafungin's novel mechanism of action, it is active against strains resistant to other agents, such as fluconazole. We believe anidulafungin will have competitive advantages over existing therapies because it combines potent fungicidal activity with a good resistance profile to date. In early 2003, we completed a Phase III clinical trial with anidulafungin for the treatment of esophageal candidiasis. Based in part on the results of that trial, in April 2003 we filed a NDA for anidulafungin for the treatment of esophageal candidiasis, which was accepted for review by the FDA in June 2003. We have also completed a Phase II clinical trial with anidulafungin for the treatment of invasive candidiasis/candidemia and based on positive results from this trial, recently began a Phase III clinical trial in this indication. We recently completed enrollment in a Phase III clinical trial to evaluate anidulafungin in combination with liposomal amphotericin for the potential treatment of invasive aspergillosis.

Dalbavancin

Our lead antibiotic product candidate, dalbavancin, is a next-generation antibiotic belonging to the same class as vancomycin, the most widely-used injectable antibiotic for Staphylococcal infections. Dalbavancin is intended for the treatment of serious systemic infections, particularly those caused by *Staphylococci*. Dalbavancin is more potent than vancomycin, in particular against methicillin-resistant *Staphylococci*, a common and difficult-to-treat bacteria. Dalbavancin has bactericidal activity, which means that it kills the bacteria rather than merely inhibiting their growth, as shown in both the laboratory and in infected animals. Because of its unique pharmacokinetic properties and the tolerability profile seen to date even at high doses, dalbavancin has the potential to be dosed weekly, which may be a significant competitive advantage over other products. We have successfully completed a Phase II clinical trial with dalbavancin for the treatment of skin and soft tissue infections and in December 2002 announced the start of Phase III clinical trials for both complicated and uncomplicated skin and soft tissue infections. We expect to complete these trials in the first half of 2004, and plan to file an NDA for dalbavancin in the second half of 2004. In the first half of 2002, we initiated a Phase II trial in catheter-related bloodstream infections, which we expect to complete in the second half of 2003.

Ramoplanin

Our third product candidate, ramoplanin, is a type of antibiotic called a lipopeptide. Ramoplanin selectively inhibits Gram-positive bacteria, including methicillin-resistant *Staphylococcus aureus* (MRSA)

S-4

and all types of vancomycin-resistant *enterococci* (VRE) and Clostridia, including *Clostridium difficile*. Ramoplanin does not show a propensity to select resistant mutants *in vitro* and does not have cross-resistance with known antibiotics. Genome Therapeutics, our licensee in North America, is developing ramoplanin, in an oral non-absorbable form, for the prevention of systemic infection in hospitalized patients with VRE in their gastrointestinal tract. Our licensee successfully completed Phase II trials with ramoplanin for the eradication of VRE in the gastrointestinal system and initiated a Phase III study for the reduction of VRE bloodstream infections in patients at risk in June 2000. Our licensee also recently initiated a Phase II dose response trial to evaluate the safety and efficacy of ramoplanin for the treatment of *Clostridium difficile*-associated diarrhea.

VIC-Acne

Our fourth product candidate, VIC-Acne, is a novel antibiotic which we are developing as a topical creme. VIC-Acne has a new mechanism of action and shows selective activity against *Propionibacterium acnes*, a bacteria associated with acne, including drug resistant strains, while it shows only modest activity against normal skin flora. As a result, it might have the potential to selectively eliminate the *Propionibacterium acnes* without significantly affecting the natural skin flora. We have recently completed a Phase I clinical trial with VIC-Acne which showed

that the drug was safe and well tolerated.

Research Collaborations

Our most advanced collaboration is with Pfizer Inc. and is aimed at discovering second and third generation oxazolidinones. The oxazolidinones represent the first new major class of antibacterial products to enter the market in over 30 years. In test tubes, they are active against a broad range of bacteria, including multidrug resistant *Staphylococci*, *Streptococci* and *Enterococci*. Pfizer received approval from the FDA, independent of us, for the first generation oxazolidinone called Zyvox. We have identified several structurally novel second generation oxazolidinone candidates, certain of which have either a broader spectrum of activity or improved potency as compared to Zyvox. Some of these compounds also show good activity in pre-clinical *in vivo* studies when administered orally. This collaboration began in April 1999 with Pharmacia Corporation, and continued when Pharmacia was acquired by Pfizer. In October 2000, Pfizer increased its research support payments to us by 30% and, in June 2002, we amended our agreement with Pfizer to extend the research term for an additional three years. Under the terms of the agreement with Pfizer, compounds that have been discovered during the collaboration with Pharmacia prior to its acquisition by Pfizer in April 2003 will be considered for development by Pfizer. In May 2003, we announced an agreement to continue this collaboration.

Our second collaboration is with Novartis Pharma AG and is designed to develop deformylase inhibitors as new antibacterial agents and to provide novel target-based screens. Deformylase is an essential enzyme in bacteria but not in human cells, and thus represents a good target for the discovery of selective inhibitors that can serve as broad spectrum antibacterial agents. We have identified several lead inhibitor molecules that are active against multidrug resistant strains, as well as respiratory pathogens such as *S. pneumoniae*, *H. influenzae* and *M. catarrhalis*. Several lead compounds have demonstrated activity in pre-clinical *in vivo* studies when administered orally, representing an example of *de novo* design of an active antibacterial agent. Our collaboration with Novartis began in April 1999. In January 2002, we received a fifth milestone payment as a result of our delivery of our fifth target-based screen, which we expect will be used in Novartis' high-throughput screening laboratory to identify new anti-infectives. In March 2002, we amended the original agreement in order to extend the research term an additional year and to provide that Novartis will make an additional payment upon our achievement of a new milestone. In February 2003, we amended the original agreement in order to extend the research term through March 31, 2005.

S-5

Our third collaboration is a program called "VITACHEM" and is designed to investigate the pharmaceutical and non-pharmaceutical utility of our collection of microbial chemicals in markets outside of the anti-infectives market. We offer two types of collaborations under the VITACHEM program: fee-for-service collaborations, under which our collaborators pay us research fees, plus milestone payments and royalties calculated as a percentage of net sales; and equal collaborations, based on cost-sharing and reward-sharing. To date, we have entered into three fee-for-service collaborations with Schering-Plough, Bayer AG and Menarini and two equal collaborations with Myriad Genetics Inc. on oncology, cardiovascular and viral targets, and Newron Pharmaceuticals S.p.A. on central nervous system targets.

Internal Discovery Research

In addition to our external research collaborations, we have internal research programs both in the United States and in Italy as a result of our recently completed merger. The objective of internal research is primarily to discover novel antimicrobials for hospital use for development by us. This effort combines our internal expertise in functional genomics-based target selection, novel assay development, mechanism-based rational drug design, combinatorial chemistry, high-throughput screening of our diversified library of microbial extracts and medicinal chemistry. We are currently investigating several *in vivo* active leads.

Our Strategy

Our objective is to be a leader in the discovery, development and marketing of pharmaceutical products for the treatment of bacterial and fungal infections in the hospital setting. We intend to achieve this goal through the implementation of four strategies:

Focus our discovery and development efforts on products to treat bacterial and fungal infections. We believe that anti-infective products have significant development advantages over products in other therapeutic categories. These advantages include lower costs and shorter development cycles. In addition, product candidates in this area have a greater probability of clinical success due to the higher predictive value of clinical trials in this area. Finally, there is a growing demand for new anti-infective products. We believe that this demand is driven primarily by the aging of the population, the growing number of seriously ill patients in hospitals and an increase in immunosuppression and fungal and bacterial resistance to existing therapies.

Target our resources on products that have potential utility in the hospital setting. We believe that our efforts are best focused on developing products that would be administered in a hospital setting. Because of the increased number of elderly patients and the severity of illnesses among patients in intensive care units, we believe that hospitals present an addressable market with significant unmet needs. This strategy will also allow us to use a relatively small sales force, thereby allowing us to reach the greatest number of patients while still remaining cost-effective.

Focus on products that have a competitive advantage over currently marketed drugs. We intend to focus our development efforts on products that we expect to have potential advantages over currently marketed drugs. This strategy reduces the time and expense we will need to effectively educate physicians about new types of treatments and will allow us to market our relative benefits directly against our competitors' products.

Pursue our two-fold approach to product development. We have a two-fold approach to product development and marketing. Our primary strategy is to internally develop anti-infective products with utility in a hospital setting and then to market these products to hospitals using our own focused sales force. For oral anti-infective products, which have utility in a broader community setting, we intend to collaborate in our development and marketing efforts with large pharmaceutical companies. This two-fold approach allows us to pursue, on a proprietary basis,

S-6

internal development and marketing of those products for which we feel the development and marketing requirements are manageable, such as injectable anti-infectives, and to out-license products, such as orally administered anti-infectives, that require greater marketing resources than we are willing to commit.

We were incorporated in Delaware as a wholly-owned subsidiary of Sepracor Inc. in 1995 and we have been operating as an independent company since 1996. In March 2003, we changed our name from Versicor Inc. to Vicuron Pharmaceuticals Inc. Our principal executive offices are located at 455 South Gulph Road, Suite 305, King of Prussia, Pennsylvania 19406. Our telephone number is (610) 205-2300. Our website is <http://www.vicuron.com>. The information found on our website and on websites linked to it are not incorporated into or a part of this prospectus supplement or the accompanying prospectus.

The name Vicuron and our logo are trademarks of Vicuron Pharmaceuticals Inc. Other trademarks and trade names appearing in this prospectus supplement and the accompanying prospectus are the property of their holders.

S-7

THE OFFERING

Common stock offered by us	5,000,000 shares
Common stock to be outstanding after this offering	52,801,265 shares
Use of proceeds	We intend to use the net proceeds of this offering primarily for clinical development of product candidates, as well as commercialization activities and general corporate purposes, including working capital and research expenses. See "Use of Proceeds."

Nasdaq National Market symbol

MICU

Information in the table above is based on 47,801,265 shares outstanding at the close of business on June 30, 2003, assumes that no options or warrants have been exercised since June 30, 2003, and does not include:

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

8,929,994 shares of common stock issuable upon the exercise of options outstanding on June 30, 2003 at a weighted average exercise price of \$9.576 per share;

258,791 shares available for future issuance under our 1995 Stock Option Plan, 131,723 shares available for future issuance under our 1997 Equity Incentive Plan, 1,051,021 shares available for future issuance under our 2000 Employee Stock Purchase Plan, 1,210,109 shares available for future issuance under our 2001 Stock Option Plan, and 17,700 shares available for future issuance under our 2002 Stock Option Plan, each as of June 30, 2003; and

195,072 shares of common stock issuable upon the exercise of warrants outstanding on June 30, 2003 at an exercise price of \$4.72 per share.

Unless otherwise indicated, all information in this prospectus supplement assumes no exercise of the underwriters' over-allotment option to purchase up to 650,000 additional shares of common stock.

S-8

SUMMARY CONSOLIDATED FINANCIAL DATA

We derived the summary consolidated financial data for the years ended December 31, 2000 through 2002 from our audited historical consolidated financial statements. The summary consolidated financial information as of and for the three months ended March 31, 2002 and 2003 has been derived from our unaudited historical consolidated financial statements. Operating results for the three months ended March 31, 2003 are not necessarily indicative of the results that may be expected for the entire year ending December 31, 2003. You should read this information in conjunction with our consolidated financial statements and the related notes contained in our annual, quarterly and other reports that we have filed with the Securities and Exchange Commission, or SEC, and incorporated by reference herein.

	Year Ended December 31,			Three Months Ended March 31,	
	2000	2001	2002	2002	2003
	(in thousands, except per share amounts)				
Statement of Operations Data:					
Revenues	\$ 5,871	\$ 6,428	\$ 6,341	\$ 1,812	\$ 1,758
Operating expenses:					
Research and development expense	15,531	32,612	48,189	9,997	12,723
General and administrative expense	8,891	9,600	8,184	2,501	2,082
Acquired in-process research and development					94,532
Total operating expenses	24,422	42,212	56,373	12,498	109,337
Loss from operations	(18,551)	(35,784)	(50,032)	(10,686)	(107,579)
Net interest income (expense)	3,230	2,997	1,236	345	449
Other	18	(60)		(62)	(70)
Net loss	(15,303)	(32,847)	(48,796)	(10,403)	(107,200)
Preferred stock deemed dividends and accretion to redemption value	(3,486)				
Net loss available to common stockholders	\$ (18,789)	\$ (32,847)	\$ (48,796)	\$ (10,403)	\$ (107,200)
Net loss per share, basic and diluted	\$ (1.95)	\$ (1.42)	\$ (1.91)	\$ (0.45)	\$ (3.15)

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

	Year Ended December 31,			Three Months Ended March 31,	
Shares used in computing net loss per share, basic and diluted	9,638	23,090	25,516	23,261	33,995
	As of March 31, 2003				
	(unaudited)				
	Actual		As Adjusted		
	(in thousands)				

Balance Sheet Data:

Cash, cash equivalents and marketable securities	\$	145,365	211,755
Working capital		116,280	182,670
Total assets		221,439	287,829
Term loan payable, less current portion		5,455	5,455
Accumulated deficit		(259,819)	(259,819)
Total stockholders' equity		177,847	244,237

The "as adjusted" column in the table above reflects the sale of 5,000,000 shares of common stock by us in this offering at an assumed offering price of \$14.20 per share, after deducting the underwriters' discounts and commissions and estimated offering expenses.

S-9

SUMMARY PRO FORMA CONDENSED CONSOLIDATED FINANCIAL DATA

The following summary pro forma condensed consolidated statement of operations data for the year ended December 31, 2002 and the three months ended March 31, 2003 give effect to our merger with Biosearch as if it had occurred on January 1, 2002. The following summary pro forma condensed consolidated financial data have been derived from, and should be read along with, the "Unaudited Pro Forma Condensed Consolidated Financial Information" and related notes beginning on page 3 of the prospectus accompanying this prospectus supplement and the other financial statements referred to therein.

The summary pro forma condensed consolidated financial data are not necessarily indicative of what our results of operations would have been had the merger occurred at the beginning of the applicable period.

	Year ended December 31, 2002				Three months ended March 31, 2003			
	Historical Vicuron	Historical Biosearch	Pro Forma Adjustments	Pro Forma	Historical Vicuron	Historical Biosearch	Pro Forma Adjustments	Pro Forma
	(in thousands, except per share amounts)							

Statement of Operations Data:

Revenues:

Collaborative research and development, contract services and government grants	\$	6,083	\$	4,033	\$	(770)	\$	9,346	\$	1,518	\$	578	\$	2,096
License fees and milestones		258		1,117		(177)		1,198		163		(46)		117

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

	Year ended December 31, 2002				Three months ended March 31, 2003			
Total revenues	6,341	5,150	(947)	10,544	1,518	741	(46)	2,213
Operating expenses:								
Research and development	48,189	11,542	(3,847)	57,188	11,179	2,639	988	15,132
General and administrative	8,184	5,475		13,659	1,723	4,497		6,220
Amortization of intangible assets			1,862	1,862			465	465
Total operating expenses	56,373	17,017	(681)	72,709	12,902	7,136	1,779	21,817
Loss from operations	(50,032)	(11,867)	(266)	(62,165)	(11,384)	(6,395)	(1,825)	(19,604)
Interest income (expense), net	1,236	2,893	(906)	3,223	173	688		861
Net loss	\$ (48,796)	\$ (8,974)	\$ (1,172)	\$ (58,942)	\$ (11,211)	\$ (5,707)	\$ (1,825)	\$ (18,743)
Net loss per share, basic and diluted	\$ (1.91)	\$ (0.74)		\$ (1.26)	\$ (0.42)	\$ (0.47)		\$ (0.39)
Shares used in computing net loss per share, basic and diluted	25,516	12,093		46,748	26,446	12,085		47,678

S-10

RISK FACTORS

Investing in our common stock involves a high degree of risk. In addition to the risks described below, you should carefully consider the other information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus before making a decision to purchase our common stock. The risks set forth below are not the only risks we face. If any of the following risks occur, our business, financial condition and results of operations could be harmed. As a result, the price of our common stock could decline, and you could lose all or part of your investment.

Risks Related to Our Business

Our ability to become profitable is heavily dependent upon our obtaining FDA approval of anidulafungin and dalbavancin, our two lead product candidates, and marketing them successfully.

In order to become profitable, we anticipate that we will need to obtain FDA marketing approval for anidulafungin and dalbavancin and then commercialize them successfully. In April 2003, we filed a NDA with the FDA seeking approval to market anidulafungin for the treatment of esophageal candidiasis. Dalbavancin is in Phase III clinical trials for the treatment of both complicated and uncomplicated skin and soft tissue infections and in a Phase II trial for catheter-related bloodstream infections. We expect to complete the Phase III trials in the first half of 2004 and file an NDA for dalbavancin in the second half of 2004. Factors that could negatively affect or delay our receipt of FDA approval of one or both of these drugs include:

a refusal by the FDA to approve our NDAs for these drugs or a request for additional information or data;

delays in completing clinical trials of dalbavancin; and

negative or inconclusive results of our ongoing clinical trials for dalbavancin.

Our success is also dependent upon successful commercialization of these two product candidates. Successful commercialization requires acceptance of anidulafungin and dalbavancin by hospital-based physicians, patients and other medical decision makers.

Our success will further depend upon our ability to protect our intellectual property and products. We rely on a combination of patent, trade secret and regulatory protections to protect us from competitors with similar technologies. With regard to anidulafungin, we rely on patents covering the compound, methods of production and methods of use to protect this product candidate from generic competition. With regard to dalbavancin, we rely primarily on regulatory provisions, such as the data exclusivity provisions under the Hatch-Waxman Act, as well as patents and know-how to protect this product candidate from generic competition. However, in each case there can be no assurances that we will obtain protection for any specified duration.

If we are unable to develop and successfully commercialize our product candidates, we might not generate significant revenues or become profitable.

To date, we have not commercialized any products or recognized any revenue from product sales and none of our product candidates are approved for sale. Successful commercialization of a new drug product requires significant investment in research and development, pre-clinical testing and clinical trials, regulatory approval, and sales and marketing activities. Most of our product candidates are in early stages of development, one is being reviewed by the FDA, and three are in clinical trials. Our efforts to commercialize our product candidates are subject to a variety of risks inherent in the

S-11

development of biopharmaceutical products based on new technologies. These risks include the following:

Pre-clinical testing and clinical trials are protracted, expensive and uncertain processes. It might take us and our collaborators several years to complete the testing process, and failure can occur at any stage of the process. Success in pre-clinical testing and early clinical trials does not ensure that later clinical trials will be successful.

Any or all of our new drug applications might be denied by the FDA and analogous foreign regulators.

Our product candidates, even if found to be safe and effective, might be difficult to develop into commercially viable drugs or to manufacture on a large scale or might be uneconomical to market commercially.

Third-party proprietary rights might preclude us from marketing our drugs.

Third-parties might market superior drugs or be more effective in marketing equivalent drugs.

Even if our product candidates are successfully developed and effectively marketed, the size of their potential market might change such that our sales revenue is less than initially contemplated. In any such case, we might never generate sufficient or sustainable revenues to enable us to become profitable.

We expect to incur losses for the foreseeable future and might never achieve profitability.

We have incurred net losses since our inception in 1995. As of March 31, 2003, our accumulated deficit was \$259.8 million (including a \$94.5 million write-off of acquired in-process research and development resulting from our merger with Biosearch). Our accumulated deficit results from our net losses of \$1.1 million in 1995; \$4.8 million in 1996; \$6.7 million in 1997 (including \$0.4 million in accretion of dividends

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

on preferred stock); \$15.1 million in 1998 (including \$2.5 million in accretion of dividends on preferred stock); \$67.4 million in 1999 (including deemed dividends of \$35.1 million and \$3.1 million in accretion of dividends on preferred stock); \$18.8 million in 2000 (including \$3.5 million in accretion of dividends on preferred stock); \$32.8 million in 2001; \$48.8 million in 2002; and \$107.2 million in the three months ended March 31, 2003 (including a \$94.5 million write-off of acquired in-process research and development resulting from our merger with Biosearch).

Our losses to date have resulted principally from:

research and development costs relating to the in-licensing and development of our product candidates, which represented approximately 82% of our aggregate operating expenses from our inception through March 31, 2003; and

general and administrative costs relating to our operations, which represented approximately 18% of our aggregate operating expenses from our inception through March 31, 2003.

On February 28, 2003 we merged with Biosearch, which also has incurred net losses since its inception in 1996. Biosearch's net losses were \$23.6 million for 2000, \$9.8 million for 2001, \$9.0 million for 2002 and \$5.4 million from January 1, 2003 through the acquisition date of February 28, 2003. At February 28, 2003, Biosearch had an accumulated deficit of \$54.8 million. Biosearch's losses resulted principally from:

research and development costs relating to the discovery, development and manufacture of Biosearch's product candidates, representing 79% of Biosearch's aggregate operating expenses from January 1, 2000 through February 28, 2003; and

general and administrative costs relating to Biosearch's operations, representing 25% of Biosearch's aggregate operating expenses from January 1, 2000 through February 28, 2003;

S-12

however, these expenses were partially offset by amortization of negative goodwill, less losses on trading securities in the net amount of (4%) of Biosearch's aggregate operating expenses from January 1, 2000 through February 28, 2003.

We expect to incur substantial and increasing losses for the foreseeable future as a result of increases in our research and development costs, including costs associated with conducting pre-clinical testing and clinical trials, and charges related to purchases of technology and other assets. We expect that our operating losses will fluctuate significantly from quarter to quarter as a result of the timing of receipt of regulatory approval of anidulafungin and our other product candidates, the success of our commercialization efforts following regulatory approval, increases or decreases in our research and development efforts, the execution or termination of collaborative arrangements, the initiation, success or failure of clinical trials, or other factors. Our chances for achieving profitability will depend on numerous factors, including success in:

receiving regulatory approvals for our product candidates;

developing and testing new product candidates;

licensing rights to our product candidates to third parties;

qualifying for and receiving grants and subsidies;

manufacturing products;

marketing products; and

competing with products from other companies.

Many of these factors will depend on circumstances beyond our control. We cannot assure you that we will become profitable.

If we do not compete successfully in the development and commercialization of products and keep pace with rapid technological change, we will be unable to capture and sustain a meaningful market position.

The biotechnology and pharmaceutical industries are highly competitive and subject to significant and rapid technological change as researchers learn more about diseases and develop new technologies for treatment. Our competitors in the United States and elsewhere are numerous and include, among others, major multinational pharmaceutical and chemical companies, specialized biotechnology companies and universities, and other research institutions. Specifically:

if anidulafungin receives FDA and international marketing approval, it will face competition from commercially available drugs such as amphotericin B, fluconazole, itraconazole, and potentially from caspofungin, which was the first to receive FDA approval of a new class of antifungal agents called echinocandins (which includes anidulafungin). One of our competitors initially obtained approval only for the narrow indication of aspergillosis salvage therapy, but has recently expanded its scope to include other serious fungal infections;

if dalbavancin receives FDA and international marketing approval, it will face competition from commercially available drugs such as vancomycin, teicoplanin, linezolid and quinupristin/dalfopristin, and drug candidates in clinical development such as daptomycin, which is currently being reviewed by the FDA; and

if ramoplanin receives FDA and international marketing approval, it will face competition from commercially available drugs such as oral vancomycin as well as drugs focused on the treatment (as opposed to prevention) of bloodstream vancomycin-resistant enterococci infections in hospitalized patients, such as linezolid and quinupristin/dalfopristin.

S-13

Our future products, if any, might also compete with new products currently under development or developed by others in the future.

Many of our potential competitors, either alone or together with their collaborators, have substantially greater financial resources and larger research and development and marketing teams than we do. In addition, many of these competitors, either alone or together with their collaborators, have significantly greater experience than we do in developing, manufacturing and marketing products. As a result, these competitors' products might come to market sooner or might prove to be more effective, to be less expensive, to have fewer side effects or to be easier to administer than ours. In any such case, sales of our eventual products would likely suffer and we might never recoup the significant investments we are making to develop these product candidates.

If clinical trials for our product candidates are unsuccessful or delayed, we will be unable to meet our anticipated development and commercialization timelines, which could harm our business and cause our stock price to decline.

Before obtaining regulatory approvals for the commercial sale of any products we might develop, we must demonstrate through pre-clinical testing and clinical trials that our product candidates are safe and effective for use in humans. Conducting pre-clinical testing and clinical trials is a protracted, time-consuming and expensive process. Completion of clinical trials might take several years or more. Our commencement and rate of completion of clinical trials might be delayed by many factors, including:

slower than expected rate of hospital and patient recruitment;

inability to manufacture sufficient quantities of the study drug for use in clinical trials;

unforeseen safety issues;

lack of efficiency during the clinical trials;

inability to adequately follow patients after treatment;

governmental or regulatory delays; or

a decision to expand clinical trials or add studies to increase the statistical significance of the results.

In addition, the results from pre-clinical testing and early clinical trials are often not predictive of results obtained in later clinical trials. In general, a number of new drugs have shown promising results in early clinical trials, but subsequently failed to establish sufficient safety and efficacy data to obtain necessary regulatory approvals. Data obtained from pre-clinical and clinical activities are susceptible to varying interpretations, which might delay, limit or prevent regulatory approval. In addition, regulatory delays or rejections might be encountered as a result of many factors, including perceived defects in the design of clinical trials and changes in regulatory policy during the period of product development.

As of June 30, 2003, we have one product candidate, anidulafungin, being reviewed by the FDA and three product candidates in clinical trials: dalbavancin in Phase III; ramoplanin in Phase III; and VIC-Acne which has completed Phase I. We also have anidulafungin in Phase III for an additional indication and dalbavancin and ramoplanin in Phase II each for an additional indication. Patient follow-up for these clinical trials has been limited and more trials will be required before we will expect to apply for regulatory approvals.

Clinical trials conducted by us or by third parties on our behalf might not demonstrate sufficient safety and efficacy to obtain the requisite regulatory approvals for anidulafungin, dalbavancin, ramoplanin or VIC-Acne or any other potential product candidates. Such a failure might delay development of our other product candidates and hinder our ability to conduct related pre-clinical

S-14

testing and clinical trials. It might also cause regulatory authorities to prohibit us from undertaking any additional clinical trials for our other product candidates. Our other product candidates are in pre-clinical development, and we have not submitted investigational new drug applications, or INDs, to commence clinical trials involving these compounds. Our pre-clinical development efforts might not be successfully completed and we might not file further INDs. Any delays in, or termination of, our clinical trials would harm our development and commercialization timelines, which could cause our stock price to decline. Any of these events could also impede our ability to obtain additional financing.

If our third-party clinical trial managers do not perform, clinical trials for our product candidates might be delayed or unsuccessful.

As of March 31, 2003, we had 32 full-time clinical development employees. We expect to continue to rely on third parties, including our collaborators, clinical research organizations and outside consultants, to assist us in managing and monitoring clinical trials. If these third parties fail to perform satisfactorily under the terms of our agreements with them, clinical trials for our product candidates might be delayed or unsuccessful. Furthermore, the FDA and/or other regulatory agencies of the EU, might inspect some of our clinical investigational sites, our collaborators' records and our facilities and files to determine if the clinical trials were conducted according to good clinical practices. If the FDA determines that our clinical trials were not in compliance with applicable requirements, we might be required to repeat the clinical trials.

If our third-party manufacturers do not produce our product candidates on a timely basis, clinical trials and commercialization of our product candidates could be delayed.

We currently do not have manufacturing facilities capable of manufacturing products in quantities necessary for large-scale trials or marketing. The Aventis plant in Brindisi, Italy, and the Chemsyn Laboratories plant in the United States will be our initial manufacturing sites for dalbavancin and anidulafungin, respectively. Subsequently, we intend to manufacture products in our own manufacturing plant in Pisticci, Italy, which is currently under construction. To the extent that our manufacturing capabilities are insufficient to produce all of the necessary active ingredients for our current and future product candidates, we anticipate that we might need to rely on third parties to manufacture some or all of these active ingredients. However, there are a limited number of facilities in which our product candidates can be produced, and third-party manufacturers have limited experience in manufacturing anidulafungin, dalbavancin, ramoplanin and VIC-Acne in quantities sufficient for conducting clinical trials or for commercialization. Difficulties are often encountered in manufacturing new products, including problems involving production yields, quality control and assurance, shortage of qualified personnel, compliance with FDA and other regulations,

production costs, and development of advanced manufacturing techniques and process controls. Any contract manufacturer might not perform as agreed or might not remain in the contract manufacturing business for the time we require to successfully develop, produce and market our product candidates. If any of our contract manufacturers fails to perform satisfactorily under its agreements with us, such as by failing to deliver the required quantities of our product candidates for clinical use on a timely basis and at commercially reasonable prices, and if we do not find a replacement manufacturer or develop our own manufacturing capabilities, clinical trials involving our product candidates, or commercialization of our products, could be delayed.

If we do not establish successful marketing and sales capabilities or do not enter into successful marketing arrangements with third parties, we will not be able to commercialize our future products and will not become profitable.

We intend to sell a portion of our future products, including anidulafungin and dalbavancin, through our own sales force. At present, however, we have no sales and marketing infrastructure and we lack any experience in direct marketing, sales and distribution. Our future profitability will depend

S-15

in part on our ability to develop a direct sales and marketing force to sell our future products, if any, to our target market. We might not be able to attract and retain qualified salespeople or be able to build an efficient and effective sales and marketing force. To the extent that we enter into marketing and sales arrangement with other companies, our revenues will depend on the efforts of others. These efforts might not be successful. If we are unable to enter into third-party arrangements, then we must substantially expand our marketing and sales force in order to achieve commercial success for certain products, and to compete with other companies that have experienced and well-funded marketing and sales operations.

If we cannot enter into new in-licensing arrangements, our product portfolio and potential profitability could be harmed.

An important component of our business strategy is to in-license drug compounds discovered by other pharmaceutical and biotechnology companies or academic research laboratories, in order to develop them ourselves. Currently we in-license anidulafungin from Eli Lilly. Anidulafungin is our lead antifungal product candidate and one of our four product candidates in clinical development. Under our license arrangement with Eli Lilly, we acquired exclusive worldwide rights to anidulafungin. This license arrangement will terminate on a country-by-country basis upon the later of the expiration of all product patents in the country or 10 years from the date of the first commercial sale of anidulafungin in the country. Competition for new promising compounds can be intense. If we are not able to identify future in-licensing opportunities and enter into future licensing arrangements on acceptable terms, our future product portfolio and potential profitability could be harmed.

If we do not establish and maintain collaborations or if our collaborators do not perform, we will be unable to develop our joint product candidates.

We have entered into collaboration arrangements with third parties to develop product candidates. Additional collaborations might be necessary in order for us to fund our research and development activities and third-party manufacturing arrangements, to seek and obtain regulatory approvals and to successfully commercialize our existing and future product candidates. If we do not maintain our existing collaborative arrangements or do not enter into additional collaborative arrangements, the number of product candidates from which we could receive future revenues would decline. In addition, our dependence on collaborative arrangements with third parties subjects us to a number of risks, including the following:

The collaborative arrangements might not be on terms favorable to us. Agreements with collaborators typically allow the collaborators significant discretion in electing whether to pursue any of the planned activities. We cannot control the amount and timing of resources our collaborators devote to the product candidates or their prioritization of the product candidates, and our collaborators might choose to pursue alternative products.

Our collaborators might also not perform their obligations as expected. Business combinations or significant changes in a collaborator's business strategy might adversely affect a collaborator's willingness or ability to complete its obligations to us.

Moreover, we could become involved in disputes with our collaborators which could lead to delays in, or the termination of, our development programs with them, as well as time-consuming and expensive litigation or arbitration.

Even if we fulfill our obligations under a collaborative agreement, our collaborators can generally terminate the agreements under specified circumstances.

If any collaborator were to terminate or breach their agreement with us, or otherwise fail to complete its obligations in a timely manner, our chances of successfully commercializing products could be harmed.

S-16

If our future products are not accepted by the market, we are not likely to generate significant revenues or become profitable.

Even if we obtain regulatory approval to market products in the future, we might not gain market acceptance among physicians, patients, healthcare payors and the medical community. The degree of market acceptance of any pharmaceutical product that we might develop will depend on a number of factors, including:

demonstrations of clinical efficacy and safety;

cost-effectiveness;

potential advantages over alternative therapies, including fewer side effects or easier administration;

reimbursement policies of government and third-party payors; and

the effectiveness of our marketing and distribution capabilities.

Physicians will not recommend therapies using any of our future products until clinical data or other factors demonstrate their safety and efficacy as compared to other drugs or treatments. Even if the clinical safety and efficacy of therapies using any of our future products is established, physicians might elect not to recommend the therapies for a number of other reasons, including the possibility that the mode of administration of our future product might not be effective for their patients' indications and locations. For example, many antibiotic or antifungal products are typically administered by infusion or injection, which requires substantial cost and inconvenience to patients and might not be practical in non-hospital settings.

Physicians, patients, third-party payors and the medical community might not accept and utilize any product candidates that we or our collaborators develop. If none of our future products achieve significant market acceptance, we are not likely to generate significant revenues or become profitable.

If we are unable to attract and retain skilled employees and consultants, we will be unable to develop and commercialize our product candidates.

We are highly dependent on our skilled management and scientific staff. In order to pursue our product development, marketing and commercialization plans, we might need to hire additional personnel with experience in clinical testing, government regulation, manufacturing, marketing and finance. We might not be able to attract and retain personnel on acceptable terms given the intense competition for such personnel among high technology enterprises, including biotechnology, pharmaceutical and healthcare companies, universities and non-profit research institutions. Most of our management and scientific staff do not have employment contracts. If we lose a significant number of these persons, or are unable to attract and retain qualified personnel, our business, financial condition and results of operations might be harmed. We do not maintain key person life insurance on any of our personnel.

In addition, we rely on consultants and members of our scientific and clinical advisory boards to assist us in formulating research and development strategies. All of these consultants and the members of our scientific and clinical advisory boards are employed by others, and they might have commitments to, or advisory or consulting agreements with, others that might limit their availability to us. If we lose the services of these advisors, our achievement of our development objectives might be impeded, and our business, financial condition and results of operations

might be harmed. Finally, except for work performed specifically for and at our direction, the inventions or processes discovered by our scientific and clinical advisory board members and other consultants will not become our intellectual property, but will be the intellectual property of the individuals or their institutions. If we desire access to these

S-17

inventions, we will be required to obtain appropriate licenses from the owners. We face the risk that we might not be able to obtain such licenses on favorable terms or at all.

Our revenues are subject to significant fluctuations, which makes it difficult to draw meaningful comparisons from period-to-period changes in our operating results.

We expect that substantially all of our revenues for the foreseeable future will result from payments under collaborative arrangements, with some European grant and subsidy revenue. To date, collaborative payments have taken the form of up-front payments, reimbursement for research and development expenses and milestone payments. Milestone payments to our company under collaborative arrangements are subject to significant fluctuation in both timing and amount. As a result, comparisons of our revenues and results of operations between periods might not produce meaningful indications of our progress toward commercializing one or more product candidate. Moreover, the historical revenues of Vicuron and Biosearch on a stand-alone basis might not be indicative of our future performance or of our ability to continue to achieve additional milestones and to receive additional milestone payments from our collaborators.

We might seek additional funding, which could dilute our stockholders or impose burdensome financial restrictions, and if we do not obtain necessary funding, we might be forced to delay or curtail the development of our product candidates.

We expect to incur increasing research and development, general and administrative and sales and marketing expenses over the next several years. Based on our current plans and assumptions, we estimate that our cash and liquid assets at March 31, 2003, will be sufficient to fund our operating losses for the next 18 to 24 months. However, if our plans change and/or our assumptions are inaccurate, we might need to seek capital sooner than anticipated. Some of our more significant plans and assumptions relate to:

receipt of regulatory approval for anidulafungin and commencement of a marketing campaign for anidulafungin;

payments received or made under possible future collaborative agreements;

continued progress in the research and development of our future products;

costs associated with protecting our patent and other intellectual property rights;

costs associated with developing marketing and sales capabilities; and

the rate of market acceptance on any future products.

Other than with respect to our \$1.5 million line of credit for equipment financing that we entered into in January 2003 and our Italian loan facility for the construction of our manufacturing plant, we have no committed sources of additional capital. To the extent our capital resources are insufficient to meet our future capital requirements, we will have to raise additional funds to continue the development of our product candidates. We might also seek additional funding much earlier than we would otherwise need, in order to take advantage of attractive opportunities in the capital markets.

We might seek to raise funds from a traditional lender or through public or private debt or equity offerings. To the extent we raise additional capital through the sale of equity or convertible debt securities, the securities could be sold at a discount to prevailing market price and the issuance of those securities could result in dilution to our stockholders. Moreover, the incurrence of debt financing could result in a substantial portion of our operating cash flow being dedicated to the payment of principal and interest on such indebtedness, and we might be subject to restrictive covenants as a result of such debt financing. This could render us more vulnerable to competitive pressures and economic

downturns and could impose restrictions on our operations. If adequate funds are not available from any of those

S-18

sources, our business might be harmed. We might be required to delay, reduce the scope of, or eliminate one or more of our research and development programs or otherwise significantly curtail operations. In addition, we might be required to obtain funds by entering into arrangements with collaborators on unattractive terms or relinquish rights to certain technologies or drug candidates that we would not otherwise relinquish in order to continue independent operations.

If we make any more strategic acquisitions, we will incur a variety of costs and might never realize the anticipated benefits.

We recently merged with Biosearch and, if appropriate opportunities become available, we might attempt to acquire additional products, product candidates or businesses that we believe are a strategic fit with our business. Currently, however, we are not a party to any additional acquisition agreements. If we pursue any transaction of that sort, the process of negotiating the acquisition and integrating an acquired product, product candidate or business might result in operating difficulties and expenditures and might require significant management attention that would otherwise be available for ongoing development of our business, whether or not any such transaction is ever consummated. Moreover, we might never realize the anticipated benefits of any acquisition. Future acquisitions could result in potentially dilutive issuances of equity securities, the incurrence of debt, contingent liabilities and/or impairment expenses related to goodwill and impairment or amortization expenses related to other intangible assets, which could harm our financial condition.

If our use of hazardous materials results in contamination or injury, we could suffer significant financial loss.

Our operations include the controlled use of hazardous materials, primarily small quantities of toxic biological materials and chemical compounds which we store, collect, combine, analyze and, at times, produce in connection with our research and manufacturing activities. We cannot eliminate the risk of accidental contamination or injury from these materials. In the event of an accident or environmental discharge, we might be held liable for any resulting damages. We do not currently maintain separate insurance to cover contamination or injuries relating to hazardous materials, and such liabilities might not be covered by our general liability insurance coverage.

Risks Related to the Recent Merger with Biosearch and International Expansion

The ongoing integration of our Italian and U.S. based management following the recent merger will represent significant challenges.

Our merger with Biosearch was only recently completed and we will face significant challenges in combining our management and internal control and disclosure systems in a timely and efficient manner. This integration will be complex and time-consuming because, among other things, our executive officers will be located in separate U.S. and Italian offices. Our U.S. management team has recently relocated from the San Francisco Bay Area to King of Prussia, Pennsylvania, while some of the management team of our Italian operations will remain in Gerenzano, Italy. Failure to integrate our management and internal systems successfully could result in inefficient resource management and inconsistent financial controls and reporting practices across our operating units and, as a result, we might not achieve the anticipated potential benefits of the merger.

S-19

When Nasdaq's currently proposed director-independence rules are adopted, compliance with both the new rules and our bylaws, as amended by the merger agreement, might require us to increase the size of our board.

We have eight directors on our board, four of whom were associated with Versicor prior to the merger and the other four of whom were associated with Biosearch. In connection with the merger, we amended our bylaws in a manner that is intended, among other things, to maintain an even balance of legacy Versicor directors and legacy Biosearch directors on the board for three years from the date of the completion of the merger. If we decide to add additional directors to the board during the three-year period, our bylaws effectively require us to add an even number of directors (with one-half of the additional directors proposed by the four legacy Versicor directors and the other half proposed by the four legacy Biosearch directors) in order to maintain an equal number of legacy Versicor and Biosearch directors on the board.

Our bylaws might make it more difficult for us to comply with Nasdaq's recently proposed director independence rule. In order for a majority of our directors to be independent, we would need to (a) ask up to three of our non-independent directors to resign followed by

appointment of three new independent directors, and/or (b) increase the size of our board by adding up to six additional independent directors. If the proposed rules are adopted in their current form, our board will also need to appoint an independent director as chairman of the audit committee. Any increase in the size of our board or change in its membership might give rise to inefficiencies, which might cause some board actions to be delayed.

We might be required to repay some or all of the Italian and/or EU research grants and loan subsidies previously received by Biosearch and we might not qualify or be approved for new grants and subsidies.

Biosearch and its subsidiary historically funded a portion of their operations through research grants and loan subsidies awarded by Italian and EU authorities. Under applicable law, any transfer of those grants and subsidies (including transfer by merger) requires written approval from the Italian bank authorized to make the disbursement on behalf of the government and from the appropriate Italian or EU authorities. In connection with the merger, we applied for permission to transfer Biosearch's grants and subsidies to our Italian branch. Although the merger has recently been completed, the Italian and EU authorities have not as yet reached an official decision on whether to approve our transfer requests. If the transfers are approved, we intend to apply for further permission to contribute the grants and subsidiaries to Vicuron Pharmaceuticals Italy S.r.l., our wholly-owned subsidiary in Italy. We face the risk that one or both of the transfers might not be approved, in which case we might be required to repay some or all of the grants and subsidies received by Biosearch prior to the merger, in the aggregate amount of up to approximately \$1.8 million as of March 31, 2003, and we may forfeit grants and subsidies awarded to Biosearch but not yet disbursed as of March 31, 2003 by the authorized bank, in the aggregate amount of up to approximately \$1.1 million as of March 31, 2003 (each estimate based on exchange rates then prevailing). Regardless of whether or not we are required to repay those grants, we anticipate that our Italian subsidiary will be eligible to apply for new research grants and subsidies from both the Italian and EU authorities. However, grants and subsidies are awarded in the discretion of those authorities and we face the risk that our Italian subsidiary might not qualify or be approved for any additional grants or subsidies in the future.

S-20

As a result of the recently completed merger with Biosearch, we will operate in both the United States and Italy, which will cost us time and resources and might result in additional, unexpected challenges.

As a result of our recently completed merger, our operations will be located both in the United States and Italy. This expansion will cost us time and resources that we would not have to spend if our operations were confined within one country only, such as:

our management will need to devote additional time to overseeing operations in two countries;

language barriers within our company and with contractual counterparties in Italy might result in misunderstandings, improperly executed instructions and additional translation costs, and language translations themselves might lead to inaccuracies; and

internal transportation and communications costs will increase in order for personnel and ideas to be shared between the two countries.

The increased time and resources we spend to manage operations internationally will result in an increase in our historical cost of doing business. In addition, international operations might present other challenges. For example, the cultural differences between business operations (generally including employer-employee relations) in the United States and those in Italy might reduce some of the benefits of the merger.

Complying with two national regulatory structures might result in administrative challenges.

Our operations must comply with applicable laws of and rules of the United States (including California law, Delaware corporate law and the rules and regulations of the SEC and the Nasdaq National Market), the EU legal system and the Republic of Italy (including the rules and regulations of CONSOB and Borsa Italiana, which collectively regulate companies listed on Italy's public markets such as the Nuovo Mercato). Conducting our operations in a manner designed to comply with all applicable laws and rules will require us to allocate additional time and resources to regulatory compliance matters. For example:

issuing each material announcement in both English and Italian might cause administrative challenges;

submitting filings and applications with regulatory and governmental authorities in the U.S., Italy and the EU, and approving translations of each significant document into the other language, if necessary, would be time-consuming and expensive and might distract our executives from their primary focus of managing our business, and language translations themselves might lead to inaccuracies;

under Italian employment law, our relations with our employees in Italy are governed by collective bargaining agreements negotiated at the national level (and over which we have no control), which reduce the methods customarily available in the United States to motivate and/or make changes to our Italian workforce;

under European Union data protection regulations, we are unable to send without restriction private personal data, including many employment records and some clinical trial data, from our Italian offices to our U.S. offices; and

tariffs, customs, duties, import restrictions, tax effects and other trade barriers might delay or increase the cost of relocating personnel and, if marketing approvals are obtained, commercial quantities of our products between nations.

S-21

We are subject to risks resulting from fluctuations in the exchange rate of the dollar relative to the euro, which could cause costs to be greater than we expect and introduce additional volatility in our reported quarterly results.

As a result of the recently completed merger, we are exposed to risks associated with foreign currency transactions insofar as we might desire to use dollars to make contract payments denominated in euros or vice versa. As the net positions of our unhedged foreign currency transactions fluctuates, our earnings might be negatively affected. In addition, we are exposed to risks associated with the translation of euro-denominated financial results and accounts into U.S. dollars. Although our reporting currency remains the U.S. dollar, a portion of our consolidated revenues and costs now arise in euros, which we restate in dollars for purposes of financial reporting. In addition, the reported carrying value of our euro-denominated assets and liabilities will be affected by fluctuations in the value of the U.S. dollar as compared to the euro. Accordingly, changes in the value of the U.S. dollar relative to the euro might have an adverse effect on our reported results of operations and financial condition, and fluctuations in exchange rates might introduce additional volatility in our reported results and accounts from period to period.

All of our Italian subsidiary's contract parties have the right to terminate their contracts with us for a limited period after June 30, 2003.

On June 30, 2003, we contributed the former assets, liabilities and business of Biosearch to our wholly-owned subsidiary in Italy, Vicuron Pharmaceuticals Italy S.r.l. Among the contributed assets were a number of contracts between our company (as successor to Biosearch) and various third parties. As a result of the contribution, under Italian law, those third parties have the right to terminate those contracts for a limited period. None of those parties exercised the identical rights they had in connection with our merger with Biosearch.

Risks Related to Operating in Our Industry

If we experience delays in obtaining regulatory approvals, or are unable to obtain them at all, for one or more of our product candidates, commercialization of those products will be delayed.

Our efforts to develop and market our product candidates will be subject to extensive and rigorous domestic regulation. FDA rules govern, among other matters, the development, testing, manufacture, safety, efficacy, record-keeping, labeling, storage, approval, advertising, promotion, sale and distribution of pharmaceutical products in the United States. Any products that we market abroad will also be subject to extensive regulation by foreign governments. In order to obtain permission to sell our product candidates, we must provide the FDA and foreign regulatory authorities with clinical data demonstrating that our proposed drugs are safe in humans and effective at treating an indicated condition. None of our product candidates has been approved for sale in the United States or any foreign market, and we cannot predict whether regulatory clearance will be obtained for any product that we are developing or intend to develop. The regulatory review and approval process takes many years, is dependent upon the type, complexity and novelty of the product candidate, requires the expenditure of substantial resources, involves post-marketing surveillance, and might involve ongoing requirements for post-marketing studies. Delays in obtaining regulatory

approvals might:

impede the commercialization of any drugs that we or our collaborators develop;

require us or our collaborators to comply with costly additional procedures;

diminish any competitive advantage that we or our collaborators might attain from early market introduction of a new product; and

delay or eliminate our receipt of revenues or royalties.

S-22

Any required approvals, once granted, might be withdrawn. Further, if we do not comply with applicable FDA and foreign regulatory requirements at any stage during the regulatory process, we might be subject to sanctions, including:

imposed delays in clinical trials or commercialization;

refusal by the FDA and foreign regulators to review pending market approval applications or supplements to approval applications;

product recalls or seizures;

suspension of production;

withdrawals of previously issued marketing approvals; and

fines, civil penalties and criminal prosecutions.

We choose to develop some proprietary product candidates ourselves and to out-license other product candidates to third parties for collaborative development. The licensing or collaboration agreement will generally specify which party is responsible for directing the clinical trial process and seeking regulatory approvals. Regardless of whether the process is directed by us or by our collaborators, in each case we face the risk that our clinical trials might be unsuccessful, and that the FDA will not grant us marketing approval. We might also encounter delays or rejections based upon future changes in government regulation, legislation or FDA policy during the period of product development, clinical trials and FDA regulatory review. If we do not obtain required governmental approvals, we will be precluded from marketing the candidate for which approval was sought. If regulatory clearance for marketing a future product is granted, this clearance will be limited to those disease states and conditions for which the product is demonstrated through clinical trials to be safe and effective.

Outside the United States, the ability to market a product is contingent upon receiving a marketing authorization from the appropriate regulatory authorities. This foreign regulatory approval process typically includes all of the risks associated with FDA clearance described above and might include additional risks.

If our manufacturing subsidiary or our contract manufacturers fail to comply with applicable Good Manufacturing Practice requirements, we could be subject to fines or other sanctions, or be precluded from marketing any future products.

Manufacturing facilities are required to comply with FDA Good Manufacturing Practice regulations. Even facilities outside the United States, such as the manufacturing plant we are constructing in Italy, must comply with these regulations if the manufactured products will be sold in the United States. Good Manufacturing Practice regulations include requirements relating to quality control and quality assurance as well as to maintenance of records and documentation. Manufacturing facilities are subject to inspection by the FDA. These facilities must be

approved before we can use them in commercial manufacturing of our products. Comparable Good Manufacturing Practice regulations also apply in the EU, Italy and other foreign countries. Our contract manufacturers and our manufacturing subsidiary might not be able to comply with the applicable Good Manufacturing Practice requirements and other FDA or other EU, Italian or foreign regulatory agencies' regulatory requirements.

If our intellectual property rights do not adequately protect our product candidates or future products, others could compete against us more directly, which would hurt our business.

Our success depends in part on our ability to protect our intellectual property from unauthorized use by third parties, which we will be able to do only to the extent that our intellectual property is

S-23

covered by valid and enforceable patents or is effectively maintained as a trade secret. We have rights relating to 33 issued U.S. patents, 15 U.S. patent applications, 447 foreign patents and 50 foreign patent applications. Of these patents and patent applications:

our non-Biosearch patent portfolio as of July 9, 2003 includes 5 U.S. patents, 12 U.S. patent applications and 3 foreign patent applications; and

our Biosearch patent portfolio, as of March 31, 2003, includes an additional 28 U.S. patents, 3 U.S. patent applications, 447 foreign patents and 47 foreign patent applications (of which, dalbavancin-related rights include 4 issued U.S. patents, 4 issued Canadian patents and 1 foreign patent application).

Our collaborations involve the following additional patents:

our license agreement with Eli Lilly with respect to anidulafungin covers 15 U.S. patents, 10 U.S. patent applications, 79 foreign patents and 122 foreign patent applications;

our collaborative agreement with Novartis covers 2 U.S. patent applications; and

our collaborative agreement with Pfizer (as successor to Pharmacia) with respect to the development of oxazolidinones covers 4 U.S. patents, 6 U.S. patent applications, 2 Canadian patent applications and 1 foreign patent applications.

The patent position of biopharmaceutical companies involves complex legal and factual questions and, therefore, we cannot predict with certainty whether they will be enforceable. We have in the past and might in the future receive office actions or other notices from U.S. or foreign patent authorities seeking to limit or otherwise qualify some patent claims. Patents, if issued, might be challenged, invalidated or circumvented. Thus, any patents that we own or license from third parties might not provide any protection against competitors. Our pending patent applications, those we might file in the future, or those we might license from third parties, might not result in patents being issued. Also, patent rights might not provide us with adequate proprietary protection or competitive advantages against competitors with similar technologies. The laws of many foreign countries do not protect intellectual property rights to the same extent as do the laws of the United States.

In addition to patents, we rely on trade secrets and proprietary know-how. We seek protection, in part, through confidentiality and proprietary information agreements. These agreements might not provide meaningful protection or adequate remedies for our technology in the event of unauthorized use or disclosure of confidential and proprietary information. Failure to protect our intellectual property rights could seriously impair our competitive position and harm our business.

If third parties claim we are infringing their intellectual property rights, we could suffer significant litigation or licensing expenses or be prevented from marketing our future products.

Our success depends in part on our ability to operate without infringing upon the intellectual property rights of others. Research has been conducted for many years in the areas in which we focus our research and development efforts. This has resulted in a substantial number of issued patents and an even larger number of still-pending patent applications. U.S. patent applications which are not foreign filed can be

maintained in secrecy until issuance. U. S. patent applications which are also intended for foreign filing usually publish 18 months after the earliest priority date or within six months of the U.S. filing date, whichever is later. The publication of discoveries in the scientific or patent literature frequently occurs substantially later than the date on which the underlying discoveries were made. Our commercial success will depend significantly on an ability to operate without infringing the patents and other intellectual property rights of third parties. However, our technologies might infringe the patents or violate other intellectual property rights of third parties without our knowledge. In the event an infringement claim is brought against us, we might be required to pay legal and other

S-24

expenses to defend such a claim and, if our defense is unsuccessful, we might be prevented from pursuing product development and commercialization and might be subject to damage awards.

Our success also depends in part on our ability to prevent others from infringing our intellectual property rights. The biotechnology and pharmaceutical industries have been characterized by extensive litigation regarding patents and other intellectual property rights. The defense and prosecution of intellectual property legal actions, U.S. Patent and Trademark Office interference proceedings and related legal and administrative proceedings in the United States and internationally involve complex legal and factual questions. As a result, such proceedings are costly and time-consuming to pursue and their outcome is uncertain. Litigation might be necessary to:

enforce patents that we own or license;

protect trade secrets or know-how that we own or license; or

determine the enforceability, scope and validity of the intellectual property rights of others.

If we become involved in any litigation, interference or other administrative proceedings, we will incur substantial expense and the efforts of our technological and management personnel will be significantly diverted. An adverse determination might subject us to loss of proprietary position or to significant liabilities, or require us to seek licenses that might not be available from third parties. We might be restricted or prevented from manufacturing and selling products, if any, in the event of an adverse determination in a judicial or administrative proceeding or if we fail to obtain necessary licenses. Costs associated with these arrangements might be substantial and might include ongoing royalties. Furthermore, we might not be able to obtain the necessary licenses on satisfactory terms, if at all.

If the government and third-party payors fail to provide adequate coverage and reimbursement rates for our future products, if any, our revenues and prospects for profitability will be harmed.

In both domestic and foreign markets, our sales of any future products will depend in part upon the availability of reimbursement from third-party payors. Such third-party payors include government health administration authorities, managed care providers, private health insurers and other organizations. These third-party payors are increasingly challenging the price, and examining the cost effectiveness, of medical products and services. In addition, significant uncertainty exists as to the reimbursement status of newly approved healthcare products. We might need to conduct post-marketing studies in order to demonstrate the cost-effectiveness of any future products to such payors' satisfaction. Such studies might require us to commit a significant amount of management time and financial and other resources. Our future products might not ultimately be considered cost-effective. Adequate third-party reimbursement might not be available to enable us to maintain price levels sufficient to realize an appropriate return on investment in product development. Domestic and foreign governments continue to propose and pass legislation designed to reduce the cost of healthcare. For example, in some foreign markets, the government controls prescription pharmaceuticals' pricing and profitability. In the United States, we expect that there will continue to be federal and state proposals to implement similar governmental control. In addition, increasing emphasis on managed care in the United States will continue to put pressure on pharmaceutical product pricing. Cost control initiatives could decrease the price that we would receive for any products in the future, which would limit our revenues and profitability. Accordingly, legislation and regulations affecting the pricing of pharmaceuticals might change before our proposed products are approved for marketing. Adoption of such legislation could further limit reimbursement for pharmaceuticals.

S-25

If a successful product liability claim or series of claims is brought against us for uninsured liabilities or in excess of insured liabilities, we could be forced to pay substantial damage awards.

The use of any of our product candidates in clinical trials, and the sale of any approved products, might expose us to product liability claims. We currently maintain, product liability insurance coverage in the amount of \$10 million per occurrence and \$10 million in the aggregate. Such insurance coverage might not protect us against all of the claims to which we might become subject. We might not be able to maintain adequate insurance coverage at a reasonable cost or in sufficient amounts or scope to protect us against potential losses. In the event a claim is brought against us, we might be required to pay legal and other expenses to defend the claim, as well as uncovered damages awards resulting from a claim brought successfully against us. Furthermore, whether or not we are ultimately successful in defending any such claims, we might be required to direct financial and managerial resources to such defense and adverse publicity could result, all of which could harm our business.

Risks Related to the Securities Markets

Our stock price has been and is likely to continue to be volatile, and your investment could suffer a decline in value.

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

the results of our clinical trials and those of our competitors, and any significant delays or unexpected complications in our clinical trials;

decisions by regulatory authorities with respect to our development efforts and product candidates;

public concern regarding the safety and efficacy of drugs we develop;

new products or services introduced or announced by us or our competitors;

announcements of scientific innovations by us or our competitors;

actual or anticipated variations in our annual and quarterly operating results;

conditions or trends in the biotechnology and pharmaceutical industries;

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

additions or departures of key personnel;

general economic conditions;

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

future sales of equity or debt securities by us;

new regulatory legislation adopted in the United States or abroad; and

sales of our common stock by our directors, officers or significant stockholders.

In addition, the stock market in general, and the Nasdaq National Market, the Nuovo Mercato and the market for biotechnology and pharmaceutical stocks in particular, have experienced significant price and volume fluctuations. Over the 52-week period ending June 30, 2003, the market price of Vicuron common stock as reported on the Nasdaq National Market ranged from a high of \$15.62 to a low of \$7.65 and our average daily trading volume was 164,420 shares. Volatility in the market price for particular companies has often been unrelated or disproportionate to the operating performance of those companies. These broad market and industry factors might seriously harm the market price of

S-26

our common stock, regardless of our operating performance. In addition, securities class action litigation has often been initiated following periods of volatility in the market price of a company's securities. 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 implemented anti-takeover provisions that could discourage or prevent a takeover, even if an acquisition would be beneficial to our stockholders.

Provisions of our restated certificate of incorporation, our amended and restated bylaws and our shareholder rights plan, commonly known as a "poison pill," increase the likelihood that any third party would need to negotiate with our board prior to initiating a takeover proposal for our company and could have the effect of delaying or preventing a change of control of our company. For example, our board of directors, without further stockholder approval, may issue preferred stock (or, in the face of a potential acquiror's increased ownership, rights to purchase our common stock for a nominal price) that could delay or prevent a change of control, as well as reduce the voting power of holders of our common stock. In addition, some of our stockholders have entered into a stockholders agreement in which they have agreed, for a period of three years following completion of the merger, to vote as recommended by the board on some issues. These provisions could delay or prevent an attempt to replace or remove our management. The foregoing factors could also limit the price that investors or an acquiror might be willing to pay in the future for shares of our common stock.

Risks Related to this Offering

Investors who purchase shares in this offering may experience dilution.

In order to raise additional capital, we expect that we will in the future offer additional shares of our common stock at prices that may not be the same as the price per share in this offering. We have an effective shelf registration statement from which we can offer shares of our common stock. We cannot assure you that we will be able to sell shares in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering. If the price per share at which we sell additional shares of our common stock in future transactions is less than the price per share in this offering, investors who purchase our common stock in this offering will suffer a dilution of their investment.

The sale of a substantial number of our shares could harm our stock price.

As of June 30, 2003, we had 47,801,265 shares of common stock outstanding. All of these shares are eligible for sale on the Nasdaq National Market and the Nuovo Mercato, although some of the shares are subject to sale volume and other limitations. We have also filed a registration statement that permits the sale of 1.1 million shares under our 2000 Employee Stock Purchase Plan (of which 1,051,021 remain available for issuance as of June 30, 2003). As of June 30, 2003, options to purchase approximately 8,929,994 shares of our common stock, with a weighted average exercise price of \$9.576 were outstanding. As of June 30, 2003, a warrant to purchase 195,072 shares of our common stock at an exercise price of \$4.72 was outstanding and exercisable. This offering of 5,000,000 shares of our common stock is being made pursuant to a shelf registration statement that permits the sale of up to \$80.5 million worth of shares of our common stock. This means that, while the shelf registration statement remains effective, and assuming the underwriters do not exercise their over-allotment option, we have the ability to sell approximately \$9.5 million worth of additional shares of our common stock under that registration statement assuming a public offering price of \$14.20 per share in this offering.

Each of our directors and executive officers has generally agreed not to sell any shares of our common stock that they hold for a period of 90 days after the date of this prospectus supplement without the prior written consent of Morgan Stanley & Co. Incorporated. As a result, the holders of an

aggregate of approximately 5,124,859 shares of our common stock (as of April 1, 2003) will be contractually restricted from selling their shares for a period ending 90 days after the date of this prospectus supplement. However, Morgan Stanley & Co. Incorporated can waive this restriction and allow any of these stockholders to sell their shares at any time. Also, sales of a substantial number of these shares following the expiration or waiver of the lock-up periods could cause our stock price to fall.

We may allocate the net proceeds from this offering in ways with which you might not agree.

Our expected use of the net proceeds of this offering is general in nature and is subject to change based upon changing conditions and opportunities. Our management has broad discretion in applying the net proceeds we estimate we will receive in this offering. Because the net proceeds are not required to be allocated to any specific use, investment or transaction, you cannot determine at this time the value or propriety of our application of the net proceeds. Moreover, you will not have the opportunity to evaluate the economic, financial or other information on which we base our decisions on how to use our net proceeds. As a result, you and other stockholders may not agree with our decisions.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents we have filed with the SEC that are incorporated by reference herein contain "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. All statements, other than statements of historical facts included in this prospectus, regarding our strategy, future operations, financial position, projected costs, prospects, plans and objectives of management are forward-looking statements. These statements can often be identified by the use of forward-looking terminology such as "expects," "anticipates," "believes," "intends," "will," or the negative of such terms or other similar types of expressions, although not all forward-looking statements contain these identifying words.

These forward-looking statements include, but are not limited to, statements regarding:

the extent to which our patent portfolio and applicable regulatory provisions may protect our products and technology,

our ability to identify new product candidates using our proprietary expertise in lead optimization, functional genomics and mechanism-based rational drug design,

our ability to achieve milestones and earn milestone and other payments under our collaborative agreements,

the potential of such product candidates to lead to the development of safer or more effective therapies,

our ability to develop the technology derived from our research programs and collaborations,

the anticipated timing of the initiation or completion of Phase I, Phase II or Phase III clinical trials or the filing of an NDA for any of our product candidates,

the receipt of future regulatory approvals,

our future operating expenses,

our future losses, and

our future expenditures for research and development.

The forward-looking statements are based on our current expectations, assumptions, estimates and projections about our business and our industry, and involve known and unknown risks, uncertainties and other factors that may cause our or our industry's results, levels of activity, performance or achievement to be materially different from any future results, levels of activity, performance or achievements expressed or implied in or contemplated by such forward-looking statements. In addition, the results of our previous clinical trials are not necessarily indicative of future clinical trials results. Our actual results could differ materially from those anticipated in such forward-looking statements as a result of several factors more fully described under the caption "Risk Factors" and elsewhere in this prospectus, including the documents incorporated by reference herein. The forward-looking statements made in this prospectus relate only to events as of the date on which the statements are made. We undertake no obligation to update publicly any forward-looking statements for any reason, even if new information becomes available or other events occur in the future.

This prospectus supplement, and the documents incorporated by reference into the accompanying prospectus, contain statistics and other data that have been obtained from, or compiled from, information made available by third parties. These statistics and other data have not been prepared by us and we accept no responsibility for the accuracy of that information.

S-29

USE OF PROCEEDS

We estimate that the net proceeds from the sale of the 5,000,000 shares of common stock that we are offering will be approximately \$66.4 million, after deducting the underwriters' discounts and commissions and estimated offering expenses, based on the offering price of \$14.20 per share. If the underwriters' over-allotment option is exercised in full, we estimate that the net proceeds will be approximately \$75.1 million.

We will retain broad discretion over the use of the net proceeds of this offering. We currently intend to use the net proceeds of this offering primarily for clinical development of product candidates, as well as commercialization activities and general corporate purposes, including working capital and research expenses. In addition, we may use some of the net proceeds to hire additional personnel. The amounts and timing of the expenditures may vary significantly depending on numerous factors, such as the progress of our research and development efforts, technological advances and the competitive environment for our products. We also might use a portion of the net proceeds to acquire or invest in complementary businesses, products and technologies.

Pending our use of the net proceeds, we intend to invest the net proceeds in short-term, interest-bearing, investment-grade securities.

MARKET PRICE AND DIVIDENDS ON OUR COMMON STOCK

Our common stock is quoted on the Nasdaq National Market under the symbol "MICU." The following table sets forth for the periods indicated, the high and low closing prices per share, as reported on the Nasdaq National Market:

	Common Stock Closing Price	
	High	Low
2001		
First Quarter	\$ 9.44	\$ 7.06
Second Quarter	13.87	6.63
Third Quarter	15.67	11.95
Fourth Quarter	20.99	13.66

Common Stock Closing Price

2002

First Quarter	24.16	16.75
Second Quarter	18.99	9.65
Third Quarter	12.11	8.17
Fourth Quarter	12.20	7.85

2003

First Quarter	13.00	10.24
Second Quarter	15.12	11.40
Third Quarter through July 10, 2003	14.00	15.00

On July 10, 2003 the last reported sale price of our common stock on the Nasdaq National Market was \$14.20 per share. As of the close of business on June 30, 2003, there were 114 record holders of our common stock.

We have never declared or paid a cash dividend on our common stock and do not anticipate paying any cash dividends in the foreseeable future. We currently intend to retain our earnings, if any, for the development of our business. The declaration of any future dividends by us is within the discretion of our board of directors and will be dependent on our earnings, financial condition and capital requirements as well as any other factors deemed relevant by our board of directors.

S-30

CAPITALIZATION

The following table sets forth our capitalization as of March 31, 2003:

on an actual basis; and

on an as adjusted basis to give effect to the sale of 5,000,000 shares of common stock offered by us in this offering, assuming a public offering price of \$14.20 per share in this offering and after deducting the underwriters' discounts and commissions and estimated offering expenses payable by us.

	As of March 31, 2003	
	Actual	As Adjusted
	(in thousands, except share and per share data)	
Cash, cash equivalents and marketable securities	\$ 145,365	\$ 211,755
Long-term debt, less current portion	\$ 5,455	\$ 5,455
Stockholders' equity:		
Preferred stock, par value \$0.001; 5,000,000 shares authorized; no shares issued and outstanding (actual and as adjusted)		
Common stock, par value \$0.001; 100,000,000 shares authorized; 47,679,720 shares issued and outstanding	48	53

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

	As of March 31, 2003	
(actual) and 52,679,720 shares issued and outstanding (as adjusted)		
Additional paid-in capital	439,082	505,467
Deferred stock compensation	(1,249)	(1,249)
Accumulated other comprehensive loss	(215)	(215)
Accumulated deficit	(259,819)	(259,819)
	<hr/>	<hr/>
Total stockholders' equity	177,847	244,237
	<hr/>	<hr/>
Total capitalization	\$ 183,302	\$ 249,692
	<hr/>	<hr/>

Information in the table above excludes:

8,535,787 shares of common stock issuable upon the exercise of options outstanding at March 31, 2003 with a weighted average exercise price of \$9.34 per share;

258,791 shares available for future issuance under our 1995 Stock Option Plan, 56,672 shares available for future issuance under our 1997 Equity Incentive Plan, 1,065,827 shares available for future issuance under our 2000 Employee Stock Purchase Plan, 1,801,522 shares available for future issuance under our 2001 Stock Option Plan, and 14,160 shares available for future issuance under our 2002 Stock Option Plan at March 31, 2003; and

195,072 shares of common stock issuable upon the exercise of warrants outstanding at March 31, 2003 at an exercise price of \$4.72 per share.

The information in the table above is presented as of March 31, 2003 and thus does not include any share issuances occurring subsequent to March 31, 2003.

S-31

DILUTION

Our net tangible book value as of March 31, 2003 was approximately \$157.2 million, or \$3.30 per share of common stock. Net tangible book value per share is calculated by subtracting our total liabilities from our total tangible assets, which is total assets less intangible assets, and dividing this amount by the number of shares of common stock outstanding. After giving effect to the sale by us of the 5,000,000 shares of common stock offered in this offering, assuming a public offering price of \$14.20 per share and after deducting the underwriters' discounts and commissions and estimated offering expenses payable by us, our net tangible book value as of March 31, 2003 would have been \$223.6 million, or \$4.24 per share of common stock. This represents an immediate increase in the net tangible book value of \$0.94 per share to our existing stockholders and an immediate and substantial dilution in net tangible book value of \$9.96 per share to new investors. The following table illustrates this per share dilution:

Assumed public offering price per share	\$	14.20
Net tangible book value per share as of March 31, 2003	\$	3.30
Increase per share attributable to new investors		0.94
		<hr/>
Net tangible book value per share after this offering		4.24
		<hr/>
Dilution per share to new investors	\$	9.96
		<hr/>

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

In the discussion and table above, we assume no exercise of outstanding options and warrants. As March 31, 2003, there were 8,535,787 shares of common stock reserved for issuance upon exercise of outstanding options with a weighted average exercise price of \$9.34 per share and 195,072 shares of common stock reserved for issuance upon exercise of an outstanding warrant with an exercise price of \$4.72 per share. To the extent that any of these outstanding options and warrants are exercised, there will be further dilution to new investors.

S-32

UNDERWRITERS

Under the terms and subject to the conditions contained in an underwriting agreement dated the date of this prospectus supplement, the underwriters named below, for whom Morgan Stanley & Co. Incorporated, Pacific Growth Equities, LLC, Lazard Frères & Co. LLC and Harris, Nesbitt Gerard, Inc. are acting as representatives, have severally agreed to purchase, and we have agreed to sell to them, severally, the number of shares of our common stock indicated below:

Underwriter	Number of Shares
Morgan Stanley & Co. Incorporated	
Pacific Growth Equities, LLC	
Lazard Frères & Co. LLC	
Harris, Nesbitt Gerard, Inc.	
Total	5,000,000

The underwriters are offering the shares of common stock subject to their acceptance of the shares from us and subject to prior sale. The underwriting agreement provides that the obligations of the several underwriters to pay for and accept delivery of the shares of common stock offered by this prospectus supplement and accompanying prospectus are subject to the approval of certain legal matters by their counsel and to other conditions. The underwriters are obligated to take and pay for all of the shares of common stock offered by this prospectus supplement if any such shares are purchased. However, unless the underwriters exercise their option, the underwriters are not required to take or pay for the shares covered by the underwriters' over-allotment option described below.

The underwriters initially propose to offer part of the shares of common stock directly to the public at the public offering price listed on the cover page of this prospectus supplement and part to certain dealers at a price that represents a concession not in excess of \$ _____ a share under the public offering price. Any underwriter may allow, and any such dealers may reallow a concession not in excess of \$ _____ per share to other underwriters or to certain dealers. After the initial offering of the shares of common stock, the offering price and other selling terms may from time to time be varied by the representatives.

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to an aggregate of 650,000 additional shares of common stock at the public offering price listed on the cover page of this prospectus supplement, less underwriting discounts and commissions. The underwriters may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with the offering of the shares of common stock offered by this prospectus supplement. To the extent the option is exercised, each underwriter will become obligated, subject to specified conditions, to purchase approximately the same percentage of the additional shares of our common stock as the number listed next to the underwriter's name in the preceding table bears to the total number of shares of common stock listed next to the names of all underwriters in the preceding table. If the underwriters' option is exercised in full, the total price to the public would be \$ _____ million and the total underwriters' discounts and commissions would be \$ _____ million.

From time to time, some of the underwriters or their affiliates have provided, continue to and may in the future provide, investment banking and other financial services for us. These underwriters and their affiliates have received and may in the future receive customary fees for their services.

Our common stock is quoted on The Nasdaq National Market and the Nuovo Mercato stock market in Italy under the symbol "MICU."

S-33

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

We have agreed that, without the prior written consent of Morgan Stanley & Co. Incorporated on behalf of the underwriters, we will not, during the period ending 90 days after the date of this prospectus supplement:

offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock; or

enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock,

whether any transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise.

The restrictions described in the immediately preceding paragraph do not apply to:

the sale of shares to the underwriters;

the issuance by us of shares of common stock or embedded options under our employee stock purchase plan or upon the exercise of options or warrants or the conversion of securities outstanding on the date of this prospectus supplement; or

grants of employee or director stock options to employees or directors, or sales of our common stock to employees, in each case pursuant to the terms of a plan in effect on the date hereof.

Our directors and executive officers have agreed that they will not, without in each case the prior written consent of Morgan Stanley & Co. Incorporated on behalf of the underwriters, during the period ending 90 days after the date of this prospectus supplement:

offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock; or

enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock,

whether any transaction described above is to be settled by delivery of our common stock or other securities, in cash or otherwise.

The restrictions described in the above paragraphs relating to our officers and directors do not apply to:

any shares of our common stock acquired in the open market after the closing of this offering;

the transfer of any shares of our common stock or securities convertible into common stock as a gift, or into trusts benefiting the transferor or its immediate family members without consideration, subject to specified conditions including that the transferee agree to the restriction described above; or

distributions of shares of common stock or securities convertible into common stock to limited partners or stockholders of the transferor.

In order to facilitate this offering of the common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriters may sell more shares than they are obligated to purchase under the underwriting agreement, creating a short position. A short sale is "covered" if the short position is no greater than the number of shares available for purchase by the underwriters under the over-allotment option. The

S-34

underwriters can close out a covered short sale by exercising the over-allotment option or purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriters will consider, among other things, the open market price of shares compared to the price available under the over-allotment option. The underwriters may also sell shares in excess of the over-allotment option, creating a naked short position. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in this offering. In addition, to stabilize the price of the common stock, the underwriters may bid for, and purchase, shares of our common stock in the open market. Finally, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the common stock in this offering, if the syndicate repurchases previously distributed common stock to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the common stock above independent market levels. The underwriters are not required to engage in these activities, and may end any of these activities at any time.

A prospectus supplement or accompanying prospectus in electronic format may be made available on the web sites maintained by one or more of the underwriters. Other than the prospectus supplement or accompanying prospectus in electronic format, the information on any of these websites and any other information contained on a website maintained by an underwriter or syndicate member is not part of this prospectus supplement or accompanying prospectus.

We and the underwriters have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act.

REGULATION G DISCLOSURE

The discussion under the caption "Major Research and Development Projects" in our Annual Report on Form 10-K/A for the year ended December 31, 2002, which we filed with the SEC on March 3, 2003, included some data not prepared in accordance with generally accepted accounting principles, or GAAP. More specifically, the presentation of research and development expense relating to each project excluded non-cash stock compensation expense, however, inclusion of such expense is required by GAAP. We have presented the disclosure below in accordance with GAAP. This revised presentation is presented as of the date we filed our Annual Report on Form 10-K/A for the year ended December 31, 2002. The corresponding non-GAAP disclosure contained in our Form 10-K/A for the year ended December 31, 2002 is hereby superseded and, as a result, is not incorporated by reference in, and does not constitute a part of, this prospectus supplement or the accompanying prospectus.

Major Research and Development Projects

Our ongoing clinical trials of anidulafungin and dalbavancin are our two most significant research and development projects, generating 33% and 16%, respectively, of our total research and development expenses since our inception.

Anidulafungin

Anidulafungin is our lead antifungal product candidate. We in-licensed anidulafungin from Eli Lilly pursuant to the May 1999 agreement described below. As of December 31, 2002, the intravenous formulation of anidulafungin is in:

Phase III clinical trials for the treatment of esophageal candidiasis, patient enrollment completed;

S-35

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

Phase III clinical trials for the treatment of invasive candidiasis/candidemia; and

Phase III clinical trials for the treatment of aspergillosis.

In May 1999, we obtained from Eli Lilly an exclusive worldwide license for the development and commercialization of anidulafungin. We paid \$11.0 million for the license and an additional \$3.0 million for product inventory (which we have received). As a result, we recognized \$14.0 million of research and development costs in 1999. If specified milestones are achieved on the intravenous formulation of anidulafungin in the United States and Canada, we will be obligated to make additional payments of up to \$14.0 million to Eli Lilly. We are also obligated to make additional payments of up to \$8.0 million to Eli Lilly if specified milestones on the intravenous formulation of anidulafungin are achieved in Europe, and additional payments of up to \$8.0 million if specified milestones on the intravenous formulation of anidulafungin are achieved in Japan. We are obligated to make additional payments to Eli Lilly of up to \$21.0 million if sales of an intravenous formulation of anidulafungin exceed specified targets in the United States and Canada, Europe and Japan. We believe that it is unlikely that we will be obligated to make all or a significant portion of these payments to Eli Lilly. In addition, we are obligated to make royalty payments in respect of sales of any product resulting from the compound.

We are not currently developing an oral formulation of anidulafungin and do not presently intend to do so in the future. However, under the license agreement with Eli Lilly, we are obligated to make additional payments to Eli Lilly of up to \$25.0 million if, and only if, specified milestones are achieved on an oral formulation of anidulafungin in the United States, additional payments of up to \$15.0 million if specified milestones are achieved on an oral formulation of anidulafungin in Europe, and additional payments of up to \$15.0 million if specified milestones are achieved on an oral formulation of anidulafungin in Japan. In addition, we are obligated to make additional payments to Eli Lilly of up to \$24.0 million if, and only if, sales of an oral formulation of anidulafungin exceed specified targets worldwide. Because an oral formulation of anidulafungin is not currently feasible, we believe that it is unlikely that we will be obligated to make any of these payments to Eli Lilly. We have also granted to Eli Lilly an option to license the exclusive worldwide rights to any oral formulation of anidulafungin, which is exercisable upon successful completion of Phase II clinical trials. If Eli Lilly exercises this option, Eli Lilly would pay us an up-front fee and royalties based on net product sales, and would reimburse us for any milestone payments paid plus the value, on a cost-plus basis, of all prior development expenses attributed to the development and commercialization of the oral formulation of anidulafungin. However, due to the speculative nature of the oral formulation of anidulafungin, we believe that it is unlikely that we will be entitled to receive fees or royalties and reimbursement of expenses from Eli Lilly.

Research and development expense allocated to our anidulafungin project, expressed as a percentage of total research and development expense for the period, was:

42% for the year 2002 compare to 34% for the year 2001 and 12% for the year 2000; and

33% in the aggregate from our inception through December 31, 2002.

Our development administration overhead costs are included in total research and development expense for the each period, but are not allocated among our various projects.

The goal of our anidulafungin project is to obtain marketing approval from the U.S. Food and Drug Administration, or FDA, and analogous international agencies; and we will consider the project substantially complete if we obtain those approvals even though subsequent to that time we might incur additional expenses in conducting additional clinical trials and follow-up studies. To obtain the first of such approvals, we hope to file a new drug application, or NDA, with the FDA at the conclusion of our Phase III trials for treatment of esophageal candidiasis, which has completed patient enrollment, assuming that the clinical trial's results support a filing. That trial began in the first quarter of 2001 and, assuming successful completion of the Phase III trials, we anticipate filing an NDA for

S-36

anidulafungin by the end of April 2003. Material cash inflows relating to our anidulafungin project will not commence until after marketing approvals are obtained, and then only if anidulafungin finds acceptance in the marketplace. To date, we have not received any revenues from product sales of anidulafungin. Because of the many risks and uncertainties relating to the completion of clinical trials, receipt of marketing approvals and acceptance in the marketplace, we cannot predict when material cash inflows from our anidulafungin project will commence, if ever.

A failure to obtain marketing approval for anidulafungin would likely have the following results on our operations, financial position and liquidity:

because our research and development projects are independent, a failure to obtain marketing approval for anidulafungin would not necessarily interrupt our development programs for dalbavancin or our pre-clinical compounds; however, we might reduce our development staff (unless one or more of our other product candidates is then entering in late-stage clinical trials, in which case we might re-assign anidulafungin researchers to those projects);

we would be relieved of our contingent obligation to make further milestone payments and royalty payments to Eli Lilly;

we would not earn any sales revenue from anidulafungin, which would increase the likelihood that we would need to obtain additional financing for our other development efforts; and

our reputation among investors might be harmed, which might make it more difficult for us to obtain equity capital on attractive terms or at all.

Dalbavancin

Dalbavancin is our lead antibiotic product candidate. We in-licensed dalbavancin from Biosearch pursuant to the February 1998 agreement described below. As of December 31, 2002, dalbavancin is in:

Phase III clinical trials for the treatment of skin and soft tissue infections; and

Phase II clinical trials for the treatment of catheter-related blood stream infections.

In February 1998, we entered into a license agreement and a collaborative agreement with Biosearch. Under the license agreement, Biosearch granted us an exclusive license to develop and commercialize dalbavancin in the United States and Canada. In exchange for the license and upon the receipt of favorable results in pre-clinical studies, we paid an initial license fee of \$2.0 million and issued 250,000 shares of our common stock to Biosearch. In May 2001 and December 2002, we paid Biosearch additional milestone payments for the start of Phase II and Phase III clinical trials, respectively.

Research and development expense allocated to our dalbavancin project, expressed as a percentage of total research and development expense for the period, was:

23% for the year 2002 compared to 21% for the year 2001 and 6% for the year 2000; and

16% in the aggregate from our inception through December 31, 2002.

Our development administration overhead costs are included in total research and development expense for each period, but are not allocated among our various projects.

The goal of our dalbavancin project is to obtain marketing approval from the FDA and analogous international agencies; and we will consider the project substantially complete if we obtain those approvals even though subsequent to that time we might incur additional expenses in conducting additional clinical trials and follow-up studies. Before we can obtain such marketing approvals we will need to complete pivotal Phase III clinical trials with satisfactory results and submit a NDA to the FDA. In any case, we would not expect to file an NDA for dalbavancin until the second half of 2004,

at the earliest. We are unable to estimate the costs to completion for our dalbavancin project due to the risks surrounding the clinical trial process, including the risk that we may repeat, revise or expand the scope of our ongoing clinical trials or conduct additional clinical trials to secure marketing approvals and the additional risks listed under the caption "Risk Factors Risks Related to our Business". If clinical trials for our product candidates are unsuccessful or delayed, we will be unable to meet our anticipated development and commercialization timelines, which

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

could harm our business and cause our stock price to decline." Material cash inflows relating to our dalbavancin project will not commence until after marketing approvals are obtained, and then only if dalbavancin finds acceptance in the marketplace. Because of the many risks and uncertainties relating to the completion of clinical trials, receipt of marketing approvals and acceptance in the marketplace, we cannot predict when material cash inflows from our anidulafungin project will commence, if ever.

A failure to obtain marketing approval for dalbavancin would likely have the following results on our operations, financial position and liquidity:

because our research and development projects are independent, a failure to obtain marketing approval for dalbavancin would not necessarily interrupt our development programs for anidulafungin or our pre-clinical compounds; however, we might reduce our development staff (unless one or more of our other product candidates is then entering in late-stage clinical trials, in which case we might be able to re-assign dalbavancin researchers to those projects);

we would not earn any sales revenue from dalbavancin, which would increase the likelihood that we would need to obtain additional financing for our other development efforts; and

our reputation among investors might be harmed, which might make it more difficult for us to obtain equity capital on attractive terms or at all.

Risks relating to our major research and development projects

We face many risks that could prevent or delay the completion of our anidulafungin and dalbavancin projects, including those listed under the caption "Risk Factors Risks Related to Operating in our Industry."

Development Administration

Research and development expense comprising development administration overhead costs, expressed as a percentage of total research and development expense for the period, was:

14% for the year 2002, compared to 14% for the year 2001 and 28% for the year 2000; and

13% in the aggregate from our inception through December 31, 2002.

We do not allocate our development administration costs among our various projects because our development administration group is managed as a separate cost center and its expenditures are not always project specific.

Other research and development projects

The remaining 38% of our total research and development expenses from our inception through December 31, 2002 were generated by various pre-clinical studies and drug discovery programs, including our collaborations with Pfizer and Novartis described below.

Oxazolidinones collaboration with Pfizer. In March 1999, we entered into a collaboration agreement with Pharmacia (later acquired by Pfizer) pursuant to which we are collaborating to discover, synthesize and develop second and third generation oxazolidinone product candidates. In connection with the collaboration, Pharmacia made an equity investment in us of \$3.8 million and paid

us research support and license fee payments. Under the terms of the agreement and in consideration of our research obligations, we are entitled to receive funding from Pfizer, as successor to Pharmacia, to support certain of our full-time researchers. If specified milestones are achieved,

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

Pfizer is obligated to pay us additional payments of up to \$14.0 million for each compound, a portion of which may be credited against future royalty payments to which we are entitled on the worldwide sales of any drug developed and commercialized from the collaboration. In October 2000, Pharmacia increased its funding for this collaboration by 30%, and in June 2001, we received a milestone payment for the initiation of clinical development of one of the compounds. In July 2002, we agreed with Pharmacia by amendment to extend the collaboration for an additional three years through March 2005. Through December 31, 2002, Pharmacia made aggregate payments to us under this collaboration agreement (excluding equity investments) of \$13.9 million.

Research and development expense allocated to our collaboration with Pfizer, expressed as a percentage of total research and development expense for the period, was:

7% for the year 2002, compared to 10% for the year 2001 and 19% for the year 2000; and

10% in the aggregate from January 1, 1999 through December 31, 2002.

The goal of our collaboration with Pfizer is to discover, synthesize and obtain marketing approval for second and third generation oxazolidinone product candidates. We supply research, product leads and other specified intellectual property to the collaboration. The collaboration also depends upon Pfizer to develop the product candidates, to obtain marketing approval from the FDA and analogous international agencies and to manufacture and sell any products resulting from the collaboration. Material cash inflows in the form of royalties relating to this collaboration will not commence until after marketing approvals are obtained, and then only if the product finds acceptance in the marketplace. One product candidate resulting from the collaboration has entered Phase I clinical trials. In order to obtain marketing approval, Pfizer will need to complete Phase I, II and III clinical trials with satisfactory results and submit a NDA to the FDA. Pfizer is under no obligation to continue the development of any product candidate resulting from this collaboration. Because of this, and the substantial risks and uncertainties relating to the completion of clinical trials, receipt of marketing approvals and acceptance in the marketplace, we cannot predict when material cash inflows from our collaboration with Pfizer will commence, if ever.

Deformylase inhibitors collaboration with Novartis. In March 1999, we entered into a collaboration agreement with Novartis pursuant to which we are collaborating to discover and develop novel deformylase inhibitors. In connection with the collaboration, Novartis made an initial equity investment in us of \$3.0 million. We have also received a number of milestone payments from Novartis and are entitled to receive additional payments of up to \$13.0 million for our compounds or up to \$7.25 million for Novartis compounds upon the achievement of specified milestones. Novartis may deduct a portion of these milestone payments from the royalties it will be obligated to pay us on the worldwide sales of any drug developed and commercialized from this collaboration. As a result of progress achieved by the collaboration, in July 2002 we agreed with Novartis by amendment to extend the collaboration by an additional year through March 2003. Through December 31, 2002, Novartis has made aggregate payments to us under this agreement (excluding equity investments) of \$11.1 million.

Research and development expense allocated to our collaboration with Novartis, expressed as a percentage of total research and development expense for the period, was:

5% for the year 2002, compared to 8% for the year 2001 and 17% for the year 2000; and

8% in the aggregate from January 1, 1999 through December 31, 2002.

The goal of our collaboration with Novartis is to discover, synthesize and obtain marketing approval for deformylase inhibitor product candidates. We are responsible for supplying research to the

collaboration, according to a research plan developed by a joint research committee. Our research obligations currently extend through March 2003. Novartis provides us with funding to support some of our researchers on this project. The collaboration will depend upon Novartis to conduct the development of product candidates and to obtain marketing approval from the FDA and analogous international agencies. Material cash inflows in the form of royalties relating to this collaboration will not commence until after marketing approvals are obtained, and then only if the product finds acceptance in the marketplace. Currently all compounds identified by the collaboration are still in pre-clinical stages. In order to obtain marketing approval, Novartis will need to initiate and complete Phase I, II and III clinical trials with satisfactory results and submit a NDA to the FDA. Novartis is under no obligation to continue the development of any product candidate resulting from this

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

collaboration. Because of this, and the many risks and uncertainties relating to the completion of clinical trials, receipt of marketing approvals and acceptance in the marketplace, we cannot predict when material cash inflows from our collaboration with Novartis will commence, if ever.

In addition to the work on deformylase inhibitors, under the collaboration agreement we have been delivering to Novartis a series of screening assays based on novel anti-bacterial targets. For each screen that Novartis accepts as validated, we receive a milestone payment. In August 2001 and January 2002, Novartis paid us our fourth and fifth milestone payment, respectively, as a result of our delivery of our fourth and fifth target-based screens, which we expect will be used in Novartis' high-throughput screening laboratory to identify new anti-infectives.

A failure by Pfizer or Novartis to pursue or obtain marketing approval for any product candidate resulting from our collaborations could have the following results on our operations, financial position and liquidity:

we would not receive any further milestone payments or any royalty revenue from the collaborations; and

while we do not rely on any particular external development collaboration to produce marketable products (and, ultimately, royalty revenues), the failure of all of our external development collaborations would increase the likelihood that we would need to obtain additional financing for our internal research and development efforts.

LEGAL MATTERS

O'Melveny & Myers LLP, San Francisco, California will pass on the validity of the shares of our common stock offered by this prospectus supplement. Ropes & Gray LLP, Boston, Massachusetts, will pass on certain legal matters in connection with the offered securities on behalf of the underwriters.

NOTICE TO RESIDENTS OF ITALY

This offering of shares of our common stock has not been registered with the Commissione Nazionale per le Società e la Borsa ("CONSOB") pursuant to Article 94, paragraph 1 of Legislative Decree No. 58 of 24 February 1998, as amended ("Legislative Decree No. 58"); accordingly, each underwriter has represented and agreed that it has not offered, and will not offer, any of our shares in the Republic of Italy in a solicitation to the public at large (sollecitazione all'investimento) and, therefore, that our shares shall only be offered in the Republic of Italy to "professional investors" (investitori professionali), as defined under Article 31, paragraph 2, of CONSOB Regulation No. 11522 of 1 July 1998, as amended, or pursuant to another exemption from the registration requirement set forth by Article 94, paragraph 1 of Legislative Decree No. 58 and shall in any event be effected in accordance with any applicable Italian laws and regulations, including any securities, tax and exchange control regulations and any applicable requirement or limitation which may be imposed by CONSOB or the Bank of Italy.

S-40

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other information with the SEC. You can request copies of these documents, upon payment of a duplicating fee, by submitting a request in writing to the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of its Public Reference Room. The SEC also maintains an internet site at <http://www.sec.gov> that contains reports, proxy and information statements and information regarding registrants like us that file electronically. In addition, our common stock is listed on the Nasdaq National Market and the Nuovo Mercato stock exchange in Italy, and similar information concerning us can be inspected and copied at the offices of the National Association of Securities Dealers, Inc., 9513 Key West Avenue, Rockville, Maryland 20850, and at the offices of Borsa Italiana S.p.A., 6 Piazza degli Affari, Milano 20123, Italy.

This prospectus supplement and the accompanying prospectus are part of a registration statement that we have filed with the SEC. The registration statement contains more information than this prospectus supplement and the accompanying prospectus regarding us and our common stock, including a number of exhibits and schedules. You can obtain a copy of the registration statement from the SEC at the address listed above or from the SEC's internet site.

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

You should rely only on the information included or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone else to provide you with different information.

No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus. You must not rely on any unauthorized information or representations. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

S-41

PROSPECTUS

\$80,500,000

Common Stock

The shares of common stock of Vicuron Pharmaceuticals Inc. covered by this prospectus may be offered and sold to the public from time to time in one or more issuances.

Our common stock is quoted on the Nasdaq National Market and the Nuovo Mercato stock exchange in Italy under the symbol "MICU." On June 20, 2003, the closing price of our common stock as reported by Nasdaq was \$14.38 per share.

This prospectus provides you with a general description of the shares that we may offer. Each time we offer shares, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. We may also add, update or change in the prospectus supplement any of the information contained in this prospectus. This prospectus may not be used to sell any of the common stock unless accompanied by a prospectus supplement. You should read both this prospectus and any prospectus supplement together with additional information described under the heading "Where You Can Find More Information" before you make your investment decision.

An investment in our common stock involves significant risks, which we describe in our quarterly report on Form 10-Q for the quarter ended March 31, 2003 and in other documents that we subsequently file with the Securities and Exchange Commission, and which we will describe in supplements to this prospectus.

We will sell shares to underwriters or dealers, through agents, or directly to investors.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is June 23, 2003

No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus. You must not rely on any unauthorized information or representations. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

TABLE OF CONTENTS

	Page
About This Prospectus	ii
Vicuron Pharmaceuticals Inc.	1
Risk Factors	2
Special Note Regarding Forward-Looking Statements	2
Use of Proceeds	2
Unaudited Pro Forma Condensed Consolidated Financial Information	3
Plan of Distribution	9
Legal Matters	11
Experts	11
Where You Can Find More Information	11
Incorporation of Certain Documents by Reference	12

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the United States Securities and Exchange Commission, or SEC, using a "shelf" registration process. Under the shelf process, we may, from time to time, issue and sell to the public any part or all of the shares described in the registration statement in one or more offerings up to an aggregate dollar amount of \$80,500,000.

This prospectus provides you with a general description of the shares that we may offer. Each time we offer shares, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. We may also add, update or change in the prospectus supplement any of the information contained in this prospectus.

You should rely only on the information contained or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with information different from that contained or incorporated by reference into this prospectus. You should assume that the information contained in this prospectus or any prospectus supplement is accurate only as of the date on the front of the document and that any information contained in any document we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any prospectus supplement or any sale of a security. These documents are not an offer to sell or a solicitation of an offer to buy these shares of common stock in any circumstances under which the offer or solicitation is unlawful.

In this prospectus and any prospectus supplement, unless otherwise indicated, the terms "Vicuron," "we," "us" and "our" refer to Vicuron Pharmaceuticals Inc. and its consolidated subsidiaries.

VICURON PHARMACEUTICALS INC.

We are a transatlantic biopharmaceutical company focused on the discovery, development and marketing of drugs for the treatment of seriously ill patients, primarily in the hospital setting. We focus on seeking to develop antibiotics and antifungals that may have competitive advantages over existing products, such as greater potency, improved effectiveness against difficult to treat strains and reduced toxicity. Because the development process for anti-infective products is relatively efficient and well-defined, we believe the costs and time required to bring new anti-infective products to market can be significantly less than the time required to bring products to market in other major therapeutic categories.

We have a two-fold approach to product discovery, development and marketing. Our primary strategy is to focus on the discovery and development of proprietary products, concentrating on injectable antibiotic and antifungal products for the hospital market. We expect to market these products to hospitals in North America and selected European markets through our to be developed direct sales force, which we believe we can accomplish through a targeted and cost-effective sales and marketing infrastructure. Our product candidates target disease indications that represent markets where there is demand for new therapies.

Our secondary strategy is to collaborate with major pharmaceutical companies to discover and develop orally administered antibiotic and antifungal products for the non-hospital market. Major pharmaceutical companies are generally better suited to market these products, as these products require substantial expenditures for sales and marketing to reach their full market potential. Under our typical collaboration agreements,

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

we are responsible for discovering the compounds and our collaborators are responsible for developing and marketing them. We expect to receive a combination of research funding, milestone payments and equity investments from our collaborators, as well as royalty fees if any products are commercialized.

Our discovery platform combines our proprietary expertise in the critical areas of functional genomics, mechanism-based rational drug design, high-throughput screening of our diversified library of microbial extracts, combinatorial chemistry, lead optimization and medicinal chemistry. We intend to leverage our technology platform to discover and supply lead compounds both for internal development and commercialization, in the case of hospital products, and for our pharmaceutical collaborations, in the case of community products.

We were incorporated in Delaware as a wholly-owned subsidiary of Sepracor Inc. in 1995 and began operating as an independent company since 1996. On February 28, 2003, we completed the merger of Biosearch Italia S.p.A. with and into Vicuron, with Vicuron continuing as the surviving corporation. In March 2003, we changed our name from Versicor Inc. to Vicuron Pharmaceuticals Inc. Our principal executive offices are located at 455 South Gulph Road, Suite 305, King of Prussia, Pennsylvania 19406. Our telephone number is (610) 491-2200. Our website is <http://www.vicuron.com>. The information found on our website and on websites linked to it are not incorporated into or a part of this prospectus.

Vicuron and our logo are trademarks of Vicuron Pharmaceuticals Inc. Other trademarks and trade names appearing in this prospectus are the property of their holders.

1

RISK FACTORS

Prior to making an investment decision with respect to the shares that we may offer, you should carefully consider the specific factors set forth under the caption "Risk Factors" in the applicable prospectus supplement, together with all of the information appearing in this prospectus or incorporated by reference into this prospectus and the applicable prospectus supplement, in light of your particular investment objectives and financial circumstances.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents we have filed with the SEC that are incorporated by reference herein contain "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. All statements, other than statements of historical facts included in this prospectus, regarding our strategy, future operations, financial position, projected costs, prospects, plans and objectives of management are forward-looking statements. These statements can often be identified by the use of forward-looking terminology such as "expects," "anticipates," "believes," "intends," "will," or the negative of such terms or other similar types of expressions, although not all forward-looking statements contain these identifying words.

The forward-looking statements are based on our current expectations, assumptions, estimates and projections about our business and our industry, and involve known and unknown risks, uncertainties and other factors that may cause our or our industry's results, levels of activity, performance or achievement to be materially different from any future results, levels of activity, performance or achievements expressed or implied in or contemplated by such forward-looking statements. In addition, the results of our previous clinical trials are not necessarily indicative of future clinical trials results. Our actual results could differ materially from those anticipated in such forward-looking statements as a result of several factors more fully described under the caption "Risk Factors" in our quarterly report on Form 10-Q for the quarter ended March 31, 2003, in the section entitled "Risk Factors" in supplements to this prospectus and elsewhere in this prospectus, including the documents incorporated by reference herein. The forward-looking statements made in this prospectus relate only to events as of the date on which the statements are made. We undertake no obligation to update publicly any forward-looking statements for any reason, even if new information becomes available or other events occur in the future.

This prospectus and the information incorporated by reference herein contains statistics and other data that have been obtained from, or compiled from, information made available by third parties. These statistics and other data have not been prepared by us and we accept no responsibility for the accuracy of that information.

USE OF PROCEEDS

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

We will retain broad discretion over the use of the net proceeds from the sale of our common stock offered hereby. Except as described in any prospectus supplement, we currently anticipate using the net proceeds from the sale of our common stock hereby primarily for clinical development of drug candidates, as well as commercialization activities and general corporate purposes, including working capital and research expenses. In addition, we may use some of the net proceeds to hire additional personnel. The amounts and timing of the expenditures may vary significantly depending on numerous factors, such as the progress of our research and development efforts, technological advances and the competitive environment for our products. We also might use a portion of the net proceeds to acquire or invest in complementary businesses, products and technologies.

Pending the use of the net proceeds, we intend to invest the net proceeds in short-term, interest-bearing, investment-grade securities.

2

UNAUDITED PRO FORMA CONDENSED CONSOLIDATED FINANCIAL INFORMATION

On February 28, 2003, we completed the merger of Biosearch Italia S.p.A. with and into Vicuron, with Vicuron continuing as the surviving corporation. In March 2003, we changed our name from Versicor Inc. to Vicuron Pharmaceuticals Inc. The following pro forma condensed consolidated financial information is based on the historical U.S. GAAP financial statements of Vicuron Pharmaceuticals Inc., or Vicuron, and Biosearch Italia S.p.A., or Biosearch, and has been prepared to illustrate the effect of the merger of Biosearch with and into Vicuron which was completed on February 28, 2003. The unaudited pro forma condensed consolidated statements of operations for the year ended December 31, 2002 and for the three months ended March 31, 2003 assume that the merger occurred as of January 1, 2002.

The merger has been accounted for under the purchase method of accounting. Under the purchase method of accounting, assets acquired and liabilities assumed are recorded at their estimated fair values. Goodwill is recorded to the extent that the merger consideration, including certain acquisition and closing costs, exceeds the fair value of the net assets acquired. The actual fair value of the net assets acquired at February 28, 2003 exceeded the purchase price and, therefore, there is negative goodwill arising as a result of the merger. This amount has been allocated to the values of property, plant and equipment and intangible assets acquired pro rata to their deemed fair values as of the merger date. The value assigned to identifiable intangible assets is being amortized over their estimated useful lives of between two and 13 years. Amounts allocated to in-process research and development were recorded as a non-cash charge to operations in the first quarter of 2003, however, in accordance with the rules and regulations promulgated under Regulation S-X, Article 11, non recurring charges should not be included in pro forma financial statements. The final determination of the purchase price allocation has been based on the fair values of the assets, including the fair value of in-process research and development and other intangibles, and the fair value of liabilities assumed at the date of the closing of the merger.

The pro forma adjustments are based upon available information and assumptions that Vicuron's management believes are reasonable. The unaudited condensed consolidated statements of operations are not necessarily indicative of Vicuron's future results of operations or the results of operations which might have occurred had the merger occurred on January 1, 2002. The pro forma adjustments are described in the following footnotes.

The unaudited pro forma condensed consolidated financial information should be read in conjunction with the audited financial statements and related notes of Vicuron and Biosearch incorporated by reference in this prospectus.

3

Unaudited Pro Forma Condensed Consolidated Statement of Operations of Vicuron For The Year Ended December 31, 2002

<u>Historical Vicuron</u>	<u>Historical Biosearch (Note 2)</u>	<u>Pro Forma Adjustments</u>	<u>Pro Forma</u>
-------------------------------	--	----------------------------------	------------------

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

	Historical Vicuron	Historical Biosearch (Note 2)	Pro Forma Adjustments	Pro Forma
(in thousands, except per share amounts)				
Revenues:				
Collaborative research and development, contract services and government grants	\$ 6,083	\$ 4,033	\$ (770) (a)	\$ 9,346
License fees and milestones	258	1,117	(177) (a)	1,198
Total revenues	6,341	5,150	(947)	10,544
Operating expenses:				
Research and development	48,189	11,542	(3,847) (a) 1,304) (b)	57,188
General and administrative	8,184	5,475		13,659
Amortization of intangible assets			1,862 (c)	1,862
Total operating expenses	56,373	17,017	(681)	72,709
Loss from operations	(50,032)	(11,867)	(266)	(62,165)
Interest income (expense), net	1,236	2,893	(906) (d)	3,223
Net loss	\$ (48,796)	\$ (8,974)	\$ (1,172)	\$ (58,942)
Net loss per share, basic and diluted	\$ (1.91)	\$ (0.74)		\$ (1.26) (e)
Shares used in computing net loss per share, basic and diluted	25,516	12,093		46,748
	4			

**Unaudited Pro Forma Condensed Consolidated
Statement of Operations of Vicuron
For The Three Months Ended March 31, 2003**

	Historical Vicuron	Historical Biosearch (Note 2)	Pro Forma Adjustments	Pro Forma
(in thousands, except per share amounts)				
Revenues:				
Collaborative research and development, contract services and government grants	\$ 1,518	\$ 578	\$	\$ 2,096
License fees and milestones		163	(46) (a)	117
Total revenues	1,518	741	(46)	2,213
Operating expenses:				
Research and development	11,179	2,639	988 (a) 326 (b)	15,132
General and administrative	1,723	4,497		6,220
Amortization of intangible assets			465 (c)	465

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

	Historical Vicuron	Historical Biosearch (Note 2)	Pro Forma Adjustments	Pro Forma
Total operating expenses	12,902	7,136	1,779	21,817
Loss from operations	(11,384)	(6,395)	(1,825)	(19,604)
Interest income (expense), net	173	688		861
Net loss	\$ (11,211)	\$ (5,707)	\$ (1,825)	\$ (18,743)
Net loss per share, basic and diluted	\$ (0.42)	\$ (0.47)		\$ (0.39) (e)
Shares used in computing net loss per share, basic and diluted	26,446	12,085		47,678
	5			

NOTES TO UNAUDITED PRO FORMA

CONDENSED CONSOLIDATED FINANCIAL INFORMATION

1. Basis of Presentation

On February 28, 2003, Vicuron acquired all of the outstanding shares of Biosearch in a transaction accounted for as a purchase under accounting principles generally accepted in the United States of America. In connection with the merger, Vicuron issued 1.77 shares of its common stock for each outstanding share of Biosearch stock, or approximately 21.4 million shares. Vicuron also issued options covering approximately 4.3 million common shares, including options issued to replace options that were held by Biosearch employees and consultants at the date of the merger.

As of February 28, 2003, there were 12.1 million shares of Biosearch ordinary shares issued and approximately 250,000 Biosearch shares issuable upon exercise of outstanding options. Based on these amounts, Biosearch shareholders received approximately 21.4 million shares of Vicuron common stock, and holders of Biosearch options received options to purchase approximately 428,000 shares of Vicuron common stock.

The purchase price of the acquisition was approximately \$243.1 million, as follows (in thousands):

Issuance of Vicuron shares	\$ 232,912
Issuance of options to acquire Vicuron shares	3,177
Transaction costs	6,978
Total	\$ 243,067

The fair value of the Vicuron shares used in determining the purchase price was \$10.97 per share based on the average closing price of Vicuron's stock from the two days before through two days after July 31, 2002, the date of the public announcement of the merger. The fair value of the options to acquire Vicuron shares was determined using the Black-Scholes option pricing model assuming a market price of \$10.30, the closing market price of Vicuron stock on February 28, 2003; an exercise price of \$10.62; an expected average life of four years; a weighted average interest rate of 3.90%; volatility of 104%; and no expected dividends.

The allocation of the purchase price is as follows (in thousands):

	February 28, 2003
Current assets	\$ 107,595
Property, plant and equipment	24,466
In-process research and development	94,532
Intangible assets	20,786
Other assets	14,356
Current liabilities	(17,535)
Long-term assets	(1,133)

	February 28, 2003
Net assets	\$ 243,067

The valuation of the purchased in-process research and development of \$94.5 million was based on the result of a valuation using the income approach and applying the percentage completion to risk-adjust the discount rates associated with each of the two significant in-process projects, ramoplanin and dalbavancin, and one additional project, BI-K-0376. The VITACHEM program and all other research and development projects have been valued as part of Biosearch's core technology and are therefore included in intangible assets, not in-process research and development. The two significant

6

in-process projects relate primarily to the development of a novel antibiotic to treat Gram-positive bacteria, ramoplanin, and a novel second-generation glycopeptide agent, dalbavancin. These in-process projects require additional significant rigorous scientific and clinical testing expected to be completed in the second half of 2004 with cash inflows from product sales forecasted to begin in 2005. Each project will require additional scientific research and chemical development, expenditures to conduct clinical trials and related legal and regulatory expense in connection with the drug approved process to complete the in-process projects. Both significant in-process projects are still undergoing clinical trials and have not received regulatory approval. The primary risk in completing the projects is the successful completion of the clinical testing and regulatory approval process. This process is time and research intensive and new drugs face significant challenges before they can be brought to the market. Any delay in the approval process could have significant consequences including increased costs thus jeopardizing the economic returns expected to be realized, delay in the rollout of the product with potential lower revenues due to competing products reaching the market and potential loss of credibility to Vicuron's scientific team.

Under the income approach, value is dependent on the present value of future economic benefits to be derived from the ownership of an asset. Central to this method is an analysis of the earnings potential represented by the appraised asset and of the underlying risk associated with obtaining those earnings. Value indications are developed by discounting future net cash flows available for distribution to their present value at market-based rates of return. Discount rates of 45%-50% were used, which are commensurate with the overall risk and percent complete of the in-process projects. Our management concluded that technological feasibility of the purchased in-process research and development had not been reached, and the technology had no alternative future uses. Accordingly, the amount allocated to in-process research and development was charged to the statement of operations in the first quarter of 2003. The results of the income approach do not necessarily indicate the price that a third party would be willing to pay to acquire the in-process project.

On the date of the merger, the fair value of the net assets acquired exceeded the purchase price paid. Therefore, there is negative goodwill arising on the acquisition of \$6.6 million. This amount has been allocated to the values of property, plant and equipment and intangible assets acquired pro rata to their deemed fair values as of the merger date.

The estimated identifiable intangible assets arising from the merger total \$20.8 million. These intangible assets have estimated useful lives of between two and 13 years.

2. Exchange Rates

The historic Biosearch statements of operations have been translated into U.S. dollars using the average Euro/U.S. dollar exchange rates for the periods presented. The average Euro/U.S. dollar exchange rate is 0.9454 and 1.0735 for the year ended December 31, 2002 and the three months ended March 31, 2003, respectively.

3. Pro Forma Adjustments

- a) Represents the elimination of intercompany balances/transactions.
- b) Represents additional depreciation of property, plant and equipment arising from the revaluation of Biosearch assets to fair value as at the date of acquisition.

- c) Represents amortization of identifiable intangible assets based on estimated fair values and useful lives assigned to these assets at the date of acquisition.

7

- d) Represents the elimination of the gain recognized by Biosearch on the sale of Vicuron common stock.
- e) Pro forma basic and diluted earnings per share is calculated by dividing the pro forma net loss by the pro forma weighted average shares outstanding as follows (in thousands):

	Year Ended December 31, 2002	Three Months Ended March 31, 2003
Vicuron historical weighted average shares	25,516	26,446
Shares issued to acquire Biosearch	21,232	21,232
Pro forma weighted average shares	46,748	47,678

8

PLAN OF DISTRIBUTION

We may sell the shares being offered by us in this prospectus to or through underwriters, dealers, agents or directly to one or more purchasers. We and our agents reserve the right to accept and to reject in whole or in part any proposed purchase of shares. A prospectus supplement, which we will provide to you each time we offer securities, will provide the names of any underwriters, dealers, or agents, if any, involved in the sale of the shares, and any applicable fee, commission, or discount arrangements with them.

We and our agents and underwriters may sell the shares being offered by us in this prospectus from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

We may determine the price or other terms of the shares offered under this prospectus by use of an electronic auction. We will describe how any auction will determine the price or any other terms, how potential investors may participate in the auction and the nature of the underwriters' obligations in the applicable prospectus supplement.

We may solicit directly offers to purchase shares. We may also designate agents from time to time to solicit offers to purchase shares. Any agent that we designate, who may be deemed to be an underwriter as that term is defined in the Securities Act, may then resell such shares to the public at varying prices to be determined by such agent at the time of resale. We may engage in at the market offerings of our common stock. An at the market offering is an offering of our common stock at other than a fixed price to or through a market maker. Under Rule 415(a)(4) of the

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

Securities Act, the total value of at the market offerings made under this prospectus may not exceed 10% of the aggregate market value of our common stock held by non-affiliates. Any underwriter that we engage for an at the market offering would be named in a post-effective amendment to the registration statement containing this prospectus. Additional details of our arrangement with the underwriter, including commissions or fees paid by us and whether the underwriter is acting as principal or agent, would be described in the related prospectus supplement. If we use underwriters to sell shares, we will enter into an underwriting agreement with the underwriters at the time of the sale to them. The names of the underwriters will be set forth in the prospectus supplement which will be used by them together with this prospectus to make resales of the shares to the public. In connection with the sale of the shares offered, the underwriters may be deemed to have received compensation from us in the form of underwriting discounts or commissions. Underwriters may also receive commissions from purchasers of the shares.

Underwriters may also use dealers to sell shares. If this happens, the dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agents.

Any underwriting compensation paid by us to underwriters in connection with the offering of the shares offered in this prospectus, and any discounts, concessions or commissions allowed by underwriters to participating dealers, will be set forth in the applicable prospectus supplement.

Underwriters, dealers, agents and other persons may be entitled, under agreements that may be entered into with us, to indemnification by us against certain civil liabilities, including liabilities under the Securities Act of 1933, or to contribution with respect to payments which they may be required to make in respect of such liabilities. Underwriters and agents may engage in transactions with, or perform services for, us in the ordinary course of business. If so indicated in the applicable prospectus

9

supplement, we will authorize underwriters, dealers, or other persons to solicit offers by certain institutions to purchase the shares offered by us under this prospectus pursuant to contracts providing for payment and delivery on a future date or dates. The obligations of any purchaser under these contracts will be subject only to those conditions described in the applicable prospectus supplement, and the prospectus supplement will set forth the price to be paid for shares pursuant to those contracts and the commissions payable for solicitation of the contracts.

Any underwriter may engage in over-allotment, stabilizing and syndicate short covering transactions and penalty bids in accordance with Regulation M of the Exchange Act. Over-allotment involves sales in excess of the offering size, which creates a short position. Stabilizing transactions involve bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Syndicate short covering transactions involve purchases of shares in the open market after the distribution has been completed in order to cover syndicate short positions. Penalty bids permit the underwriters to reclaim selling concessions from dealers when the shares originally sold by such dealers are purchased in covering transactions to cover syndicate short positions. These transactions may cause the price of the shares sold in an offering to be higher than it would otherwise be. These transactions, if commenced, may be discontinued by the underwriters at any time.

Each issuance of shares offered under this prospectus will be a new issue of our common stock, which is listed on the Nasdaq National Market. Any shares of our common stock sold pursuant to a prospectus supplement will be listed on the Nasdaq National Market or on the exchange on which the stock offered is then listed, subject (if applicable) to official notice of issuance. Any underwriters to whom we sell shares for public offering and sale may make a market in the shares that they purchase, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice.

The anticipated date of delivery of the shares offered hereby will be set forth in the applicable prospectus supplement relating to each offering.

In order to comply with certain state securities laws, if applicable, the shares may be sold in such jurisdictions only through registered or licensed brokers or dealers. In certain states, the shares may not be sold unless the shares have been registered or qualified for sale in such state or an exemption from regulation or qualification is available and is complied with. Sales of shares must also be made by us in compliance with all other applicable state securities laws and regulations.

We will pay all expenses of the registration of the shares.

10

LEGAL MATTERS

The validity of the shares of our common stock offered hereby will be passed upon for us by O'Melveny & Myers LLP, San Francisco, California.

EXPERTS

The financial statements of Vicuron Pharmaceuticals Inc. incorporated in this Prospectus by reference to the Annual Report on Form 10-K/A 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.

The consolidated financial statements of Biosearch Italia S.p.A. incorporated in this Prospectus by reference to the Current Report on Form 8-K of Vicuron Pharmaceuticals Inc. filed on June 6, 2003, have been so incorporated in reliance on the report of PricewaterhouseCoopers SpA, independent accountants, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information and reporting requirements of the Securities Exchange Act of 1934, as amended, under which we file annual, quarterly and special reports, proxy and information statements and other information with the SEC. Our filings, including the registration statement, are available to the public over the internet at the SEC's web site at <http://www.sec.gov>. You may also read and copy any documents 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., Washington, D.C. 20549. You can request copies of these documents, upon payment of a duplicating fee, by submitting a request in writing to the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. In addition, our common stock is listed on the Nasdaq National Market and the Nuovo Mercato stock exchange in Italy, and similar information concerning us can be inspected and copied at the offices of the National Association of Securities Dealers, Inc., 9513 Key West Avenue, Rockville, Maryland 20850, or at the offices of Borsa Italiana S.p.A., 6 Piazza degli Affari, Milano 20123, Italy.

We have filed a registration statement on Form S-3 under the Securities Act of 1933, as amended, with the SEC with respect to the common stock being offered pursuant to this prospectus. This prospectus does not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus to any contract, agreement or other document of Vicuron, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference in this prospectus for a copy of such contract, agreement or other document. Copies of all or any part of the registration, including the documents incorporated by reference or the exhibits, may be obtained upon payment of the prescribed rates at the offices of the SEC listed above.

You should rely only on the information incorporated by reference or provided in this prospectus and any prospectus supplement. We have not authorized anyone else to provide you with different information.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with it, which means that we can disclose important business, financial and other information to you in this prospectus by referring you to the publicly filed documents containing this information. The information incorporated by reference is deemed to be a part of this prospectus, except for any information superseded by information contained in this prospectus or filed later by us with the SEC. We incorporate by reference into this prospectus the following documents that we have previously filed with the SEC, which documents contain important information about Vicuron and our common stock:

our annual report on Form 10-K/A for the year ended December 31, 2002;

Edgar Filing: VICURON PHARMACEUTICALS INC - Form 424B5

our proxy statement for our 2003 Annual Meeting of Shareholders as filed on Schedule 14A on April 29, 2003;

our quarterly report on Form 10-Q for the quarter ended March 31, 2003;

our current reports on Form 8-K filed on March 26, 2003 and June 6, 2003; and

the description of our common stock contained in our registration statement on Form 8-A filed with the SEC on July 25, 2000 (File No. 0-31145), including any amendment or report updating this description.

All reports and other documents subsequently filed by us with the SEC pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934, as amended, after the date of this prospectus and prior to the termination of the offering shall be deemed to be incorporated by reference in this prospectus and to be a part of this prospectus from the date of filing of such reports and documents. This prospectus also incorporates by reference any documents that we file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement. Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or in any other subsequently filed document which also is or is deemed to be incorporated by reference in this prospectus modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will provide without charge to each person to whom this prospectus is delivered, upon written or oral request, a copy of any and all of the documents that have been incorporated by reference in this prospectus, other than the exhibits to such documents unless the exhibits are specifically incorporated by reference but not delivered with this prospectus. Requests should be directed to Dov A. Goldstein, M.D., Vice President, Finance and Chief Financial Officer, Vicuron Pharmaceuticals Inc., 455 South Gulph Road, Suite 305, King of Prussia, Pennsylvania 19406.

QuickLinks

[TABLE OF CONTENTS PROSPECTUS SUPPLEMENT](#)

[PROSPECTUS SUPPLEMENT SUMMARY](#)

[THE OFFERING](#)

SUMMARY CONSOLIDATED FINANCIAL DATA

SUMMARY PRO FORMA CONDENSED CONSOLIDATED FINANCIAL DATA

RISK FACTORS

Risks Related to Our Business

Risks Related to the Recent Merger with Biosearch and International Expansion

Risks Related to Operating in Our Industry

Risks Related to the Securities Markets

Risks Related to this Offering

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

USE OF PROCEEDS

MARKET PRICE AND DIVIDENDS ON OUR COMMON STOCK

CAPITALIZATION

DILUTION

UNDERWRITERS

REGULATION G DISCLOSURE

LEGAL MATTERS

NOTICE TO RESIDENTS OF ITALY

WHERE YOU CAN FIND MORE INFORMATION

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS

VICURON PHARMACEUTICALS INC.

RISK FACTORS

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

USE OF PROCEEDS

UNAUDITED PRO FORMA CONDENSED CONSOLIDATED FINANCIAL INFORMATION

Unaudited Pro Forma Condensed Consolidated Statement of Operations of Vicuron For The Year Ended December 31, 2002

Unaudited Pro Forma Condensed Consolidated Statement of Operations of Vicuron For The Three Months Ended March 31, 2003

PLAN OF DISTRIBUTION

LEGAL MATTERS

EXPERTS

WHERE YOU CAN FIND MORE INFORMATION

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE