

NEUROCRINE BIOSCIENCES INC
Form 424B5
November 28, 2001

This filing is made pursuant
to Rule 424 (b) (5) under
the Securities Act of
1933 in connection with
Registration No. 333-73216

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

**Preliminary Prospectus Supplement to Prospectus Dated November 20, 2001
Subject to Completion, Dated November 28, 2001**

3,250,000 Shares

Common Stock

This is a public offering of common stock of Neurocrine Biosciences, Inc. We are offering 3,250,000 shares of our common stock. Our common stock is traded on the Nasdaq National Market under the symbol NBIX. On November 23, 2001, the last reported sale price of our common stock was \$47.90 per share.

Investing in the common stock involves risk. See Risk Factors beginning on page S-7.

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

	Per Share	Total
Public offering price	\$	\$
Underwriting discounts and commissions	\$	\$
Proceeds, before expenses, to Neurocrine	\$	\$

We have granted the underwriters the right to purchase up to 487,500 additional shares of common stock to cover over-allotments.

Joint Bookrunning Managers

Deutsche Banc Alex. Brown

Credit Suisse First Boston

CIBC World Markets

Lehman Brothers

UBS Warburg

The date of this prospectus supplement is _____, 2001.

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement is a supplement to the accompanying prospectus that is also a part of this document. This prospectus supplement and the accompanying prospectus are part of a registration statement that we filed with the Securities and Exchange Commission using a shelf registration process. Under the shelf registration process, we may sell any combination of the securities described in the accompanying prospectus up to a total dollar amount of \$200,000,000, of which this offering is a part. In this prospectus supplement, we provide you with specific information about the terms of this offering and certain other information. Both this prospectus supplement and the accompanying prospectus include important information about us, our common stock and other information you should know before investing in our common stock. This prospectus supplement and the accompanying prospectus also incorporate important business and financial information about Neurocrine Biosciences, Inc. and its subsidiaries that is not included in or delivered with these documents. You should read both this prospectus supplement and the accompanying prospectus as well as the additional information described under the heading *Where You Can Find More Information* beginning on page S-63 of this prospectus supplement before investing in our common stock. This prospectus supplement adds, updates and changes information contained in the accompanying prospectus and the information incorporated by reference. To the extent that any statement that we make in this prospectus supplement is inconsistent with the statements made in the accompanying prospectus or the information incorporated by reference, the statements made in the accompanying prospectus are deemed modified or superseded by the statements made in this prospectus supplement.

S-1

SUMMARY

This summary highlights selected information contained in greater detail elsewhere in this prospectus supplement. This summary may not contain all of the information that you should consider before investing in our common stock. You should carefully read the entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference therein.

Our Business

Neurocrine Biosciences, Inc. develops and intends to commercialize drugs for the treatment of neurologic and endocrine system-related diseases and disorders. Our product candidates address some of the largest pharmaceutical markets in the world, including insomnia, anxiety, depression, cancer, diabetes and multiple sclerosis. We currently have 15 programs in various stages of research and development, including seven programs in clinical development and one program in advanced preclinical development. Our lead clinical development program is a drug for the treatment of insomnia currently being evaluated in Phase III clinical trials.

While we independently develop the majority of our product candidates, we have entered into collaborations for five of our 15 programs. We have entered into collaboration agreements with GlaxoSmithKline, Wyeth-Ayerst, a division of American Home Products, Taisho Pharmaceutical, Janssen Pharmaceutica, a subsidiary of Johnson & Johnson, and Eli Lilly.

Our Product Candidates

Our clinical development programs address large potential markets in a broad range of disease. These are summarized as follows:

Insomnia. Our most advanced product candidate, NBI-34060, is currently being evaluated in Phase III clinical trials for insomnia. Insomnia is a prevalent neurological disorder, with approximately one-half of the U.S. adult population reporting trouble sleeping a few nights per week or more, according to the National Sleep Foundation. According to Med Ad News, worldwide sedative sales in 2000 totaled approximately \$2.0 billion. However, many sedatives have side effects, including next day residual sedation effects. In addition, existing drugs are restricted to short term use and are not approved for dosing in the middle of the night or to maintain sleep throughout the night. As a result, we believe there is a significant unmet medical need for an improved sedative.

We have completed 19 Phase I and Phase II clinical trials of NBI-34060 for efficacy and safety involving more than 1,100 subjects. Results from these trials demonstrate that NBI-34060 significantly decreases time to sleep onset in both transient and chronic insomnia subjects without evidence of increased unwanted side effects or next day residual sedation as compared to placebo. In several of these studies, we observed that NBI-34060 increased sleep duration and reduced the number of nighttime awakenings. The compound was also shown in Phase II trials to be safe when used in the middle of the night.

Based upon the positive results from these Phase II trials, we have planned a comprehensive Phase III clinical program involving approximately 2,200 subjects in seven large

clinical trials to confirm the safety and efficacy of NBI-34060 and to differentiate the compound from other sleep medicines. In November 2001, we initiated our first Phase III clinical trial of NBI-34060 in approximately 500 patients to evaluate two doses of an immediate release formulation of NBI-34060 for long-term treatment of chronic insomnia.

Depression and Anxiety. Our product candidate, NBI-34041, is currently being evaluated in Phase I clinical trials for depression and anxiety. Depression and anxiety are two of the most common psychiatric disorders. Researchers believe that a chemical known as a corticotropin-releasing factor, or CRF, is overproduced in the brains of individuals with clinical depression and anxiety. NBI-34041 is one of a new class of compounds that functions by attaching to the receptors for CRF, thereby antagonizing, or blocking, its activity.

We have intellectual property rights to two receptors for CRF and have developed numerous classes of novel small molecule drugs to block these receptors. In August 2001, we began a collaboration with GlaxoSmithKline, or GSK, to develop and commercialize a new class of CRF antagonists, including NBI-34041. We have completed two Phase I safety trials of NBI-34041 and together with GSK expect to initiate further safety and efficacy trials in 2002. We also have a backup CRF antagonist in preclinical development, which we expect will advance into Phase I trials in 2002.

Cancer. Our product candidate, NBI-3001, is in Phase II clinical trials for malignant glioma, an aggressive form of brain cancer, and is currently being evaluated in a Phase I safety trial for kidney, lung and breast cancer. Interleukin-4, or IL-4, is a natural substance that modulates cell growth. Cell surface proteins that bind to IL-4, known as IL-4 receptors, are highly concentrated on the cells of malignant brain tumors as well as many other cancers, including some types of kidney, lung and breast cancer. By attaching a toxic agent to the IL-4 protein, we may preferentially target the IL-4 receptors and thus selectively kill cancer cells.

In malignant glioma, we have completed two Phase II clinical trials. In the first trial, completed in February 2000, NBI-3001 demonstrated an acceptable safety and tolerability profile. In addition, of the 27 patients who completed therapy, 63% showed complete or partial reduction in tumor size at least once during follow-up. In the second Phase II clinical trial, we tested the compound in 18 patients to confirm the optimum dosing schedule for Phase III trials. We expect to meet with the FDA in early 2002 to discuss the requirements for our Phase III trials. In addition, if the Phase I safety trial in the U.S. for kidney, lung and breast cancer proves successful, we expect to move into Phase II efficacy trials in the second half of 2002. The FDA has awarded fast track and orphan drug status for this drug candidate for treatment of a certain type of glioma. We have maintained worldwide commercial rights to NBI-3001 for oncology uses and an exclusive option for all other therapeutic uses.

Multiple Sclerosis. We have completed two Phase II safety and preliminary efficacy trials for our product candidate, NBI-5788, in patients with a recurring form of multiple sclerosis. In autoimmune diseases such as multiple sclerosis, T cells, which ordinarily target infectious agents, may mistake normally occurring proteins in the central nervous system as foreign. In multiple sclerosis, this protein is called myelin, and destruction of the myelin which surrounds the nerve fibers in the brain and spinal cord leads to neurologic dysfunction and degeneration of the central nervous system. By altering the structure of this protein using our altered peptide ligand technology, we believe that NBI-5788 may prevent T cells from destroying healthy tissue.

We have maintained worldwide commercial rights to NBI-5788. We are currently in the process of preparing a clinical development plan for confirmatory Phase II trials for this product candidate to determine optimal dose and frequency of administration.

Diabetes. Our drug candidate, NBI-6024, is currently being tested in a Phase II clinical trial in patients with Type I diabetes. In Type I diabetes, as in multiple sclerosis, the immune system erroneously targets healthy tissue in this case the pancreatic cells responsible for the production of insulin. By altering the structure of certain proteins in these cells, we believe that NBI-6024 may prevent the destruction of insulin-secreting cells, allowing patients to delay or avoid chronic insulin therapy.

We have completed several safety trials in approximately 100 diabetic patients, which have demonstrated that our compound was safe and well tolerated. We recently initiated a 386-patient Phase II efficacy trial and expect to initiate a second 300-patient Phase II trial in early 2002. We are developing this drug candidate in worldwide collaboration with Taisho Pharmaceutical.

Hormone dependent disease. Gonadotropin-releasing hormone is a hormone that regulates sex steroid production and normal reproductive function. Researchers have linked elevated levels of this hormone to diseases such as prostate cancer and endometriosis, a common uterine disease. We have developed antagonists of the receptors for this hormone, and initiated Phase I safety trials in November of this year. Current treatments for these diseases are large molecule drugs administered by injection. Our drug candidates, if successfully commercialized, would be administered orally.

Research. We have seven additional research programs in areas such as neurodegenerative disease, obesity, and gastrointestinal, sleep and eating disorders. We believe that these research programs will supply clinical development candidates in the future.

Our Business Strategy

Our strategy is to build a large and diversified product portfolio, which we believe maximizes our commercial opportunity and reduces overall clinical and technical risk. We focus on drug candidates that we believe address large unmet market opportunities. We pursue this strategy through internal drug development efforts, through collaborations with global pharmaceutical companies and by acquiring rights to complementary drugs. In conducting our drug development efforts, we collaborate with platform technology companies to supplement our research capabilities, and we generally outsource capital intensive, non-strategic activities.

Other Information

We were incorporated in California in 1992 and reincorporated in Delaware in 1996. Our common stock began trading publicly in May 1996. Our headquarters are located at 10555 Science Center Drive, San Diego, California 92121. Our telephone number is (858) 658-7600. Our website is www.neurocrine.com, but the information on this website does not constitute a part of this prospectus supplement.

S-4

The Offering

Common stock offered by Neurocrine	3,250,000 shares
Common stock to be outstanding after this offering	29,476,218 shares
Use of proceeds	For research and product development, potential technology acquisitions, working capital and general corporate purposes.
Nasdaq National Market symbol	NBIX

The number of shares of our common stock outstanding after the offering is based on the number of shares outstanding as of November 16, 2001. This number does not include:

3,952,380 shares of common stock reserved for the exercise of options outstanding at a weighted average exercise price of \$18.34 per share;

430,504 shares of common stock reserved for the exercise of warrants outstanding at a weighted average exercise price of \$14.72 per share;

174,524 shares of common stock reserved for issuance under our employee stock purchase plan; and

874,735 shares of common stock reserved for issuance under our other stock incentive plans.

Unless otherwise indicated, the information in this prospectus supplement assumes no exercise of the underwriters over-allotment option.

Neurocrine Biosciences is a registered trademark of Neurocrine Biosciences, Inc. All other brand names, trademarks and service marks appearing in this prospectus supplement and the accompanying prospectus are the property of their respective holders.

S-5

Summary Consolidated Financial Data

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

(in thousands, except per share data)

The following table is a summary of our consolidated financial data for the periods presented. You should read this data along with Management's Discussion and Analysis of Financial Condition and Results of Operations included in this prospectus supplement, and our financial statements and related notes in our most recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q, each filed with the Securities and Exchange Commission and incorporated by reference in this prospectus supplement and the accompanying prospectus. The summary financial data for the nine months ended September 30, 2000 and 2001 have been derived from unaudited financial statements. Historical results are not necessarily indicative of results to be expected for any future period.

	Years Ended December 31,					Nine Months Ended September 30,	
	1996	1997	1998	1999	2000	2000(1)	2001
(unaudited)							
Statement of Operations Data:							
Revenues:							
Sponsored research and development	\$ 9,092	\$14,985	\$ 8,751	\$12,171	\$ 6,881	\$ 4,943	\$10,948
Sponsored research and development from related party			3,610	491			
Milestones and license fees	9,000	10,250	2,500	3,000	6,345	2,152	16,459
Grant income and other revenues	1,124	909	1,176	1,129	1,362	1,050	1,002
Total revenues	19,216	26,144	16,037	16,791	14,588	8,145	28,409
Operating expenses:							
Research and development	12,569	18,758	21,803	29,169	40,227	28,404	49,583
General and administrative	3,697	5,664	6,594	7,476	9,962	6,930	7,304
Write-off of acquired in-process research and development and licenses			4,910				
Total operating expenses	16,266	24,422	33,307	36,645	50,189	35,334	56,887
Income (loss) from operations	2,950	1,722	(17,270)	(19,854)	(35,601)	(27,189)	(28,478)
Interest income, net	2,598	3,931	4,000	2,851	6,048	4,293	5,742
Other income	574	818	504	1,066	1,047	973	550
Equity in NPI net losses and other adjustments, net		(1,130)	(7,188)	(885)		(47)	(114)
Net income (loss) before income taxes	6,122	5,341	(19,954)	(16,822)	(28,506)	(21,970)	(22,300)
Income taxes	248	214	1		302	302	
Net income (loss)	\$ 5,874	\$ 5,127	\$(19,955)	\$(16,822)	\$(28,808)	\$(22,272)	\$(22,300)
Earnings (loss) per share(2):							
Basic	\$ 0.39	\$ 0.30	\$ (1.10)	\$ (0.88)	\$ (1.30)	\$ (1.02)	\$ (0.87)
Diluted	\$ 0.36	\$ 0.28	\$ (1.10)	\$ (0.88)	\$ (1.30)	\$ (1.02)	\$ (0.87)
Shares used in calculation of earnings (loss) per share(2):							
Basic	14,971	16,930	18,141	19,072	22,124	21,900	25,575
Diluted	16,127	18,184	18,141	19,072	22,124	21,900	25,575

September 30, 2001

Actual

As Adjusted(3)

Balance Sheet Data:

		(unaudited)
Cash, cash equivalents and short-term investments	\$141,255	\$287,390
Working capital	140,259	286,394
Total assets	177,954	324,089
Long-term debt and capital lease obligations, net of current portion	2,042	2,042
Accumulated deficit	(92,780)	(92,780)
Total stockholders' equity	145,533	291,667

- (1) During the fourth quarter of 2000, we adopted, as required, the SEC's Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements," effective January 1, 2000 (see Note 5, "Revenue Recognition," in the notes to the unaudited condensed financial statements included in our Quarterly Report on Form 10-Q for the period ended September 30, 2001).
- (2) Computed on the basis described for earnings per share in Note 3, "Net Earnings or Loss Per Common Share," in the notes to the unaudited condensed financial statements included in our Quarterly Report on Form 10-Q for the period ended September 30, 2001.
- (3) The As Adjusted Balance Sheet Data summarized above reflects the application of the net proceeds from the sale of the 3,250,000 shares of common stock offered by us at the assumed public offering price of \$47.90 per share and after deducting the underwriting discounts and commissions and our estimated offering expenses.

S-6

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the following risk factors and all other information contained in this prospectus supplement and accompanying prospectus before purchasing our common stock. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties that we are unaware of, or that we currently deem immaterial, also may become important factors that affect us. If any of the following risks occur, our business, financial condition or results of operations could be materially and adversely affected. In that case, the trading price of our common stock could decline, and you may lose some or all of your investment.

Risks Related to our Business

We have a history of losses and expect to incur substantial losses and negative operating cash flows for the foreseeable future, and we may never achieve sustained profitability.

Since our inception, we have incurred significant net losses, including net losses of \$22.3 million in the period from January 1, 2001 through September 30, 2001. As a result of ongoing operating losses, we had an accumulated deficit of \$92.8 million as of September 30, 2001. We do not expect to be profitable in 2001. We have not yet completed the development, including obtaining regulatory approvals, of any products and, consequently, have not generated revenues from the sale of products. Even if we succeed in developing and commercializing one or more of our drugs, we expect to incur substantial losses for the foreseeable future. We also expect to continue to incur significant operating and capital expenditures and anticipate that our expenses will increase substantially in the foreseeable future as we:

- seek regulatory approvals for our product candidates;
- develop, formulate, manufacture and commercialize our drugs;
- implement additional internal systems and infrastructure; and
- hire additional clinical and scientific personnel.

We also expect to experience negative cash flow for the foreseeable future as we fund our operating losses and capital expenditures. As a result, we will need to generate significant revenues to achieve and maintain profitability. We may not be able to generate these revenues, and we may never achieve profitability in the future. Our failure to achieve or maintain profitability could negatively impact the market price of our common stock. Even if we do become profitable, we cannot assure you that we would be able to sustain or increase profitability on a quarterly or annual basis.

If we cannot raise additional funding, we may be unable to complete development of our product candidates.

We may require additional funding in order to continue our research and product development programs, including preclinical testing and clinical trials of our product candidates, for operating expenses, and to pursue regulatory approvals for product candidates. We also may require additional funding to establish manufacturing and marketing capabilities in the future. We believe that our existing capital resources, together with interest income and future payments due under our strategic alliances, will be sufficient to satisfy our current and projected funding requirements for at least the next 12 months. However, these resources might

S-7

be insufficient to conduct research and development programs as planned. If we cannot obtain adequate funds, we may be required to curtail significantly one or more of our research and development programs or obtain funds through additional arrangements with corporate collaborators or others that may require us to relinquish rights to some of our technologies or product candidates.

Our future capital requirements will depend on many factors, including:

- continued scientific progress in our research and development programs;
- the magnitude of our research and development programs;
- progress with preclinical testing and clinical trials;
- the time and costs involved in obtaining regulatory approvals;
- the costs involved in filing and pursuing patent applications and enforcing patent claims;
- competing technological and market developments;
- the establishment of additional strategic alliances;
- the cost of manufacturing facilities and of commercialization activities and arrangements; and
- the cost of product in-licensing and any possible acquisitions.

We intend to seek additional funding through strategic alliances, and may seek additional funding through public or private sales of our securities, including equity securities. In addition, we have leased equipment and may continue to pursue opportunities to obtain additional debt financing in the future. However, additional equity or debt financing might not be available on reasonable terms, if at all, and any additional equity financings will be dilutive to our stockholders.

Because the development of our product candidates is subject to a substantial degree of technological uncertainty, we may not succeed in developing any of our product candidates.

All of our product candidates are in research or development and we do not expect any of our product candidates to be commercially available for the foreseeable future, if at all. Only a small number of research and development programs ultimately result in commercially successful drugs. Potential products that appear to be promising at early stages of development may not reach the market for a number of reasons. These reasons include the possibilities that the potential products may:

- be found ineffective or cause harmful side effects during preclinical studies or clinical trials;
- fail to receive necessary regulatory approvals on a timely basis or at all;
- be precluded from commercialization by proprietary rights of third parties;
- be difficult to manufacture on a large scale; or
- be uneconomical or fail to achieve market acceptance.

If any of these potential problems occurs, we may never successfully market any products.

S-8

In November 2001, we began enrolling subjects in a Phase III clinical trial for NBI-34060, our insomnia product under development. Since this is our most advanced product program, our business and reputation would be particularly harmed if the product does not prove to be efficacious in our late stage clinical trials or we fail to receive necessary regulatory approvals on a timely basis or achieve market acceptance.

We may not receive regulatory approvals for our product candidates or approvals may be delayed.

Regulation by government authorities in the United States and foreign countries is a significant factor in the development, manufacture and marketing of our proposed products and in our ongoing research and product development activities. Any failure to receive the regulatory approvals necessary to commercialize our product candidates would have a material adverse effect on our business. The process of obtaining these approvals and the subsequent substantial compliance with appropriate federal and state statutes and regulations require spending substantial time and financial resources. If we fail or our collaborators or licensees fail to obtain or maintain, or encounter delays in obtaining or maintaining, regulatory approvals, it could adversely affect the marketing of any products we develop, our ability to receive product or royalty revenues and our liquidity and capital resources. All of our products are in research and development and we have not yet requested or received regulatory approval to commercialize any product from the United States Food and Drug Administration or any other regulatory body. In addition, we have limited experience in filing and pursuing applications necessary to gain regulatory approvals, which may impede our ability to obtain such approvals.

In particular, human therapeutic products are subject to rigorous preclinical testing and clinical trials and other approval procedures of the FDA and similar regulatory authorities in foreign countries. The FDA regulates among other things, the development, testing, manufacture, safety, efficacy, record keeping, labeling, storage, approval, advertising, promotion, sale and distribution of biopharmaceutical products. Securing FDA approval requires the submission of extensive preclinical and clinical data and supporting information to the FDA for each indication to establish the product candidate's safety and efficacy. The approval process may take many years to complete and may involve ongoing requirements for post-marketing studies. Any FDA or other regulatory approval of our product candidates, once obtained, may be withdrawn. If our potential products are marketed abroad, they will also be subject to extensive regulation by foreign governments.

Our clinical trials may fail to demonstrate the safety and efficacy of our product candidates, which could prevent or significantly delay their regulatory approval.

Any failure or substantial delay in completing clinical trials for our product candidates may severely harm our business. Before obtaining regulatory approval for the sale of any of our potential products, we must subject these product candidates to extensive preclinical and clinical testing to demonstrate their safety and efficacy for humans. Clinical trials are expensive, time-consuming and may take years to complete.

In connection with our clinical trials, we face the risks that:

- we or the FDA may suspend the trials;
- we may discover that a product candidate may cause harmful side effects;
- the results may not replicate the results of earlier, smaller trials;
- the results may not be statistically significant;

S-9

-
- patient recruitment may be slower than expected; and
 - patients may drop out of the trials.

Also, late stage clinical trials are often conducted with patients having the most advanced stages of disease. During the course of treatment, these patients can die or suffer other adverse medical effects for reasons that may not be related to the pharmaceutical agent being tested but which can nevertheless adversely affect clinical trial results.

The independent clinical investigators and contract research organizations that we rely upon to conduct our clinical trials may not be diligent, careful or timely, and may make mistakes, in the conduct of our trials.

We depend on independent clinical investigators and contract research organizations, or CROs, to conduct our clinical trials under their agreements with us. The investigators are not our employees and we cannot control the amount or timing of resources

that they devote to our programs. If independent investigators fail to devote sufficient time and resources to our drug development programs, or if their performance is substandard, it will delay the approval of our FDA applications and our introductions of new drugs. The CROs we contract with for execution of our clinical trials play a significant role in the conduct of the trials and the subsequent collection and analysis of data. Failure of the CROs to meet their obligations could adversely affect clinical development of our products. Moreover, these independent investigators and CROs may also have relationships with other commercial entities, some of which may compete with us. If independent investigators and CROs assist our competitors at our expense, it could harm our competitive position.

We depend on continuing our current strategic alliances and developing additional strategic alliances to develop and commercialize our compounds.

We depend upon our corporate collaborators to provide adequate funding for a number of our programs. Under these arrangements, our corporate collaborators are responsible for:

- selecting compounds for subsequent development as drug candidates;
- conducting preclinical studies and clinical trials and obtaining required regulatory approvals for these drug candidates; and
- manufacturing and commercializing any resulting drugs.

Our strategy for developing and commercializing our products is dependent upon maintaining our current arrangements and establishing new arrangements with research collaborators, corporate collaborators and others. We have entered into collaborations with GlaxoSmithKline, Wyeth-Ayerst, Taisho Pharmaceutical, Janssen Pharmaceutica and Eli Lilly. Because we rely heavily on our corporate collaborators, the development of our projects would be substantially delayed if our collaborators:

- fail to select a compound we have discovered for subsequent development into marketable products;
- fail to gain the requisite regulatory approvals of these products;
- do not successfully commercialize products that we originate;
- do not conduct their collaborative activities in a timely manner;
- do not devote sufficient time and resources to our partnered programs or potential products;
- terminate their alliances with us;
- develop, either alone or with others, products that may compete with our products;

S-10

-
- dispute our respective allocations of rights to any products or technology developed during our collaborations; or
 - merge with a third party that may wish to terminate the collaboration.

These issues and possible disagreements with our corporate collaborators could lead to delays in the collaborative research, development or commercialization of many of our product candidates. Furthermore, disagreements with these parties could require or result in litigation or arbitration, which would be time-consuming and expensive. If any of these issues arises, it may delay the filing of our new drug applications and, ultimately, our generation of product revenues.

We have no manufacturing capabilities. If third-party manufacturers of our product candidates fail to devote sufficient time and resources to our concerns, or if their performance is substandard, our clinical trials and product introductions may be delayed and our costs may rise.

We have in the past utilized, and intend to continue to utilize, third-party manufacturers to produce the drug compounds we use in our clinical trials and for the potential commercialization of our future products. We have no experience in manufacturing products for commercial purposes and do not currently have any manufacturing facilities. Consequently, we depend on several contract manufacturers for all production of products for development and commercial purposes. If we are unable to obtain or retain third-party manufacturers, we will not be able to commercialize our products. The manufacture of our products for clinical trials and

commercial purposes is subject to specific FDA regulations. In addition, our third-party manufacturers might not comply with FDA regulations relating to manufacturing our products for clinical trials and commercial purposes or other regulatory requirements now or in the future. Our reliance on contract manufacturers also exposes us to the following risks:

Contract manufacturers may encounter difficulties in achieving volume production, quality control and quality assurance, and also may experience shortages in qualified personnel. As a result, our contract manufacturers might not be able to meet our clinical schedules or adequately manufacture our products in commercial quantities when required;

Switching manufacturers may be difficult because the number of potential manufacturers is limited. It may be difficult or impossible for us to find a replacement manufacturer quickly on acceptable terms, or at all;

Our contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to successfully produce, store and distribute our products; and

Drug manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the Drug Enforcement Agency, and corresponding state agencies to ensure strict compliance with good manufacturing practices and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers compliance with these regulations and standards.

Our current dependence upon third parties for the manufacture of our products may harm our profit margin, if any, on the sale of our future products and our ability to develop and deliver products on a timely and competitive basis.

S-11

If we are unable to retain and recruit qualified scientists or if any of our key senior executives discontinues his or her employment with us, it will delay our development efforts.

We are highly dependent on the principal members of our management and scientific staff. The loss of any of these people could impede the achievement of our development objectives. Furthermore, recruiting and retaining qualified scientific personnel to perform research and development work in the future will also be critical to our success. We may be unable to attract and retain personnel on acceptable terms given the competition among biotechnology, pharmaceutical and health care companies, universities and non-profit research institutions for experienced scientists. In addition, we rely on members of our Scientific Advisory Board and a significant number of consultants to assist us in formulating our research and development strategy. All of our consultants and members of the Scientific Advisory Board are employed by employers other than us. They may have commitments to, or advisory or consulting agreements with, other entities that may limit their availability to us.

We may be subject to claims that we or our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

As is commonplace in the biotechnology industry, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

We have no marketing experience, sales force or distribution capabilities, and if our products are approved, we may not be able to commercialize them successfully.

Although we do not currently have any marketable products, our ability to produce revenues ultimately depends on our ability to sell our products if and when they are approved by the FDA. We currently have no experience in marketing or selling pharmaceutical products and we do not have a marketing and sales staff or distribution capabilities. If we fail to establish successful marketing and sales capabilities or fail to enter into successful marketing arrangements with third parties, our product revenues will suffer.

Governmental and third-party payors may impose sales and pharmaceutical pricing controls on our products that could limit our product revenues and delay profitability.

The continuing efforts of government and third-party payors to contain or reduce the costs of health care through various means may reduce our potential revenues. These payors' efforts could decrease the price that we receive for any products we may develop and sell in the future. In addition, third-party insurance coverage may not be available to patients for any products we develop. If government and third-party payors do not provide adequate coverage and reimbursement levels for our products, or if

price controls are enacted, our product revenues will suffer.

If physicians and patients do not accept our products, we may not recover our investment.

The commercial success of our products, if they are approved for marketing, will depend upon the medical community and patients accepting our products as being safe and effective.

S-12

The market acceptance of our products could be affected by a number of factors, including:

- the timing of receipt of marketing approvals;
- the safety and efficacy of the products;
- the success of existing products addressing our target markets or the emergence of equivalent or superior products; and
- the cost-effectiveness of the products.

In addition, market acceptance depends on the effectiveness of our marketing strategy, and, to date, we have very limited sales and marketing experience or capabilities. If the medical community and patients do not ultimately accept our products as being safe and effective, we may not recover our investment.

Risks Related to Our Industry

We face intense competition and if we are unable to compete effectively, the demand for our products, if any, may be reduced.

The biotechnology and pharmaceutical industries are subject to rapid and intense technological change. We face, and will continue to face, competition in the development and marketing of our product candidates from academic institutions, government agencies, research institutions and biotechnology and pharmaceutical companies. Competition may also arise from, among other things:

- other drug development technologies;
- methods of preventing or reducing the incidence of disease, including vaccines; and
- new small molecule or other classes of therapeutic agents.

Developments by others may render our product candidates or technologies obsolete or noncompetitive.

We are performing research on or developing products for the treatment of several disorders including anxiety, depression, insomnia, malignant glioma, other forms of cancer and multiple sclerosis, and there are a number of competitors to products in our research pipeline. If one or more of these products or programs are successful, the market for our products may be reduced or eliminated.

Compared to us, many of our competitors and potential competitors have substantially greater:

- capital resources;
- research and development resources, including personnel and technology;
- regulatory experience;
- preclinical study and clinical testing experience;
- manufacturing and marketing experience; and
- production facilities.

Any of these competitive factors could reduce demand for our products. For more specific information about the competition we face, please see the section Business under the subheading Competition beginning on page S-48.

S-13

If we are unable to protect our intellectual property, our competitors could develop and market products based on our discoveries, which may reduce demand for our products.

Our success will depend on our ability to, among other things:

obtain patent protection for our products;

preserve our trade secrets;

prevent third parties from infringing upon our proprietary rights; and

operate without infringing upon the proprietary rights of others, both in the United States and internationally.

Because of the substantial length of time and expense associated with bringing new products through the development and regulatory approval processes in order to reach the marketplace, the pharmaceutical industry places considerable importance on obtaining patent and trade secret protection for new technologies, products and processes. Accordingly, we intend to seek patent protection for our proprietary technology and compounds. However, we face the risk that we may not obtain any of these patents and that the breadth of claims we obtain, if any, may not provide adequate protection of our proprietary technology or compounds.

We also rely upon unpatented trade secrets and improvements, unpatented know-how and continuing technological innovation to develop and maintain our competitive position, which we seek to protect, in part, by confidentiality agreements with our commercial collaborators, employees and consultants. We also have invention or patent assignment agreements with our employees and some, but not all, of our commercial collaborators and consultants. However, if our employees, commercial collaborators or consultants breach these agreements, we may not have adequate remedies for any such breach, and our trade secrets may otherwise become known or independently discovered by our competitors.

In addition, although we own a number of patents, the issuance of a patent is not conclusive as to its validity or enforceability, and third parties may challenge the validity or enforceability of our patents. We cannot assure you how much protection, if any, will be given to our patents if we attempt to enforce them, and they are challenged in court or in other proceedings. It is possible that a competitor may successfully challenge our patents or that challenges will result in limitations of their coverage. Moreover, competitors may infringe our patents or successfully avoid them through design innovation. To prevent infringement or unauthorized use, we may need to file infringement claims, which are expensive and time-consuming. In addition, in an infringement proceeding a court may decide that a patent of ours is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the ground that our patents do not cover its technology. Two of our European patents are subject to opposition proceedings which, if successful, could reduce the breadth of some of our proprietary rights. These proceedings relate to our broad patent covering immune therapeutics in diabetes and multiple sclerosis. In addition, interference proceedings declared by the United States Patent and Trademark Office may be necessary to determine the priority of inventions with respect to our patent applications or those of our licensors. Litigation or interference proceedings may fail and, even if successful, may result in substantial costs and be a distraction to management. We cannot assure you that we will be able to prevent misappropriation of our proprietary rights, particularly in countries where the laws may not protect such rights as fully as in the United States.

The technologies we use in our research as well as the drug targets we select may unintentionally infringe the patents or violate the proprietary rights of third parties. We cannot

S-14

assure you that third parties will not assert patent or other intellectual property infringement claims against us or our collaboration partners with respect to technologies used in potential products. Any claims that might be brought against us relating to infringement of patents may cause us to incur significant expenses and, if successfully asserted against us, may cause us to pay substantial damages. Even if we were to prevail, any litigation could be costly and time-consuming and could divert the attention of our management and key personnel from our business operations. Furthermore, as a result of a patent infringement suit brought against us or our collaboration partners, we or our collaboration partners may be forced to stop or delay developing, manufacturing or selling potential products that are claimed to infringe a third party's intellectual property unless that party grants us or our collaboration partners rights to use its intellectual property. In such cases, we may be required to obtain licenses to patents or

proprietary rights of others in order to continue to commercialize our products. However, we may not be able to obtain any licenses required under any patents or proprietary rights of third parties on acceptable terms, or at all. Even if our collaboration partners or we were able to obtain rights to the third party's intellectual property, these rights may be non-exclusive, thereby giving our competitors access to the same intellectual property. Ultimately we may be unable to commercialize some of our potential products or may have to cease some of our business operations as a result of patent infringement claims, which could severely harm our business.

For more information about our intellectual property, please see the section **Business** under the subheading **Intellectual Property** beginning on page S-43.

We face potential product liability exposure far in excess of our limited insurance coverage.

The use of any of our potential products in clinical trials, and the sale of any approved products, may expose us to liability claims. These claims might be made directly by consumers, health care providers, pharmaceutical companies or others selling our products. We have obtained limited product liability insurance coverage for our clinical trials in the amount of \$10 million per occurrence and \$10 million in the aggregate. However, our insurance may not reimburse us or may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive, and we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. We intend to expand our insurance coverage to include the sale of commercial products if we obtain marketing approval for product candidates in development, but we may be unable to obtain commercially reasonable product liability insurance for any products approved for marketing. On occasion, juries have awarded large judgments in class action lawsuits based on drugs that had unanticipated side effects. A successful product liability claim or series of claims brought against us would decrease our cash reserves and could cause our stock price to fall.

Our activities involve hazardous materials and we may be liable for any resulting contamination or injuries.

Our research activities involve the controlled use of hazardous materials. We cannot eliminate the risk of accidental contamination or injury from these materials. If an accident occurs, a court may hold us liable for any resulting damages, which may reduce our cash reserves and force us to seek additional financing.

S-15

Risks Related to this Offering

The price of our common stock is volatile.

The market prices for securities of biotechnology and pharmaceutical companies historically have been highly volatile, and the market has from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. Over the course of the last 12 months, the price of our common stock has ranged from \$14.25 per share to \$48.90 per share. The market price of our common stock may fluctuate in response to many factors, including:

- the results of our clinical trials;
- developments concerning our strategic alliance agreements;
- announcements of technological innovations or new therapeutic products by us or others;
- developments in patent or other proprietary rights;
- future sales of our common stock by existing stockholders;
- comments by securities analysts;
- changes in the structure of health care payment systems;
- general conditions in the pharmaceutical and biotechnology industry;
- general market conditions;
- actual or anticipated variations in our quarterly operating results;

government regulation;

public concern as to the safety of our drugs; and

failure of any of our product candidates, if approved, to achieve commercial success.

If any of the risks described in this Risk Factors section occurs, it could cause our stock price to fall dramatically and may expose us to class action securities lawsuits which, even if unsuccessful, would be costly to defend and a distraction to management.

We have broad discretion in how we use the net proceeds of this offering, and we may not use these proceeds effectively.

We have not designated the amount of net proceeds we will use for any particular purpose. Accordingly, our management will have broad discretion as to the application of the net proceeds and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not increase our profitability or our market value.

S-16

FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the information incorporated by reference contain forward-looking statements that involve a number of risks and uncertainties. Although our forward-looking statements reflect the good faith judgment of our management, these statements can only be based on facts and factors currently known by us. Consequently, forward-looking statements are inherently subject to risks and uncertainties, and actual results and outcomes may differ materially from results and outcomes discussed in the forward-looking statements.

Forward-looking statements can be identified by the use of forward-looking words such as believes, expects, hopes, may, plan, intends, estimates, could, should, would, continue, seeks, pro forma or anticipates, or other similar words (in the negative), or by discussions of future matters such as the development of new products, technology enhancements, possible changes in legislation and other statements that are not historical. These statements include but are not limited to statements under the captions Risk Factors, Management's Discussion and Analysis of Financial Condition and Results of Operations and Business as well as other sections in this prospectus supplement and the accompanying prospectus. You should be aware that the occurrence of any of the events discussed under Risk Factors and elsewhere in this prospectus supplement and the accompanying prospectus could substantially harm our business, results of operations and financial condition and that if any of these events occurs, the trading price of our common stock could decline and you could lose all or a part of the value of your shares of our common stock.

The cautionary statements made in this prospectus supplement are intended to be applicable to all related forward-looking statements wherever they may appear in this prospectus supplement and the accompanying prospectus. We urge you not to place undue reliance on these forward-looking statements, which speak only as of the date of this prospectus supplement.

S-17

USE OF PROCEEDS

Our net proceeds from the sale of shares of common stock we are offering are estimated to be \$146.1 million, or \$168.1 million if the underwriters exercise their over-allotment option in full, at an assumed public offering price of \$47.90 per share and after deducting the underwriting discounts and commissions and the estimated offering expenses payable by us.

We expect to use the net proceeds from this offering for research and product development, including late-stage clinical trials, potential acquisitions of technologies that complement our business and working capital and general corporate purposes. The amounts and timing of our actual expenditures will depend significantly upon a number of factors, including future revenues from licensing and corporate collaborations. As a result, we will retain broad discretion in determining how we will allocate the net proceeds from this offering. Pending these uses, we intend to invest the net proceeds in interest-bearing, investment-grade corporate and government securities.

PRICE RANGE OF COMMON STOCK

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

Our common stock is traded on the Nasdaq National Market under the symbol NBIX. The following table sets forth, for the periods indicated, the high and low sales prices per share of our common stock as reported on the Nasdaq National Market:

	Price Range of Common Stock	
	High	Low
Year Ended December 31, 1999:		
First Quarter	\$ 7.50	\$ 4.88
Second Quarter	5.88	4.00
Third Quarter	5.94	3.75
Fourth Quarter	29.63	5.38
Year Ended December 31, 2000:		
First Quarter	\$47.50	\$20.75
Second Quarter	39.75	13.94
Third Quarter	46.00	29.13
Fourth Quarter	44.88	25.50
Year Ended December 31, 2001:		
First Quarter	\$36.50	\$14.25
Second Quarter	39.99	16.75
Third Quarter	40.71	27.93
Fourth Quarter (through November 23, 2001)	48.90	30.36

On November 23, 2001, the last reported sale price of our common stock on the Nasdaq National Market was \$47.90 per share. As of November 16, 2001, there were approximately 123 stockholders of record of our common stock.

DIVIDEND POLICY

We have not declared or paid any cash dividends since our inception. We currently intend to retain our future earnings, if any, for use in the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future.

S-18

CAPITALIZATION

The following table sets forth:

our capitalization at September 30, 2001; and

our capitalization as adjusted to give effect to the sale of 3,250,000 shares of common stock offered hereby at the assumed public offering price of \$47.90 per share and the application of the net proceeds.

	September 30, 2001	
	Actual	As Adjusted
	(dollars in thousands)	
Long-term debt and capital lease obligations, net of current portion	\$ 2,042	\$ 2,042
Stockholders' equity:		
Preferred stock, \$0.001 par value, 5,000,000 shares authorized; no shares issued and outstanding		
Common stock, \$0.001 par value, 50,000,000 shares authorized; 26,187,852 shares issued and outstanding, actual; 29,437,852 shares	26	29

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

issued and outstanding, as adjusted		
Additional paid-in capital	238,880	385,011
Deferred stock compensation	(444)	(444)
Notes receivable from stockholders	(104)	(104)
Accumulated other comprehensive loss	(45)	(45)
Accumulated deficit	(92,780)	(92,780)
	<u> </u>	<u> </u>
Total stockholders' equity	145,533	291,667
	<u> </u>	<u> </u>
Total capitalization	\$147,575	\$293,709
	<u> </u>	<u> </u>

This information excludes, as of November 16, 2001:

3,952,380 shares of common stock reserved for the exercise of options outstanding at a weighted average exercise price of \$18.34 per share;

430,504 shares of common stock reserved for the exercise of warrants outstanding at a weighted average exercise price of \$14.72 per share;

174,524 shares of common stock reserved for issuance under our employee stock purchase plan; and

874,735 shares of common stock reserved for issuance under our other stock incentive plans.

S-19

DILUTION

If you invest in our common stock, your interest will be diluted by an amount equal to the difference between the public offering price and the net tangible book value per common share after this offering. We calculate net tangible book value per common share by dividing the net tangible book value (total assets less intangible assets and total liabilities) by the number of outstanding common shares.

Our net tangible book value as of September 30, 2001 was \$145.3 million or approximately \$5.55 per share. After the sale of the 3,250,000 shares of common stock offered by us at the assumed public offering price of \$47.90 per share and after deducting the underwriting discount and estimated offering expenses payable by us, our net tangible book value at September 30, 2001 would have been \$291.4 million or approximately \$9.90 per share. This represents an immediate increase in net tangible book value of \$4.35 per share to existing stockholders and an immediate dilution of \$38.00 per share to new investors in this offering. The following table illustrates this dilution on a per share basis:

Assumed public offering price per share		\$47.90
Net tangible book value per share as of September 30, 2001	\$5.55	
Increase per share attributable to new investors	4.35	
	<u> </u>	
Net tangible book value per share after this offering		9.90
		<u> </u>
Dilution per share to new investors		\$38.00
		<u> </u>

The outstanding share information in the table above excludes, as of November 16, 2001:

3,952,380 shares of common stock reserved for the exercise of options outstanding at a weighted average exercise price of \$18.34 per share;

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

430,504 shares of common stock reserved for the exercise of warrants outstanding at a weighted average exercise price of \$14.72 per share;

174,524 shares of common stock reserved for issuance under our employee stock purchase plan; and

874,735 shares of common stock reserved for issuance under our other stock incentive plans.

S-20

SELECTED CONSOLIDATED FINANCIAL DATA
(in thousands, except per share data)

The following selected consolidated financial data should be read in conjunction with our consolidated financial statements and the related notes and Management's Discussion and Analysis of Financial Condition and Results of Operations included elsewhere in this prospectus supplement or incorporated by reference. The selected consolidated statement of operations and balance sheet data for the years ended December 31, 1996, 1997, 1998, 1999 and 2000 are derived from our audited consolidated financial statements. The selected statement of operations data for the nine months ended September 30, 2000 and 2001 and the selected balance sheet data as of September 30, 2001 are derived from our unaudited financial statements. In the opinion of our management, our unaudited financial statements include all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation of this information. The operating results for the nine months ended September 30, 2001 are not necessarily indicative of results that may be expected for the year ended December 31, 2001 or any other interim period or future year.

	Years Ended December 31,					Nine Months Ended September 30,	
	1996	1997	1998	1999	2000	2000(1)	2001
(unaudited)							
Statement of Operations Data:							
Revenues:							
Sponsored research and development	\$ 9,092	\$14,985	\$ 8,751	\$12,171	\$ 6,881	\$ 4,943	\$10,948
Sponsored research and development from related party			3,610	491	-		
Milestones and license fees	9,000	10,250	2,500	3,000	6,345	2,152	16,459
Grant income and other revenues	1,124	909	1,176	1,129	1,362	1,050	1,002
Total revenues	19,216	26,144	16,037	16,791	14,588	8,145	28,409
Operating expenses:							
Research and development	12,569	18,758	21,803	29,169	40,227	28,404	49,583
General and administrative	3,697	5,664	6,594	7,476	9,962	6,930	7,304
Write-off of acquired in-process research and development and licenses			4,910				
Total operating expenses	16,266	24,422	33,307	36,645	50,189	35,334	56,887
Income (loss) from operations	2,950	1,722	(17,270)	(19,854)	(35,601)	(27,189)	(28,478)
Interest income, net	2,598	3,931	4,000	2,851	6,048	4,293	5,742
Other income	574	818	504	1,066	1,047	973	550
Equity in NPI net losses and other adjustments, net		(1,130)	(7,188)	(885)		(47)	(114)
Net income (loss) before income taxes	6,122	5,341	(19,954)	(16,822)	(28,506)	(21,970)	(22,300)
Income taxes	248	214	1		302	302	
Net income (loss)	\$ 5,874	\$ 5,127	\$(19,955)	\$(16,822)	\$(28,808)	\$(22,272)	\$(22,300)

Earnings (loss) per share(2):							
Basic	\$ 0.39	\$ 0.30	\$ (1.10)	\$ (0.88)	\$ (1.30)	\$ (1.02)	\$ (0.87)
Diluted	\$ 0.36	\$ 0.28	\$ (1.10)	\$ (0.88)	\$ (1.30)	\$ (1.02)	\$ (0.87)
Shares used in calculation of earnings (loss) per share(2):							
Basic	14,971	16,930	18,141	19,072	22,124	21,900	25,575
Diluted	16,127	18,184	18,141	19,072	22,124	21,900	25,575

	December 31,					September 30,
	1996	1997	1998	1999	2000	2001
Balance Sheet Data:						
	(unaudited)					
Cash, cash equivalents and short-term investments	\$69,920	\$75,092	\$62,670	\$ 91,098	\$164,670	\$141,255
Working capital	68,023	69,362	60,064	86,168	154,556	140,259
Total assets	77,957	91,903	80,529	109,222	185,962	177,954
Long-term debt and capital lease obligations, net of current portion	847	722	2,247	2,139	2,283	2,042
Accumulated deficit	(10,022)	(4,895)	(24,850)	(41,672)	(70,480)	(92,780)
Total stockholders equity	72,767	83,152	71,958	96,354	163,208	145,533

- (1) During the fourth quarter of 2000, we adopted, as required, the SEC's Staff Accounting Bulletin No. 101, Revenue Recognition in Financial Statements, effective January 1, 2000 (see Note 5 Revenue Recognition in the notes to the unaudited condensed financial statements included in our Quarterly Report on Form 10-Q for the period ended September 30, 2001).
- (2) Computed on the basis described for earnings per share in Note 3 Net Earnings or Loss Per Common Share in the notes to the unaudited condensed financial statements included in our Quarterly Report on Form 10-Q for the period ended September 30, 2001.

S-21

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management's Discussion and Analysis of Financial Condition and Results of Operations section contains forward-looking statements which involve risks and uncertainties, pertaining generally to the expected continuation of our collaborative agreements, the receipt of research payments thereunder, the future achievement of various milestones in product development and the receipt of payments related thereto, the potential receipt of royalty payments, preclinical testing and clinical trials of potential products, the period of time that our existing capital resources will meet our funding requirements, and our financial results of operations. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth in this prospectus supplement and the accompanying prospectus.

Overview

We incorporated in California in 1992 and reincorporated in Delaware in 1996. Since we were founded, we have been engaged in the discovery and development of novel pharmaceutical products for neurologic and endocrine diseases and disorders. Our product candidates address some of the largest pharmaceutical markets in the world, including insomnia, anxiety, depression, cancer, multiple sclerosis and diabetes. To date, we have not generated any revenues from the sale of products, and we do not expect to generate any product revenues in the foreseeable future. We have funded our operations primarily through private and public offerings of our common stock and payments received under research and development agreements. We are developing a number of products with corporate collaborators and will rely on existing and future collaborators to meet funding requirements. We expect to generate future net losses in anticipation of significant increases in operating expenses as product candidates are advanced through the various stages of clinical development. As of September 30, 2001, we have incurred a cumulative deficit of \$92.8 million and expect to incur operating losses in the future, which may be greater than losses in prior years.

Results of Operations

Nine Months Ended September 30, 2001 and 2000

Revenues for the nine months ended September 30, 2001 were \$28.4 million compared with \$8.1 million in 2000. The increase from last year to this year resulted primarily from revenues received under the GSK and Taisho agreements. On July 20,

2001, we signed a worldwide collaboration and license agreement with Glaxo Group Limited, a subsidiary of GSK, to engage in the research, development and commercialization of CRF receptor antagonist compounds. Under the GSK agreement, we recognized \$1.6 million in license fees and sponsored research and development funding and a \$15.5 million milestone in the nine months ended September 30, 2001. We also recognized \$7.0 million in sponsored research and development and \$579,000 in license fees related to the Taisho agreement in the nine months ended September 30, 2001 compared to \$2.2 million in option and license fees and \$388,000 in sponsored development fees for the respective period last year. The increase in revenues from these agreements was partially offset by the completion of the sponsored research portion of the Janssen agreement. These activities concluded, as scheduled, in February 2001. Under the Janssen agreement, we recognized \$342,000 and \$2.2 million for the nine months ended September 30, 2001 and 2000, respectively.

Research and development expenses increased to \$49.6 million for the first nine months of 2001 compared with \$28.4 million for the respective period in 2000. Increased expenses primarily reflect higher costs associated with expanding development activities and the addition

S-22

of scientific and clinical development personnel. Currently, we have 15 programs in our research and development pipeline. Seven of these programs are in clinical development, one program is in advanced pre-clinical development and seven are in various stages of research. We expect to incur significant increases in future periods as later phases of development typically involve an increase in the scope of studies, the number of patients treated and the number of scientific personnel required to manage the clinical trials.

General and administration expenses increased to \$7.3 million for the nine months ended September 30, 2001 compared with \$6.9 million during the same period last year. The increase resulted from additional administrative personnel expenses, primarily recruiting and relocation, and professional service expenses, predominantly legal costs to support the expanded research and clinical development efforts. The increase was partially offset by lower management consulting fees associated with the Taisho agreement.

Interest income increased to \$6.0 million for the first nine months of 2001, compared to \$4.5 million for the same period last year. Despite lower interest rates in 2001 compared to 2000, interest income increased because of higher investment balances achieved through offerings of our common stock. In December 2000, we sold 3.2 million shares in a public offering, which resulted in net proceeds of \$90.4 million. Due to the increase in cash reserves generated from this transaction, we anticipate interest income for this year will be higher than that of last year.

Net loss for the first nine months of 2001 was \$22.3 million, or \$0.87 per share, compared to \$22.3 million, or \$1.02 per share, for the same period in 2000. Higher costs in 2001 from expanded testing of our five clinical programs and the addition of scientific and clinical development personnel were offset by the increase in third quarter revenues. Net losses are expected to increase this year as our programs continue to advance through the various stages of the research and clinical development processes.

To date, our revenues have come from funded research and achievements of milestones under corporate collaborations. The nature and amount of these revenues from period to period may lead to substantial fluctuations in the results of quarterly revenues and earnings. Accordingly, results and earnings of one period are not predictive of future periods.

Years Ended December 31, 1998, 1999 and 2000

Our revenues for the year ended December 31, 2000 were \$14.6 million compared with \$16.8 million in 1999, and \$16.0 million in 1998. The decline in revenues from 1999 to 2000 resulted primarily from the conclusion of a collaboration with Novartis in January 2000 and the sponsored research portion of a collaboration with Eli Lilly in October 1999. During 1999, we received \$6.8 million in revenues under these agreements, in addition to \$3.0 million in milestones under the agreement with Wyeth-Ayerst. The absence of these revenues during 2000 was partially offset by \$7.1 million in revenues from Taisho. In addition, revenues recognized from Janssen were \$3.0 million in 2000 compared to \$2.4 million recognized in 1999.

Revenues for 1999 and 1998 were similar in total but had different compositions resulting from several significant events. During 1999, we entered into a collaborative agreement with Wyeth-Ayerst and agreed to a two-year extension of our 1995 collaboration with Janssen. The new agreements generated revenues of \$8.4 million during 1999. Non-recurring revenues recorded in 1998 included \$4.7 million in sponsored development and \$2.3 million in milestones received under agreements with Novartis and Neuroscience Pharma, Inc., or NPI. In addition, due to the conclusion of the sponsored research portion of the Eli Lilly agreement in

S-23

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

October 1999, revenues recognized from Eli Lilly during 1999 were \$3.2 million compared to \$4.1 million recognized in 1998.

Research and development expenses increased to \$40.2 million during 2000 compared with \$29.2 million during 1999 and \$21.8 million in 1998. Increased expenses reflect advancement of our drug candidates through progressive clinical development phases. We expect to incur significant increases in future periods as later phases of development typically involve an increase in the scope of studies, the number of patients treated and the number of scientific personnel required to manage the trials.

General and administrative expenses increased to \$10.0 million during 2000 compared with \$7.5 million during 1999 and \$6.6 million in 1998. Increased expenses from 1999 to 2000 resulted primarily from \$1.1 million in business development consulting primarily relating to the Taisho agreement and \$1.1 million of non-cash stock compensation charges relating to the employee stock purchase program and consultant stock options. Increased expenses from 1998 to 1999 resulted primarily from the addition of personnel required to support expanding research and development activities. We expect these expenses to continue to rise in 2001 as we expand clinical studies.

During 1998, we wrote off acquired in-process research and development costs of \$4.9 million. This amount included the acquisition of Northwest NeuroLogic, Inc. and the in-licensing of drug candidates for our insomnia and malignant glioblastoma programs. Both of the in-licensed programs are currently under clinical development.

Interest income increased to \$6.3 million during 2000 compared with \$3.1 million during 1999 and \$4.2 million for 1998. The increase in 2000, compared with 1999 and 1998, primarily resulted from higher investment balances achieved through offerings of our common stock. We completed a private placement of 2.3 million shares in December 1999, resulting in net proceeds of \$39.5 million. In December 2000, we sold 3.2 million shares in a public offering, which resulted in net proceeds of \$90.4 million.

In December 1999, we sold our investment in NPI and recorded a gain of \$526,000. Our proportionate share of NPI operating losses during 1999 and 1998 were \$764,000 and \$3.4 million, respectively. In addition, we recorded a write-down in the investment value of \$646,000 during 1999 and \$3.8 million during 1998 relating to the decline in cash redemption value of the NPI preferred shares.

Other income consists primarily of sublease income from unrelated parties. The fluctuations in sublease income from year to year reflect facility capacity in excess of our needs. Excess space is subleased until it is needed to support company growth. During 2001, we expect sublease income to decrease significantly as increases in personnel will require more office and laboratory space.

Net loss for 2000 was \$28.8 million, or \$1.30 per share, compared with \$16.8 million, or \$0.88 per share, and \$20.0 million, or \$1.10 per share, for 1999 and 1998, respectively. The increase in net loss primarily resulted from an increase in scientific personnel and expanded clinical development activities. We expect operating losses to increase for the foreseeable future as we continue to expand our clinical development efforts.

Liquidity and Capital Resources

At September 30, 2001, our cash, cash equivalents, and short-term investments totaled \$141.3 million compared with \$164.7 million at December 31, 2000 and \$91.1 million and

S-24

\$62.7 million at December 31, 1999 and 1998, respectively. The decline in cash balances since December 31, 2000 resulted primarily from funding of operations. The increase in cash balances from December 31, 1999 to December 31, 2000 resulted from the public offering of our common stock, which generated net cash proceeds of \$90.4 million. The increase in cash from December 31, 1998 to December 31, 1999 resulted from the private placement of our common stock for net cash proceeds of \$39.5 million.

Net cash used by operating activities during the nine months ended September 30, 2001 was \$21.9 million compared with \$12.8 million during the same period last year. Net cash used by operating activities during fiscal year 2000 was \$18.6 million compared with \$10.3 million during 1999 and \$10.7 million during 1998. The increase in cash used in operations for the nine months ended September 30, 2001 and fiscal year 2000 compared to the respective prior periods resulted primarily from the increase in clinical development activities and the addition of scientific and clinical development personnel.

Net cash provided by investing activities during the nine months ended September 30, 2001 was \$10.5 million compared to net cash used of \$53,000 for the first nine months of 2000. Net cash used by investing activities during fiscal year 2000 was \$75.7 million compared to \$21.2 million in 1999 and net cash provided by investing activities of \$4.7 million in 1998. These fluctuations resulted primarily from the timing differences in investment purchases, sales, maturities and the fluctuations in our portfolio mix between cash equivalents and short-term investment holdings. We expect similar fluctuations to continue in future periods. Capital equipment purchases for 2001 will be financed primarily through leasing agreements and are expected to be approximately \$4.0 million this year, of which \$3.5 million has been incurred in the nine months ending September 30, 2001.

Net cash provided by financing activities during the first nine months of 2001 was \$2.3 million compared with \$2.8 million for the respective period last year. Cash proceeds from the issuance of common stock under option and employee purchase programs were \$2.4 million and \$2.8 million in the nine months ended September 30, 2001 and 2000, respectively. In addition, capital lease financing provided \$1.0 million in cash during the first nine months of 2001 and \$650,000 for the same period in 2000. We expect similar fluctuations to occur throughout the year, as the amount and frequency of stock-related transactions are dependent upon the market performance of our common stock. Net cash provided by financing activities during fiscal year 2000 was \$94.1 million compared with \$41.0 million and \$1.9 million during 1999 and 1998, respectively. Cash provided during 2000 includes \$90.4 million of net proceeds from the public offering of our common stock. Cash provided during 1999 includes \$39.5 million of net proceeds received from the private sale of our common stock. Cash provided during 1998 resulted primarily from capital lease financings.

For a discussion of the effects of our collaborations on our liquidity and capital resources, see **Business Our Strategic Alliances** on page S-41.

We believe that our existing capital resources, together with interest income and future payments due under our strategic alliances, will be sufficient to satisfy our current and projected funding requirements for at least the next 12 months. However, we cannot guarantee that these capital resources and payments will be sufficient to conduct our research and development programs as planned. The amount and timing of expenditures will vary depending upon a number of factors, including progress of our research and development programs.

We will require additional funding to continue our research and product development programs, to conduct preclinical studies and clinical trials, for operating expenses, to pursue

S-25

regulatory approvals for our product candidates, for the costs involved in filing and prosecuting patent applications and enforcing or defending patent claims, if any, the cost of product in-licensing and any possible acquisitions, and we may require additional funding to establish manufacturing and marketing capabilities in the future. We may seek to access the public or private equity markets whenever conditions are favorable. We may also seek additional funding through strategic alliances and other financing mechanisms, potentially including off-balance sheet financing. We cannot assure you that adequate funding will be available on terms acceptable to us, if at all. If adequate funds are not available, we may be required to curtail significantly one or more of our research or development programs or obtain funds through arrangements with collaborators or others. This may require us to relinquish rights to certain of our technologies or product candidates.

Interest Rate Risk

We are exposed to interest rate risk on our short-term investments and on our long-term debt. The primary objective of our investment activities is to preserve principal while at the same time maximizing yields without significantly increasing risk. To achieve this objective, we invest in highly liquid and high quality government and other debt securities. To minimize our exposure due to adverse shifts in interest rates, we invest in short-term securities and ensure that the maximum average maturity of our investments does not exceed 40 months. If a 10% change in interest rates were to have occurred on September 30, 2001, this change would not have had a material effect on the fair value of our investment portfolio as of that date. Due to the short holding period of our investments, we have concluded that we do not have a material financial market risk exposure.

Interest risk exposure on long-term debt relates to our note payable, which bears a floating interest rate of prime plus one quarter percent (6.25% at September 30, 2001 and 9.75% at December 31, 2000). At September 30, 2001 and December 31, 2000, the note balance was \$186,000 and \$311,000, respectively. This note is payable in equal monthly installments through January 2003. Based on the balance of our long-term debt, we have concluded that we do not have material financial market risk exposure.

S-26

BUSINESS

We develop and intend to commercialize drugs for the treatment of neurologic and endocrine system-related diseases and disorders. Our product candidates address some of the largest pharmaceutical markets in the world, including insomnia, anxiety, depression, cancer, diabetes and multiple sclerosis. We currently have 15 programs in various stages of research and development, including seven programs in clinical development and one program in advanced preclinical development. Our lead clinical development program is a drug for the treatment of insomnia currently being evaluated in Phase III clinical trials.

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

While we independently develop the majority of our product candidates, we have entered into collaborations for five of our 15 programs. We have entered into collaboration agreements with GlaxoSmithKline, Wyeth-Ayerst, a division of American Home Products, Taisho Pharmaceutical, Janssen Pharmaceutica, a subsidiary of Johnson & Johnson, and Eli Lilly.

Our Product Pipeline

The following table summarizes our most advanced product candidates currently in preclinical or clinical development and those currently in research, and is followed by detailed descriptions of each program:

Program	Compound	Targeted Indication	Status	Commercial Rights
<i>Products under development:</i>				
GABA-A Agonist	NBI-34060	Insomnia	Phase III	Neurocrine
CRF R ₁ Antagonist	NBI-34041	Anxiety, Depression	Phase I	GlaxoSmithKline/Neurocrine
IL-4 Fusion Toxin	NBI-3001	Malignant Glioma	Phase II	Neurocrine
IL-4 Fusion Toxin	NBI-3001	Additional Cancers (kidney, lung, breast)	Phase I	Neurocrine
Altered Peptide Ligand	NBI-5788	Multiple Sclerosis	Phase II	Neurocrine
Altered Peptide Ligand	NBI-6024	Type I Diabetes	Phase II	Taisho/Neurocrine
GnRH Antagonist		Endometriosis, Prostate Cancer	Phase I	Neurocrine
CRF R ₁ Antagonist		Anxiety, Depression	Preclinical	Janssen/Neurocrine
<i>Research:</i>				
Excitatory Amino Acid Transporters		Neurodegenerative Diseases	Research	Wyeth-Ayerst/Neurocrine
CRF R ₁ Antagonist		Gastrointestinal Disorders	Research	GlaxoSmithKline/Neurocrine
CRF R ₂ Antagonist		Eating Disorders	Research	GlaxoSmithKline/Neurocrine
Urocortin/CRF R ₂ Agonist		Obesity	Research	Eli Lilly/Neurocrine
Melanocortin Receptor Agonist		Obesity	Research	Neurocrine
Melanin Concentrating Hormone Antagonist		Obesity	Research	Neurocrine
Hypocretin Agonist/Antagonist		Sleep Disorders	Research	Neurocrine

Phase III indicates that we or our collaborators are conducting confirmatory clinical trials to determine safety and efficacy as primary support for regulatory approval to market a product for a specific disease or condition.

Phase II indicates that the we or our collaborators are conducting clinical trials on groups of patients afflicted with a specific disease in order to determine preliminary efficacy, optimal dosages and expanded evidence of safety.

S-27

Phase I indicates that we or our collaborators are conducting clinical trials to determine early safety profile, maximally tolerated dose and pharmacological properties of the product in human volunteers.

Preclinical indicates that a drug candidate is being selected or has been selected and is undergoing toxicology studies and manufacturing to allow for Phase I clinical trials.

Research indicates identification and evaluation of compounds in laboratory and preclinical models.

R₁ and R₂ refer to two CRF receptor subtypes.

Products under Development

GABA-A Agonist

Insomnia is a prevalent neurological disorder in the United States, with approximately one-half of the adult population reporting trouble sleeping a few nights per week or more, according to the National Sleep Foundation. According to the National Sleep Foundation, approximately 29% of the adult population reports that they experience insomnia every night or almost every night. Despite this widespread prevalence, insomnia remains a disorder with high unmet medical needs, including the ability to maintain sleep throughout the night without next-day residual effects. Researchers have found that insomnia can be treated by drugs that interact with the site of action of a natural brain chemical involved in promoting and maintaining sleep. This chemical is called gamma amino-butyric acid, or GABA, and the site of action is called the GABA-A receptor.

During the 1980s, a class of drugs that targets the GABA-A receptor, known as benzodiazepines, were used as sedatives to treat insomnia. The most well-known of the benzodiazepines is Valium®. This class of drugs produced several undesirable side effects, including negative interactions with other central nervous system depressants, such as alcohol, the development of tolerance upon repeat dosing, insomnia following discontinuation of dosing, next day residual sedation effects, and impairment of coordination and memory. Memory impairment, which can include amnesia for events occurring prior to and after drug administration, is of particular concern in the elderly whose cognitive function may already be impaired by the aging process. During the late 1980s, a class of drugs targeting a specific site on the GABA-A receptor, known as non-benzodiazepines, was developed. The non-benzodiazepines reduce the side effects associated with benzodiazepines. The most popular of the non-benzodiazepines are marketed in the U.S. as Ambien® and Sonata®. Ambien® is the current leader, with U.S. sales of \$705 million in 2000 according to Med Ad News.

Our drug candidate for the treatment of insomnia, NBI-34060, a non-benzodiazepine, acts on a specific site on the GABA-A receptor. It is through this mechanism that the currently marketed non-benzodiazepine therapeutics also produce their sleep-promoting effects. However, NBI-34060 is more potent than the currently marketed non-benzodiazepines, including Ambien® and Sonata®, and is more selective for the specific subtype of receptors within the brain believed to be responsible for promoting sleep. We believe that this improved profile and more selective drug targeting will reduce the side effects characteristic of the currently marketed products. We also believe that receptor binding studies and preclinical studies on NBI-34060 indicate that it is a highly potent GABA-A receptor activator, or agonist, that acts very specifically on the receptor subtype we are targeting. In our Phase II clinical studies, NBI-34060 was devoid of next day residual sedation effects, and we expect it to have a considerably

S-28

reduced amnestic potential. The elderly population, which represents a large portion of the insomnia market, would benefit especially from a novel therapeutic with an improved safety profile, rapidity of onset and decrease in memory impairment.

We are developing two formulations of NBI-34060, an immediate release formulation and a modified release formulation to address the different needs of the insomnia patient population. To develop these two different formulations we have capitalized on an important feature of NBI-34060, its relatively short half-life, or duration of action of the compound, in the body. Based on our clinical studies, we have determined that the levels of NBI-34060 in the bloodstream reach the highest point approximately 30 minutes after the patient takes the tablet. NBI-34060 is then rapidly removed from the blood stream to the point that it cannot be detected four hours later. This rapid peak of drug results in rapid sleep onset followed by rapid removal of the drug from the body, reducing the risk of next-day effects. We believe that this short duration of action will allow for bedtime dosing for people who have trouble falling asleep and dosing in the middle of the night for people who have trouble staying asleep without causing the side effects and next day residual sedation effects that occurs with the longer acting drugs like Ambien®. This short duration of action has allowed us to formulate the drug in a modified release form that will effectively provide two doses of drug, a bedtime dose and a middle of the night dose, which will both rapidly induce sleep and maintain sleep through the night. If successful, this would represent the first non-benzodiazepine approved by the FDA for maintaining, rather than simply inducing, sleep.

We have completed 19 Phase I and Phase II clinical trials of NBI-34060 for efficacy and safety involving more than 1,100 subjects. Our Phase III program will involve approximately 2,200 additional subjects in seven large clinical trials. Our first Phase III clinical trial of NBI-34060, commenced in November 2001, will involve approximately 500 patients to evaluate two doses of an immediate release formulation of NBI-34060 for long-term treatment of chronic insomnia. In our Phase II clinical studies, NBI-34060 has been shown to be safe and effective in helping subjects with both chronic insomnia and transient insomnia to fall asleep rapidly without adverse side effects as compared to a placebo. Results of a single dose Phase II clinical trial in 35 healthy volunteers comparing an immediate release formulation of NBI-34060, 10 mg Ambien® and 7.5 mg zopiclone (a sedative available in Europe and under development in the U.S.) relative to placebo during middle of the night dosing demonstrated that NBI-34060 does not lead to next day residual sedation effects, while both Ambien® and zopiclone exhibited statistically significant measures of next-day adverse side effects of residual sedation. Our gender and age studies to date have indicated that NBI-34060 works with no major differences between male and female subjects and young adult and elderly subjects. In two studies of transient insomnia involving an aggregate of 659 patients, the median time to fall asleep, the primary clinical goal, was reduced by 40% to 52% compared to a placebo. In a study of chronic insomnia, subjects receiving NBI-34060 compared to Ambien® and a placebo showed a statistically significant decrease in time to sleep onset and increase in sleep duration as well as quality of sleep at every dose. Based on these results, we have initiated Phase III clinical development to support marketing registration.

We face the risk that the side effects and efficacy profile of NBI-34060 seen in our Phase I and II trials may not be confirmed in additional clinical trials or that the results of future trials may not warrant further trials.

Corticotropin-Releasing Factor

According to the Surgeon General's 1999 Report on Mental Health, 6.5% of the U.S. adult population experiences a major depressive episode each year and 16.4% of the U.S. adult

S-29

population has an anxiety disorder. Existing anti-depressant and anti-anxiety therapeutics sold in excess of \$11.7 billion worldwide in 2000, according to market analyst reports from Med Ad News. However, there remain significant unmet medical needs. The leading drug class, known as the selective serotonin reuptake inhibitors, is not effective in one-third of patients. These drugs frequently require as long as three weeks to take effect, and have significant adverse side effects such as sexual dysfunction. Therefore, a rapid acting anti-depressant with fewer side effects would represent a major advance in the treatment of depression.

Researchers have identified what they believe to be the central mediator of the body's stress responses or stress-induced disorders. This mediator is a brain chemical known as corticotropin-releasing factor, or CRF. CRF is overproduced in clinically depressed patients and individuals with anxiety disorders. Current research indicates that clinically depressed patients and patients with anxiety experience dysfunction of the hypothalamic-pituitary-adrenal axis, which is the system that manages the body's overall response to stress. When the body detects a threat to physical or psychological well-being, the region of the brain called the hypothalamus amplifies production of CRF, which induces the physical effects that are associated with stress and which can lead to depression or anxiety.

The novelty and specificity of the CRF mechanism of action and the prospect of improving upon selective serotonin reuptake inhibitor therapy is a topic of interest throughout the psychiatric community and pharmaceutical industry, representing a market opportunity both to better serve patients and expand overall treatment for this life threatening disease.

We have a strategic position in the CRF field through our intellectual property portfolio and relationship with experts in the neuropsychiatric field. Wylie Vale, Ph.D., our co-founder and Chief Scientific Advisor, is considered a leader in this field of research. We have further characterized the CRF receptor system and have identified additional members of the CRF receptor family. We have patent rights on two receptor subtypes called CRF R₁ and CRF R₂, and we have pending patent applications on small molecule organic compounds modulating the CRF receptors.

Depression. Depression is one of a group of neuropsychiatric disorders that is characterized by extreme feelings of elation and despair, loss of body weight, decreased aggressiveness and sexual behavior, and loss of sleep. Researchers believe that depression results from a combination of environmental factors, including stress, as well as an individual's biochemical vulnerability, which is genetically predetermined. Researchers believe that the biochemical basis of depression involves elevated secretion of CRF and abnormally low levels of other neurotransmitters in the brain such as serotonin. The most frequently prescribed antidepressant therapies are selective serotonin reuptake inhibitors such as Prozac®, Zoloft®, Paxil® and Celexa® which act to increase the levels of serotonin and several other chemicals in the brain. However, because these drugs affect a wide range of neurotransmitters, they have been associated with a number of adverse side effects. While newer, more selective drugs offer some safety improvement, side effects remain problematic. In addition, one of the biggest limitations of most existing antidepressant therapies is their slow onset of action.

The first clinical trial to offer evidence of proof of concept of CRF antagonists in addressing depression was a Phase IIa open label trial conducted with our NBI-30775 product candidate in 1999. Results from this trial indicated that NBI-30775 was safe and well tolerated and demonstrated anti-depressant activity as measured by a widely-accepted depression scale known as the Hamilton Depression Scores. In this trial, NBI-30775 was administered to 20 patients with major depressive disorders. Results from the trial, as reported in the Journal of Psychiatric Research, showed that treatment response, as defined by more than a 50% reduction

S-30

in Hamilton Depression Scores, occurred in 50% of the patients in the low dose group and 80% of the patients in the higher dose group. While development of NBI-30775 was discontinued by our collaborator Janssen Pharmaceutica, we were strongly encouraged by these results, which we believe support the hypothesized mechanism of action.

The Phase IIa proof of concept study was conducted pursuant to our two collaborations with Janssen Pharmaceutica in the field of CRF antagonists. Our first collaboration was in 1995 and led to the development of NBI-30775. While NBI-30775 appeared to be safe in Janssen's clinical studies, reversible increases in liver enzymes occurred in two volunteers in an expanded safety study. As a result, Janssen announced its decision to discontinue development of NBI-30775. While all collaborative work under

the Janssen agreement was completed in 1998, because of the positive efficacy results for NBI-30775, Janssen decided to proceed with a back-up compound identified from the collaborative Janssen/Neurocrine patent portfolio and funded certain additional work at Neurocrine to identify additional first generation back-up compounds to NBI-30775. This work was completed in February 2001. Our back-up program agreement provides that in August 2001 Neurocrine was to receive either a \$3.5 million milestone payment from Janssen or exclusive rights to the first generation back-up compounds. We agreed to postpone the August event to allow Janssen to complete certain studies with the back-up program compounds. To our knowledge these studies have not been completed. Janssen may elect to return the back-up program compounds to us at any time and may elect to terminate their agreement with us at any time. In such event, exclusive rights to these first generation CRF antagonist compounds will revert to us. We do not expect any additional milestone payments under the Janssen agreement, and we do not expect that Janssen will commercialize any of the first generation CRF compounds, in which event we will not receive any royalties under the Janssen agreement.

In 1998, we announced that we had initiated a proprietary CRF R_1 antagonist program independent of Janssen. This program led to the discovery of a novel class of second generation CRF R_1 antagonist compounds of a chemical class distinct from the class of compounds under development by Janssen. Clinical development of our second generation CRF R_1 antagonists began in December 2000 when we initiated a Phase I clinical program with NBI-34041, our current lead candidate. Our first study was a Phase I, randomized, double blind, placebo controlled single dose clinical trial of NBI-34041. The trial was conducted in normal volunteers and was designed to evaluate the safety, tolerability, pharmacokinetics and pharmacodynamics over a range of six escalating doses. The study results indicated no safety issues which would preclude advancement of the candidate to the next phase of clinical evaluation.

In July 2001, we announced our second CRF antagonist collaboration, a worldwide collaboration with GlaxoSmithKline, or GSK, to develop and commercialize CRF antagonists for psychiatric, neurological and gastrointestinal diseases. Under the terms of this agreement, Neurocrine and GSK will conduct a collaborative research program for up to five years and collaborate in the development of NBI-34041, as well as novel back-up candidates and second generation compounds identified through the collaborative research. In the second quarter of 2001, we initiated a Phase I sequential dose escalation study with three doses of NBI-34041 which has been completed. The future development of this product candidate will be directed by a joint steering committee of Neurocrine and GSK and will take into account data from this study, which we expect will be available in the first half of 2002.

We face the risk that CRF R_1 antagonist compounds may not be effective and safe therapeutics for the treatment of depression or any other conditions. In addition, we or GSK may decide not to initiate Phase II clinical testing or progress to later clinical trials in a timely manner, if at all.

S-31

Anxiety. Anxiety is among the most commonly observed group of central nervous system disorders, which includes phobias or irrational fears, panic attacks, obsessive-compulsive disorders and other fear and tension syndromes. The Surgeon General's 1999 Report on Mental Health estimates that anxiety disorders affect 16.4% of the U.S. adult population. Of the pharmaceutical agents that other companies currently market for the treatment of anxiety disorders, benzodiazepines, such as Valium® and Xanax®, and the anxiolytic BuSpar® are the most frequently prescribed. Several side effects, however, limit the utility of these anti-anxiety drugs. Most problematic among these are drowsiness, the inability to stand up, amnesia, drug dependency and withdrawal reactions following the termination of therapy. Despite the undesirable side effects of the benzodiazepines and the delayed time-of-onset of BuSpar®, these market leaders collectively achieved approximately \$1.5 billion worldwide in revenues in the year 2000, according to Med Ad News. In view of significant evidence implicating CRF in anxiety-related disorders, we are developing small molecule CRF R_1 receptor antagonists as anti-anxiety agents that block the effects of overproduction of CRF. We believe that these compounds utilize a novel mechanism of action that may offer the advantage of being more selective, thereby providing increased efficacy with reduced side effects as compared to benzodiazepines.

As a co-examined variable in the open label Phase IIa clinical trial for depression described above, Janssen analyzed the anti-anxiety effects of the CRF R_1 receptor antagonist NBI-30775 using the Hamilton Anxiety Scores. Janssen observed a reduction in Hamilton Anxiety Scores from baseline in both treatment groups at all times after dosing. In addition, in preclinical studies used to evaluate anti-anxiety drugs, our scientists have demonstrated with statistical significance that clinical compound candidates from our independent CRF R_1 antagonist program are effective following oral administration. We did not observe any evidence of clinically relevant side effects. These results are encouraging because they suggest that compounds blocking the CRF R_1 receptor may be effective in treating anxiety-related disorders. Despite these early results, further clinical studies may fail to demonstrate that CRF R_1 antagonists are safe or effective in addressing anxiety.

IL-4 Fusion Toxin

Interleukin 4, or IL-4, is a natural chemical that modulates cell growth. Proteins that bind to IL-4, known as IL-4 receptors, are highly concentrated on the cells of malignant brain tumors as well as many other cancers, including some types of kidney, lung and breast cancer. Targeted toxins are a novel form of anticancer therapy under investigation in a variety of clinical settings. Targeted toxin therapeutics carry a toxin to a target site on the cancer cells and subsequently kill the cancer cell. Many scientists believe that targeted toxins have several potential advantages over conventional chemotherapy in that they are more selective and effective in the treatment of chemotherapy-resistant cancer cells.

In 1998, we exclusively licensed from the National Institutes of Health, or NIH, a targeted toxin compound, IL-4 fusion toxin, which we call NBI-3001. A collaboration between the FDA and the National Cancer Institute designed the IL-4 fusion toxin. It is a combination protein in which IL-4 is attached to *Pseudomonas* exotoxin, a toxin that can kill cells. The IL-4 portion of the fusion toxin preferentially binds to human cancer cells because the cancer cells express elevated levels of receptors for IL-4 on their surface, while IL-4 receptor expression is absent or undetectable in normal tissue. Once the IL-4 portion of the IL-4 fusion toxin targets the toxin to the cancer cells, the toxin portion of the molecule preferentially kills the cancer cells.

Malignant Glioma. Malignant brain tumors are a significant cause of cancer death. Despite current therapeutic options such as surgery, radiation and chemotherapy, according to the American Cancer Society, the median survival rate for malignant glioma, the most common

S-32

form of malignant brain cancer, is only in the range of nine to 12 months. These tumors arise within the brain and generally remain confined to the brain. The clinical course of malignant glioma is characterized by relentless loss of vital neurological functions and death within approximately 12 months. The American Association for Cancer Research has reported that there has been no improvement in survival for malignant brain cancer over the past 25 years.

In 1999, we initiated a Phase I/II trial of NBI-3001 in patients with malignant glioma in which the primary endpoints were to determine safety and the maximum tolerated dose. A secondary objective was to document therapeutic effect. We completed this trial in June 2000. We enrolled a total of 31 patients with recurrent gliomas which were unresponsive to surgery and radiotherapy in the trial. Our researchers treated patients with intratumoral infusions of NBI-3001 for up to four days. This trial found NBI-3001 to be safe and to have an acceptable degree of tolerability in this patient population. While approximately one-third of the patients exhibited side effects during or immediately following therapy, these effects were consistent with marked tumor cell death and the subsequent inflammatory response to this tumor cell death. The researchers did not observe any significant peripheral drug-related toxicities. The researchers reported that, of the 27 patients who completed therapy:

seven patients, or 26%, were evaluated at least once during follow-up as complete remissions, defined as no evidence of viable tumor;

10 patients, or 37%, were evaluated at least once during follow-up as a partial response, defined as greater than 50% reduction in tumor mass; and

10 patients, or 37%, were evaluated at least once during follow-up as continuing to suffer from stable or progressive disease.

In addition, the six-month median survival data showed trends toward efficacy. In the fourth quarter of 2000, we initiated an additional Phase II trial to better establish a dosing regimen and safety and efficacy for Phase III studies. To date, 18 patients have been enrolled in three dosing groups. These patients will be followed to evaluate 26-week survival, safety, tolerability and optimal clinical dose prior to embarking on the Phase III program.

In October 1999, the FDA granted us fast track designation for NBI-3001. Fast track designation allows us to accelerate our clinical program for NBI-3001 and expedite receipt of regulatory approvals. In April 2000, we were awarded orphan drug designation for NBI-3001 for astrocytic glioma. Under FDA rules, drug developers may obtain orphan drug designation for drugs that treat a disease or condition that affects fewer than 200,000 people in the United States per year. Orphan drug designation provides us with seven years of marketing exclusivity following approval, tax incentives and access to grant funding. We face the risk that we will not successfully complete clinical testing or progress to later clinical trials in a timely manner, or at all.

Additional Cancers. In conjunction with our clinical trials of IL-4 fusion toxin in malignant glioma, we entered into a collaborative research and development agreement with the FDA to investigate the safety and efficacy of IL-4 fusion toxin in laboratory models of different cancers and by different routes of administration. Research teams from the FDA and NIH have published results with IL-4 fusion toxin demonstrating a high level of binding and destruction of specific types of cancers. We are conducting preclinical research to support the application of NBI-3001 to peripheral solid tumors and have shown that IL-4 fusion toxin can be safely administered intravenously in preclinical models. We filed an investigational new drug, or IND, application with the FDA in July 2001 and initiated a Phase I clinical trial in November 2001 to first investigate the safety and efficacy of NBI-3001

against kidney, non-small-cell lung and breast cancers. These three cancers have a combined expected incidence in 2001 of approximately 400,000 people in the United States according to the American Cancer Society.

S-33

We face the risks that the effectiveness of NBI-3001 seen in our laboratory models, or the safety profile of NBI-3001 seen in our preclinical models, may not be confirmed in clinical trials or that the results of future clinical trials may not warrant further development in any of these settings or that the trial results may not support initiating clinical trials in cancers other than malignant glioma.

Altered Peptide Ligands

The American Autoimmune Related Diseases Association estimates that approximately 50 million people in the United States suffer from autoimmune diseases such as multiple sclerosis, rheumatoid arthritis, Type I diabetes, systemic lupus erythematosus and thyroiditis. Scientists believe that the body's immune system causes these diseases. The immune system protects an individual from disease agents, such as viruses, by recognizing and destroying those foreign substances using specialized blood cells, called lymphocytes. Occasionally, however, certain lymphocytes arise that inappropriately recognize the body's own tissues as an invader and begin to attack normal healthy tissue, resulting in an autoimmune disease like Type I diabetes. While the mechanism through which the lymphocyte initiates the autoimmune disease is still unknown, the development of drugs that specifically suppress the action of self-reactive lymphocytes or restore the function of regulatory cells may prove advantageous for the prevention, cure or treatment of an autoimmune disease.

One type of lymphocyte involved in the immune response to self or foreign substances is the T cell. T cells detect antigens, which are foreign substances, such as viruses, bacteria or other proteins the T cell recognizes as foreign. T cells recognize these antigens and destroy them. Experiments conducted by our scientists determined that specific amino acid residues within a peptide sequence of an antigen are required for T cell recognition and subsequent cellular activation. Scientists can specifically alter the structure of such a peptide fragment so that it will not properly activate the T cell. This altered peptide ligand can thus prevent the T cell from destroying its target, or in the case of an autoimmune reaction, prevent the T cell from destroying the healthy tissue.

Multiple Sclerosis. Multiple sclerosis is a chronic autoimmune disease characterized by recurrent attacks of neurologic dysfunction due to damage in the central nervous system. The classic clinical features of multiple sclerosis include impaired vision and weakness or paralysis of one or more limbs. Patients develop a slow, steady deterioration of neurologic function over an average duration of approximately 30 years. According to the National Multiple Sclerosis Society, there are between 250,000 and 350,000 cases of multiple sclerosis in the United States and a similar number of patients in Europe. Currently available treatments for multiple sclerosis offer only limited efficacy. Doctors often prescribe steroids to reduce the severity of acute flare-ups and speed recovery. Experimental therapy with other immune-suppressive agents has shown limited success. Nevertheless, worldwide sales of multiple sclerosis therapies reached \$1.8 billion in 2000.

Our co-founder, Dr. Lawrence Steinman, identified one of the dominant destructive T cell types in the brains of patients who had died of multiple sclerosis. Dr. Steinman further identified one of the dominant antigens on the normal cell targeted by the autoreactive T cells, a peptide from a brain protein known as myelin basic protein. We designed a novel altered peptide ligand based on myelin basic protein that would target the autoreactive T cells that cause neurological damage in multiple sclerosis. Together with Novartis Pharmaceuticals Corporation, our former collaborative partner for this program, we filed an IND with the FDA and received approval in 1996 to commence clinical trials. We subsequently completed Phase I clinical trials and initiated two Phase II clinical trials of our altered peptide ligand for the treatment of multiple sclerosis, NBI-5788, in 1999.

S-34

We have completed two Phase II trials in patients with a recurring form of multiple sclerosis. One of these trials was a multi-center, placebo-controlled, randomized, parallel design study in which patients received one of three doses of NBI-5788, and the other was an open label, unblinded, non-placebo-controlled study in eight patients conducted in collaboration with the NIH. While allergic reactions were seen in some patients in these trials, suggesting that optimal dosing may be at lower levels than those selected for the trials, of the patients completing the placebo controlled study, the total volume of enhancing lesions was reduced in the lowest dose group compared to the placebo control. Moreover, in this study 57% of the patients in the lowest dose group experienced reductions in the volume of new enhancing lesions compared to 25% in the placebo group. In the open label study, a higher incidence of new brain lesions was found in two patients who received the highest dose and the one patient who received the low dose. As a result, the trial was stopped.

We plan to initiate a confirmatory efficacy trial to determine the optimal dose and frequency of administration. Our aim for future trials will be to further establish the benefit of low-dose altered peptide ligand therapy in patients with multiple sclerosis. We face the risks that we may not initiate or complete additional clinical trials or that results of any such studies may not warrant additional clinical development of potential products.

Type I Diabetes. Utilizing our experience in the development of altered peptide ligands for multiple sclerosis, we have extended this approach to Type I or juvenile-onset diabetes, which is a metabolic disease in which the body does not produce enough insulin. Like multiple sclerosis, in Type I diabetes the immune system erroneously targets healthy tissue, in this case the pancreatic cells responsible for the production of insulin. According to the International Diabetes Federation, Type I diabetes is one of the most prevalent chronic childhood conditions in North America, afflicting approximately one million patients in 2000. Diabetics often suffer from a number of complications of the disease including heart disease, circulatory problems, kidney failure, neurologic disorders and blindness. Current therapy for Type I diabetes consists of daily insulin injections to regulate blood glucose levels.

We believe that an altered peptide ligand specific for autoimmune T cells involved in diabetes may stop the destruction of the insulin-secreting cells in early onset Type I diabetic patients, thus allowing them to delay or avoid chronic insulin therapy. Working with leading diabetologists at the Barbara Davis Center for Childhood Diabetes at the University of Colorado, our scientists have engineered an altered peptide ligand that affects immune cells targeting the pancreas. In preclinical studies, this altered peptide ligand, NBI-6024, was capable of eliciting a protective immune response and reducing the incidence of diabetes. In addition, experiments using immune cells derived from the blood of Type I diabetes patients indicate that patients' immune cells recognize NBI-6024. This suggests that NBI-6024 may have the potential to intervene in the disease process in humans. We have completed four Phase I safety and dose escalating clinical trials in approximately 100 diabetic patients. Data from these trials indicates that NBI-6024 is safe and well tolerated. We have initiated a Phase IIb clinical program in the fourth quarter of 2001. The first trial in this Phase IIb clinical program is a randomized, double blind, placebo-controlled, multicenter, multi-national study in adolescent and adult patients with new onset Type I diabetes. This study will involve at least 30 study centers and approximately 400 patients.

In 2000, we entered into agreements with Taisho providing them with worldwide rights to NBI-6024. Pursuant to the collaboration agreement, we will receive licensing and option fees, payments for certain development and regulatory milestones, significant reimbursement of worldwide development expenses and payments based on sales. In September 2001, Taisho and Tanabe Seiyaku announced their intention to merge and form a new holding company by

S-35

April 2002. This merger has not affected Neurocrine's relationship with Taisho and we have been given no reason to believe that it will affect the collaboration in the future.

We face the risks that we may not initiate or complete additional clinical trials or that results of any such studies may not warrant additional clinical development of NBI-6024.

Gonadotropin-Releasing Hormone Receptor Antagonist

Gonadotropin-releasing hormone, or GnRH, is a brain peptide that stimulates the secretion of the pituitary hormones that are responsible for sex steroid production and normal reproductive function. Researchers have found that chronic administration of GnRH agonists reversibly shuts down this transmitter pathway and is clinically useful in treating hormone-dependent diseases such as prostate cancer and endometriosis. Other companies have developed several peptide drugs on this principle, such as Lupron® and Zoladex®, and according to market analyst reports by Med Ad News, the annual worldwide sales in 2000 for these drugs were approximately \$2.5 billion. However, since these drugs are peptides, they must be injected rather than taken orally. In addition, these types of agonists take up to several weeks to exert their effect, a factor not seen with direct gonadotropin-releasing hormone antagonists, and until these drugs exert their effects, they have shown a tendency to exacerbate the condition.

We believe that there is a large potential market for an orally delivered gonadotropin-releasing hormone antagonist that does not have the tendency to initially exacerbate the patient's condition. In early 2001, we selected a lead clinical candidate and initiated our Phase I clinical program in November 2001. We face the risk that clinical studies may show different results than our preclinical studies or that clinical trials may show that our GnRH antagonist product candidates are not safe or effective.

We plan to focus our clinical efforts on prostate cancer and in the area of women's health, including endometriosis and uterine fibroids. According to the Endometriosis Association, researchers believe that more than five million women in the U.S. and Canada are affected by chronic endometriosis. Of those afflicted, approximately 200,000 patients are treated in a hospital setting, and approximately 250,000 are treated in an outpatient setting, according to a 1998 National Patient Profile audit. We believe that the availability of an oral treatment lacking the side effect profile of the currently available peptide agonists may be an alternative to surgery and encourage a higher treatment rate. We also believe our drug will have utility on the treatment of prostate cancer, of which there are expected to be approximately 200,000 new cases in 2001 in the U.S., according to the American Cancer Society.

Research*Excitatory Amino Acid Transporters*

Some of the most successful central nervous system drugs, including selective serotonin reuptake inhibitors such as Prozac®, selectively target brain amino acid transporters. Similarly, we are targeting a set of proteins generally located in the brain which transport brain chemicals in and out of cells, called excitatory amino acid transporters, to selectively control the levels of a brain chemical called glutamate in order to produce a therapeutic benefit in disorders where glutamate levels are abnormal such as head trauma, schizophrenia, Lou Gehrig's Disease and other neurodegenerative and psychiatric disorders.

We are collaborating with Wyeth-Ayerst to control glutamate transporter function as a novel strategy for the treatment of neurodegenerative and psychiatric disorders. Our collaboration

S-36

includes basic research to understand the function and regulation of the transporters, along with the identification and characterization of chemical and biological leads. We face the risks that we may be unable to demonstrate that these excitatory amino acid transporters are therapeutic targets or that we may fail to identify any product candidates for preclinical or subsequent clinical development.

In 2000, we expanded our excitatory amino acid transporter research and initiated a research program focused on retinal cell death associated with damage from low blood flow. The NIH awarded us a research grant to fund our work to identify novel compounds for the alleviation of neuronal cell death in response to a wide range of conditions including diabetic induced nerve damage, glaucoma and other circulatory conditions of the eye. This work is independent of our collaboration with Wyeth-Ayerst.

CRF R₁ Peripheral Uses

Recent reports have suggested that CRF plays a role in the control or modulation of the gastrointestinal system. Studies have demonstrated that central administration of CRF acts in the brain to inhibit emptying of the stomach while stimulating bowel activity, and suggest that overproduction of CRF in the brain may be a main contributor to stress-related gastrointestinal disorders.

Irritable bowel syndrome is a gastrointestinal inflammatory disease that affects between 10% to 20% of American adults, according to the International Foundation for Gastrointestinal Disorders. Irritable bowel syndrome can be a lifelong, intermittent disease, involving chronic or recurrent abdominal pain and frequent diarrhea or constipation, or both. Some patients with irritable bowel syndrome report the onset of symptoms of the disease following a major life stress event, such as death in the family, which suggests that the causes of irritable bowel syndrome may be related to stress. In addition, most irritable bowel syndrome sufferers also experience anxiety and depression. Since researchers believe that CRF is the primary mediator of stress, they have suggested that CRF R₁ antagonists may provide a treatment for irritable bowel syndrome. Together with GSK, we are evaluating our proprietary CRF R₁ antagonists for treatment of irritable bowel syndrome. We face the risks that preclinical studies may not warrant initiating clinical testing of these candidates or that any initial clinical data may not support continuation of the program and additional clinical trials.

CRF R₂ Antagonists

Our scientists were the first to isolate a second CRF receptor, called CRF R₂. We believe the distribution of CRF R₂ in the brain suggests that CRF R₂ could play a role in some forms of anxiety and some eating disorders. Our researchers have demonstrated that administration of a CRF R₂ antagonist reduces measures of anxiety in studies of obsessive compulsive disorder and conditioned fear. We are also evaluating our proprietary CRF R₂ antagonist for treatment of a variety of eating disorders. We have screened our small molecule library and conducted exploratory chemistry to identify a new series of compounds to undergo further study. We face the risks that our work in this area will not lead to clinical candidates or that clinical trials will not find our candidates to be safe and effective.

CRF R₂ Agonists/Urocortin Agonist

CRF R₂ agonists may represent a therapeutic strategy to elevate CRF and a related neuropeptide called urocortin. Preliminary data indicate that CRF and urocortin may act as central regulators of both appetite and metabolism. We have evaluated CRF R₂ agonists in

S-37

various models of obesity and have observed reduced food intake and weight loss. In 1996, we initiated a three-year research collaboration with Eli Lilly to screen and optimize CRF R₂ agonists. In October 1999, the funded research portion of the program was completed as scheduled and Eli Lilly has retained control of the program and exclusive rights to the compounds. We face the risks that Eli Lilly may not initiate further research and that, if they do, the research may not identify suitable candidate compounds for development in a timely manner, or at all.

Melanocortin Receptor Agonists/Antagonists

Melanocortin receptors are proteins on the surface of cells which help regulate some body functions such as eating and skin color. To date, researchers have identified a family of five melanocortin receptor subtypes. Recently, researchers discovered that one of the melanocortin receptor subtypes, subtype 4, plays an important role in the mechanism regulating appetite, body weight and insulin secretion. The subtype 4 receptor is activated by melanocyte stimulating hormone. When melanocyte stimulating hormone is injected, it reduces food intake and body weight. Responses have included the apparent increase in basal metabolic rate and lowering of serum insulin levels. We believe that an orally active subtype 4 agonist may produce the same effects and, thus, may provide a novel approach to the treatment of obesity or diabetes. We hope to identify an orally active subtype 4 agonist compound. However, we may fail to do so, and we face the risk that our melanocortin research will not lead to product candidates.

Melanin Concentrating Hormone Antagonists

Recent studies suggest that melanin concentrating hormone plays a role in regulating eating behavior. Based on these findings, we believe that blocking the effect of melanin concentrating hormone with a small molecule antagonist may represent a novel approach to the treatment of obesity. Thus, we have identified the melanin concentrating hormone receptor as a compelling drug target that may be complementary to other obesity/anorexia drug targets in our drug discovery pipeline. We face the risk that our research in this area will not lead to product candidates.

Hypocretin

Hypocretins are peptides that researchers have linked to a variety of activities, including the control of eating, cardiovascular regulation and water intake. Recent publications have also reported that hypocretins appear to have a critical role as regulators of sleep. Some studies point to a lack of hypocretin as being instrumental in the development of narcolepsy and suggest that a small molecule agonist may be able to offset the lack of hypocretin and provide therapy for narcolepsy. It is possible that the hypocretin system also contributes to the regulation of other sleeping disorders such as insomnia, particularly since administration of excess hypocretin into animals promotes wakefulness. We have screened our small molecule library to identify agonists and antagonists for the hypocretin receptors and are in the process of optimizing the compounds that resulted from these screens. We will be using these compounds to further characterize the hypocretin system. We face the risk that our research in this area will not lead to product candidates.

Our Discovery Technology

We utilize a proprietary approach to small molecule drug design that we refer to as multi-channel technology.

S-38

Our Multi-Channel Discovery. The advent of molecular biology, culminating recently in the cloning of the human genome, has opened up a vast array of receptors as potential targets for drug discovery. Over the past ten years numerous new technologies have been developed to try to speed the identification of small molecule drugs. These technologies have mainly relied on the creation of large chemical libraries utilizing combinatorial chemistry, automated synthesis of compounds and ultra-high throughput screening machines to test hundreds of thousands of compounds against a particular receptor. While we utilize all of these technologies, we have taken the science to the next step, one we call Multi-Channel Discovery, or MCD.

MCD is driven by the power of traditional medicinal chemistry accelerated by a suite of computational methodologies that guide the synthesis of highly active small molecules. At the core of MCD is our development of a virtual library containing over 100 million molecules. Utilizing this universe of compounds our chemists sequentially apply computer generated molecular screens to filter compounds that will bind to the desired receptor. The unique feature of MCD is that chemists are no longer constrained by the physical properties of a particular compound but rather are free to work with thousands of shapes and charges to design compounds that will fit onto the receptor target.

The power of MCD however, lies not in its application to a single receptor as a drug target but in the database of compounds that are characterized and isolated for the next target from the same class of receptors. Our current focus is on the most attractive receptor class in the pharmaceutical industry, G-protein-coupled receptors. MCD is not a static process, but one that becomes more powerful, more predictive, and more efficient with each subsequent use. It is an artificial intelligence system applied to drug

design.

In connection with our multi-channel technology, we utilize other advanced technologies to enhance our drug discovery capabilities and to accelerate the drug development process. These technologies include:

High-Throughput Screening. We have assembled a chemical library of diverse, low molecular weight organic molecules for lead compound identification and we have implemented robotics screening capabilities linked to our library of compounds that facilitate the rapid identification of new drug candidates for multiple drug targets. In addition, we have designed a 10,000-compound library focused on some of our molecular targets. We believe that our utilization of high-throughput screening and medicinal and peptide chemistry will enable us to rapidly identify and optimize lead molecules.

Molecular Biology. Our scientists utilize novel techniques to examine gene expression in a variety of cellular systems. We have developed a sophisticated technique to evaluate the type and quantity of genes in various cellular systems prior to the isolation of genes. We have also developed unique expression vectors and cell lines that allow for the highly efficient protein expression of specific genes.

Our drug discovery program creates a significant amount of genetic sequence information. We have developed a bioinformatics system, which we believe will allow us to identify novel genes involved in neurodegeneration. We collect data with automated instruments, and we store and analyze the data using customized computational tools.

Gene Sequencing. We apply integrated automated DNA sequencing and gene identification technology in our drug discovery program, enabling us to perform extended gene analysis in a rapid, high-throughput format with independent linkage into a sequence identification database. We have optimized gene sequencing instrumentation for differential display, a technique that may facilitate the rapid identification of novel genes.

S-39

Our Business Strategy

Our goal is to become the leading therapeutic product-based biopharmaceutical company focused on neurologic and endocrine diseases and disorders. There are six key elements to our business strategy:

Build a Large and Diversified Product Portfolio to Mitigate Overall Clinical and Technical Risk. We believe that by building a large and diverse product pipeline, we can mitigate some of the risks associated with drug development. We currently have 15 programs in various stages of research and development, with seven projects in clinical development, one program in advanced preclinical development which we expect to progress into the clinic in the near future, and seven research projects to supply clinical compounds for the future. We take a portfolio approach to managing our pipeline that balances the size of the market opportunities with clear and defined clinical and regulatory paths to approval. We do this to ensure that we focus our internal development resources on innovative therapies with high probabilities of technical and commercial success.

Identify Novel Drug Targets for the Development of Innovative Therapies to Address Large Unmet Market Opportunities. We seek to identify and validate novel drug targets for internal development or collaboration. For example, the novel drug candidates we have identified to regulate CRF, which is believed to be the central mediator of the body's stress response, may represent the first new breakthrough for anxiety and depression in over 20 years. Gonadotropin-releasing factor antagonists, compounds designed to reduce the secretions of sex steroids, may represent the first novel non-injectible means of treatment of prostate cancer and endometriosis. Melanocortin and hypocretin modulators are compounds which affect proteins in the brain believed to be involved in many activities of the body. We believe these compounds build upon our franchise and expertise in obesity and sleep disorders. The creativity and productivity of our discovery research group will continue to be a critical component for our continued success. Our team of approximately 105 biologists and chemists has a goal of delivering three innovative clinical compounds over the next five years to fuel our research and development pipeline.

Establish Corporate Collaborations with Global Pharmaceutical Companies to Assist in the Development of Our Products and Mitigate Financial Risk While Retaining Significant Commercial Upside. We leverage the development, regulatory and commercialization expertise of our corporate collaborators to accelerate the development of our potential products while typically retaining co-promotional rights, and at times commercial rights, in North America. We intend to further leverage our resources by continuing to enter into strategic alliances to enhance our internal development and commercialization capabilities. To date, we have entered into strategic alliances with:

GlaxoSmithKline, for second generation corticotropin-releasing factor receptor antagonists to treat anxiety and depression and irritable bowel syndrome;

Wyeth-Ayerst, for compounds to treat neurodegenerative and psychiatric diseases;

Taisho, for compounds to treat Type I diabetes, in which the body does not produce enough insulin;
Janssen, for corticotropin-releasing factor receptor antagonists to treat anxiety and depression; and
Eli Lilly, for treatments of central nervous system disorders, including obesity.

S-40

Acquire Rights to Complementary Drug Candidates. We plan to continue to selectively acquire rights to products in various stages of development to take advantage of our drug development capabilities. For example, in May 1998, we licensed from the NIH an IL-4 fusion toxin which is currently in Phase II clinical trials for recurrent malignant glioma, as well as kidney, lung and other cancers. In May 1998, we acquired Northwest NeuroLogic, Inc. and thereby considerably expanded our research pipeline. Through this acquisition, we acquired the technology and intellectual property rights surrounding excitatory amino acid transporters, a portion of which is now in collaboration with Wyeth-Ayerst. We also acquired from Northwest NeuroLogic intellectual property relating to melanocortin technology and other technologies that we are developing. In June 1998, we licensed exclusive worldwide commercial rights for NBI-34060, our compound for the treatment of insomnia, from DOV Pharmaceutical and have since moved this compound into advanced clinical development.

Supplement Our Internal Research Capabilities by Collaborating with Leading Platform Technology Companies. We believe we can complement our multidisciplinary research process by selectively accessing new technologies from platform technology companies. Through creative collaborations with technology leaders, we believe we can accelerate and expand our internal discovery efforts. We have entered into a number of alliances with other platform technology companies to enhance our drug discovery and development capabilities. The most recent of these is our alliance with MediChem Life Sciences to crystallize the CRF₁ receptor to aid in design of a new class of CRF blockers.

Outsource Capital Intensive and Non-Strategic Activities. We intend to focus our resources on research and development activities by outsourcing our requirements for clinical drug supply and certain preclinical studies and clinical monitoring activities. We believe the availability of skilled contract manufacturers and contractors will allow us to cost-effectively meet these needs and thereby allow us to concentrate our full attention and resources on our core discovery and development programs to generate additional product opportunities.

Our Strategic Alliances

One of our business strategies is to utilize strategic alliances to enhance our development and commercialization capabilities. To date, we have formed the following alliances:

GlaxoSmithKline. In July 2001, we announced a worldwide collaboration with GSK to develop and commercialize CRF antagonists for psychiatric, neurological and gastrointestinal diseases. Under the terms of this agreement, Neurocrine and GSK will conduct a collaborative research program for up to five years and collaborate in the development of our current lead compounds, as well as novel back-up candidates and second generation compounds identified through the collaborative research. In addition, Neurocrine will be eligible to receive milestone payments as compounds progress through the research and development process, royalties on future product sales and co-promotion rights in the U.S. under some conditions. GSK may terminate the agreement at its discretion upon prior written notice to us. In such event, we may be entitled to certain payments and all product rights would revert to us. The total collaborative value of the GSK collaboration is the largest in Neurocrine's history. As of September 30, 2001, we have received \$4.5 million in license fees and \$5.5 million for the first year of sponsored research, which is being recognized as revenue over the initial research period. In addition, we recognized \$15.5 million in milestones and \$155,000 in reimbursement of development costs.

Taisho Pharmaceutical Co., Ltd. In December 1999, we entered into an agreement with Taisho, providing to them an exclusive option to obtain European, Asian and North American development and commercialization rights for our altered peptide ligand product, NBI-6024, for Type I Diabetes in exchange for a \$2.0 million option fee. In July 2000, Taisho exercised its option

S-41

as to Europe and Asia, and in December 2000, Taisho exercised its option as to North America. Together with Taisho, we formed a steering committee to oversee the worldwide development of NBI-6024. We will receive license fees, milestone payments, and reimbursement of 100% of worldwide development expenses. In addition, we will receive payments on product sales for the term of the patents covering NBI-6024, subject to adjustment for payments to third parties. Taisho may terminate the agreement at its discretion upon prior written notice to us. In such event, all product rights would revert to us. As of September 30, 2001, we have

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

received \$4.0 million in license fees and \$4.0 million in milestones. Through that date, we recognized \$2.1 million in sponsored research and \$5.7 million in reimbursement of development costs.

Wyeth-Ayerst Laboratories. Effective January 1999, we entered into a collaboration and license agreement with Wyeth-Ayerst relating to the research, development and commercialization of compounds that control excitatory amino acid transporters for the treatment of neurodegenerative and psychiatric diseases. Pursuant to the agreement, we are entitled to receive up to \$80.3 million for sponsored research and milestones, plus additional amounts for potential royalties. The amount we are entitled to receive consists of \$11.0 million for sponsored research over a three- year period, plus up to \$69.3 million in milestone payments upon achievement of certain research, development and regulatory events. We have granted Wyeth-Ayerst exclusive and non-exclusive rights to our excitatory amino acid transporters technology as well as exclusive rights to any products developed during the collaboration. These licenses are for the term of the patents licensed. We will receive royalties on product sales for the terms of the patents covering the collaboration products, subject to adjustments for royalties payable to other parties and for competition. We will also receive royalties for products that are not the subject of issued patents. We also have the option to co-promote collaboration products in Canada and the United States under some conditions. Wyeth-Ayerst may terminate the agreement if they decide that the research is not successful, if they decide to stop the program or if we are acquired by another company. The agreement may also be terminated by either party for the other party's failure to meet its obligations under the agreement or bankruptcy. As of September 30, 2001, we have recognized a total of \$11.3 million from Wyeth-Ayerst under the agreement, consisting of \$8.3 million in sponsored research and \$3.0 million in milestone payments.

Janssen Pharmaceutica, N.V. In January 1995, we entered into the first of two research and development agreements with Janssen to collaborate in the discovery, development and commercialization of small molecule CRF R₁ antagonists for the treatment of anxiety, depression and substance abuse. Under the January 1995 agreement, Janssen funded three years of research at Neurocrine and received exclusive licenses to all CRF R₁ antagonist compounds developed during the term of the funded research or during the year thereafter. The term of the licenses are for the term of the patents licensed under the agreement. The collaborative research portion of the first Janssen agreement was completed as scheduled in 1997. In September 1999, together with Janssen, we entered into an amended agreement to expand the collaborative research and development efforts to identify additional small molecule CRF antagonists for the treatment of psychiatric disorders. In connection with the amended Janssen agreement, we received an initial payment and two years of additional research funding for our scientists working in collaboration with Janssen. All collaboration products identified under the 1999 agreement are subject to the same terms and conditions as the products arising under the 1995 agreement. This additional research was completed in February 2001. Our 1999 agreement provides that in August 2001 Neurocrine was to receive either a \$3.5 million milestone payment from Janssen or exclusive rights to the first generation back-up compounds. We agreed to postpone the August event to allow Janssen to complete certain studies with the back-up program compounds. To our knowledge these studies have not been completed. Janssen may elect to return the back-up program compounds to us at any time and

S-42

may elect to terminate their agreement with us at any time. In such event, exclusive rights to these first generation CRF antagonist compounds will revert to us.

As of September 30, 2001, we have received a total of \$20.9 million, including \$14.6 million in sponsored research, \$3.5 million in milestones, \$2.0 million in license fees and \$760,000 for reimbursement of outside costs under these agreements. Janssen is responsible for funding all clinical development and marketing activities, including reimbursement to us for our promotional efforts, if any. In connection with the 1995 agreement, Johnson & Johnson Development Corporation purchased \$5.0 million of our common stock. We do not expect any additional milestone payments under the Janssen agreement, and we do not expect that Janssen will commercialize any of the first generation CRF compounds, in which event we will not receive any royalties under the Janssen agreements.

Eli Lilly and Company. In October 1996, we entered into a research and license agreement with Eli Lilly to collaborate in the discovery, development and commercialization of CRF binding protein ligand inhibitors for the treatment of central nervous system disorders including obesity and dementias, such as Alzheimer's disease and CRF R₂ agonists for central nervous system diseases and disorders. Under the agreement, we were entitled to receive three years of funded research payments. In October 1999, the funded portion of the research program concluded as scheduled and, to our knowledge, Eli Lilly is not planning any specific future development efforts, and we do not expect to receive any additional payments under this agreement.

Risks Related to Our Strategic Alliances. We face the risks that we or any of the above collaborators may not be successful in research and drug discovery, that any preclinical and clinical drug candidates arising from the collaborations may not generate commercial product candidates that have viable clinical, regulatory and intellectual property profiles or that any commercial products arising from any of these collaborations may not enjoy market acceptance. Therefore, we may never receive any milestone payments or royalty income under any of our collaboration agreements.

Intellectual Property

We seek to protect our lead compounds, compound libraries, expressed proteins, synthetic organic processes, formulations, assays, cloned targets, screening technology and other technologies by filing, or by causing to be filed on our behalf, patent applications in the United States and abroad. We have 13 issued U.S. patents, approximately 60 pending U.S. patent applications and another approximately 140 issued and pending foreign patents and applications. We have licensed, from institutions such as The Salk Institute, Stanford University, Oregon Health Sciences University, DOV Pharmaceutical and others the rights to an additional 30 issued U.S. patents, 20 pending U.S. patent applications, and 50 issued and pending foreign filings. Two of our European patents are subject to opposition proceedings. These proceedings relate to our broad patent covering immune therapeutics in diabetes and multiple sclerosis. If successful, these opposition proceedings could reduce the breadth of some of our proprietary rights, but we believe they would not materially impede our commercialization strategy. We face the risk that one or more of the above patent applications may be denied. We also face the risk that our issued patents may be challenged or circumvented or may otherwise not provide protection for any commercially viable products we develop.

The technologies we use in our research, as well as the drug targets we select, may unintentionally infringe the patents or violate the proprietary rights of third parties. If this occurs, we may be required to obtain licenses to patents or proprietary rights of others in order

S-43

to continue with the commercialization of our products. We are aware of a European Patent application controlled by another, which if granted in its broadest scope and held to be valid, could impact the commercialization of our modified release insomnia formulation in Europe unless we obtain a license, which may not be available to us. We are also aware of pending and issued patent claims to melanin concentrating hormone ligand and receptor, the hypocretin ligand and receptor and certain uses of melanocortin subtype 4 agonists. We are conducting research in all of those areas and may ultimately need to license those patents in order to proceed. In addition, we are aware of two U.S. patents relating to IL-4 proteins that are controlled by other entities which, if construed very broadly, and if valid as so construed, could prevent us from commercializing our IL-4 fusion toxin products in the United States unless we obtain a license, which may not be available to us on commercially reasonable terms, or at all. We do not believe that our research and development activities as currently conducted infringe any valid issued patents.

NBI-34060, our leading gamma amino-butyric acid agonist compound for the treatment of insomnia, is covered generically in an issued U.S. patent, which we licensed from DOV Pharmaceutical. The term of the U.S. patent is due to expire in June 2003. NBI-34060 is not currently covered by any foreign patents of which we are aware. We intend to seek additional protection of this compound in three ways. First, we have filed nine U.S. and foreign patent applications directed to the synthesis, formulations and various forms of NBI-34060, which could extend patent protection to the year 2020. We face the risk that these patents may not issue, or may subsequently be challenged successfully. Second, patent term extension under the Hatch/Waxman Patent Term Extension Act may add patent life in the U.S. beyond the June 2003 expiration, depending on the length of clinical trials and other factors involved in the filing of a new drug application. Third, in addition to this potential patent protection, the United States, the European Union and Japan all provide data protection for new medicinal compounds. If this protection is available, no competitor may use the original applicant's data as the basis of a generic marketing application during the period of data protection. This period of exclusivity is five years in the United States, six years in Japan and six to ten years in the European Union, measured from the date of FDA, or corresponding foreign, approval.

In-Licensed Technology

We have in-licensed the following technologies to complement our ongoing clinical and research programs. Most of these licenses extend for the term of the related patent and contain customary royalty, termination and other provisions.

In May 2001, we licensed nonexclusive rights to a murine CCR7 expressing cell line from Public Health Service.

In March 2001, we licensed nonexclusive rights to a saoS-2 cell line from The Sloan-Kettering Institute for Cancer Research.

In March 2001, we licensed a HERG cell line from Wisconsin Alumni Research Foundation.

In October 2000, we licensed nonexclusive rights to several GT1-cell lines from The Salk Institute.

In August 2000, we licensed nonexclusive rights to CRF R₁ deficient mice from the Research Development Foundation.

In July 2000, we licensed exclusive rights to melanocortin subtype 3 receptor knock-out mice from Oregon Health Sciences University.

S-44

In August 1999, we licensed nonexclusive rights to the human gonadotropin-releasing hormone receptor from Mount Sinai School of Medicine.

In January 1999, we licensed exclusive worldwide rights to patents relating to excitatory amino acid transporters and melanocortin 1-5 from Oregon Health Sciences University.

In December 1998, we licensed nonexclusive rights to technology covering melanocortin subtype 4 from the University of Michigan.

In June 1998, we licensed exclusive worldwide rights to our sedative compound, NBI-34060, from DOV Pharmaceutical, Inc.

In May 1998, we licensed exclusive worldwide rights to patents covering NBI-3001, our IL-4 fusion toxin, from the National Institutes of Health and inventors Ira Pastan and David Fitzgerald.

In October 1997, we licensed co-exclusive rights to technology relating to the prevention of diabetes from University Technology Corporation.

In November 1996, we licensed exclusive worldwide rights to technology directed to peptide therapeutics for the treatment of autoimmune disease from the Trustees of Dartmouth College.

In November 1994, we licensed exclusive worldwide rights to technology relating to treatment of multiple sclerosis using peptide analogs of myelin basic protein from Stanford University.

In November 1993, we licensed exclusive worldwide rights to CRF R₁ from the Salk Institute for Biological Studies.

Manufacturing

We currently rely, and will continue to rely for at least the next few years, on contract manufacturers to produce sufficient quantities of our product candidates for use in our preclinical and anticipated clinical trials. Manufacturers of our NBI-34060 clinical trial material include Organichem Corporation, Pharmaceutics International, Inc. and Patheon, Inc., Polypeptide Laboratories, Cook Pharmaceutical Solutions, Pyramid Laboratories and Prima Pharm Inc. manufacture our altered peptide ligands NBI-6024 and NBI-5788. Cedarburg Pharmaceuticals, Albany Molecular Research and Pharmaceutics International, Inc. manufacture our CRF antagonist compounds. MediChem and Pharmaceutics International, Inc. manufacture our GnRH antagonist compounds. Manufacturers of our NBI-3001 clinical trial material include Diosynth and Charles River Laboratories.

There is currently a limited supply of some of these components. Furthermore, the contract manufacturers that we have identified to date only have limited experience at manufacturing, formulating, analyzing and packaging our product candidates in quantities sufficient for conducting clinical trials or for commercialization.

If we are unable to establish and maintain relationships with third parties for manufacturing sufficient quantities of our product candidates and their components that meet our planned time and cost parameters, it could delay the development and timing of our clinical trials.

S-45

Marketing and Sales

We currently have no sales, marketing or distribution capabilities. In order to commercialize any of our product candidates, we must either internally develop sales, marketing and distribution capabilities or make arrangements with third parties to perform these services. We intend to sell, market and distribute some products directly and intend to rely on relationships with third parties to sell, market and distribute other products. Under our collaboration agreements with GSK, Janssen, Wyeth-Ayerst and Eli Lilly, we may have the opportunity to co-promote some of our products in the United States. To market any of our products directly, we must develop a marketing and sales force with technical expertise and with supporting distribution capabilities, none of which we currently have.

Government Regulation

Regulation by government authorities in the United States and foreign countries is a significant factor in the development, manufacture and marketing of our proposed products and in our ongoing research and product development activities. All of our

products will require regulatory approval by government agencies prior to commercialization. In particular, human therapeutic products are subject to rigorous preclinical studies and clinical trials and other approval procedures of the FDA and similar regulatory authorities in foreign countries. Various federal and state statutes and regulations also govern or influence testing, manufacturing, safety, labeling, storage and record-keeping related to such products and their marketing. The process of obtaining these approvals and the subsequent substantial compliance with appropriate federal and state statutes and regulations require the expenditure of substantial time and financial resources.

Preclinical studies generally are conducted in laboratory animals to evaluate the potential safety and the efficacy of a product. Drug developers submit the results of preclinical studies to the FDA as a part of an investigational new drug application which must be approved before we can begin clinical trials in humans. Typically, clinical evaluation involves a time consuming and costly three-phase process.

- | | |
|-----------|---|
| Phase I | Clinical trials are conducted with a small number of subjects to determine the early safety profile, maximum tolerated dose and pharmacokinetics of the product in human volunteers. |
| Phase II | Clinical trials are conducted with groups of patients afflicted with a specific disease in order to determine preliminary efficacy, optimal dosages and expanded evidence of safety. |
| Phase III | Large-scale, multi-center, comparative trials are conducted with patients afflicted with a target disease in order to provide enough data to demonstrate with substantial evidence the efficacy and safety required by the FDA. |

The FDA closely monitors the progress of each of the three phases of clinical trials that are conducted in the United States and may, at its discretion, reevaluate, alter, suspend or terminate the testing based upon the data accumulated to that point and the FDA's assessment of the risk/benefit ratio to the patient. To date we have conducted many of our clinical trials in Europe and South Africa.

Once Phase III trials are completed, drug developers submit the results of preclinical studies and clinical trials to the FDA in the form of a new drug application, or a biologics licensing

S-46

application for approval to commence commercial sales. In response, the FDA may grant marketing approval, request additional information or deny the application if the FDA determines that the application does not meet regulatory approval criteria. FDA approvals may not be granted on a timely basis, or at all. Furthermore, the FDA may prevent a drug developer from marketing a product under a label for its desired indications, which may impair commercialization of the product. Similar regulatory procedures must also be complied with in countries outside the United States.

If the FDA approves the new drug application, the drug becomes available for physicians to prescribe in the United States. After approval, the drug developer must submit periodic reports to the FDA, including descriptions of any adverse reactions reported. The FDA may request additional studies, known as Phase IV, to evaluate long-term effects.

In addition to studies requested by the FDA after approval, a drug developer may conduct other trials and studies to explore use of the approved compound for treatment of new indications. The purpose of these trials and studies and related publications is to broaden the application and use of the drug and its acceptance in the medical community.

Orphan Drug Designation

The FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States. Orphan drug designation must be requested before submitting a new drug application. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. If a product that has orphan drug designation subsequently receives FDA approval for the indication for which it has orphan drug designation, the product is entitled to orphan exclusivity, which means the FDA may not approve any other applications to market the same drug for the same indication, except in very limited circumstances, for seven years. Our IL-4 fusion toxin product candidate has received orphan drug designation from the FDA for astrocytic glioma.

Approvals outside the United States

We will have to complete an approval process similar to that in the United States in virtually every foreign target market for our products in order to commercialize our product candidates in those countries. The approval procedure and the time required for approval vary from country to country and may involve additional testing. Foreign approvals may not be granted on a timely basis, or at all. In addition, regulatory approval of prices is required in most countries other than the United States. We face the risk that the resulting prices would be insufficient to generate an acceptable return to us or our corporate collaborators.

Fast Track Designation

Congress enacted the Food and Drug Administration Modernization Act of 1997, in part, to ensure the timely availability of safe and effective drugs, biologics and medical devices by expediting the FDA review process for new products. The Food and Drug Administration Modernization Act establishes a statutory program for the approval of so-called fast track products. The new law defines a fast track product as a new drug or biologic intended for the treatment of a serious or life-threatening condition that demonstrates the potential to address unmet medical needs for such a condition. Under the new fast track program, the sponsor of a

S-47

new drug or biologic may request the FDA to designate the drug or biologic as a fast track product at any time during clinical development of the product. Fast-track designation provides an expedited review of a product, which accelerates FDA review.

We may seek fast track designation to secure expedited review of appropriate product candidates. We can never be sure that we will obtain fast track designation. We cannot predict the ultimate impact, if any, of the new fast track process on the timing or likelihood of FDA approval of any of our potential products. We received fast track designation for our IL-4 fusion toxin.

Competition

The biotechnology and pharmaceutical industries are subject to rapid and intense technological change. We face, and will continue to face, competition in the development and marketing of our product candidates from biotechnology and pharmaceutical companies, research institutions, government agencies and academic institutions. Competition may also arise from, among other things:

other drug development technologies;

methods of preventing or reducing the incidence of disease, including vaccines; and

new small molecule or other classes of therapeutic agents.

Developments by others may render our product candidates or technologies obsolete or noncompetitive. We are performing research on or developing products for the treatment of several disorders including insomnia, anxiety, depression, malignant glioma, other forms of cancer, Type I diabetes and multiple sclerosis.

We are developing a gamma amino-butyric acid receptor agonist, NBI-34060, for the treatment of insomnia. Ambien® and Sonata® are already marketed for the treatment of insomnia by Pharmacia, Sanofi-Synthelabo and American Home Products, respectively.

In the area of anxiety disorders, our product candidates will compete with well-established products such as Valium®, marketed by Hoffman-La Roche, Xanax®, marketed by Pharmacia, BuSpar®, marketed by Bristol-Myers Squibb, among others as well as generic alternatives for each of these products.

We are also developing products for depression, which will compete with well-established products in the antidepressant class, including Prozac®, marketed by Eli Lilly as well as its generic alternatives, Zoloft®, marketed by Pfizer, Paxil®, marketed by GSK, and Celexa®, marketed by Forest Laboratories, among others. Certain technologies under development by other pharmaceutical companies could result in additional commercial treatments for depression and anxiety. In addition, a number of companies also are conducting research on molecules to block CRF, which is the same mechanism of action employed by our compounds.

Guilford Pharmaceuticals Gliadel® is approved in the U.S. and Europe for use in a subset of brain cancers known as recurrent glioblastoma multiforme. FDA review of Gliadel for treatment of primary glioblastoma multiforme is expected in December 2001. Gliadel® will potentially compete with our IL-4 fusion toxin product, NBI-3001, if our product is approved by the FDA. Temozolomide, marketed by Schering Plough, is approved in Europe for both recurrent malignant glioma and recurrent astrocytoma and in the U.S. for only recurrent astrocytoma. Temozolomide may also compete with our IL-4 fusion toxin product.

We are also pursuing development of NBI-3001 for the treatment of peripheral solid tumors, such as kidney cancer and non-small-cell lung cancer. Proleukin[®] is marketed by Chiron for the treatment of kidney cancer, and drug treatments for non-small-cell lung cancer include Taxotere[®], marketed by Aventis, Taxol[®], marketed by Bristol-Myers Squibb, Navelbine[®], marketed by GSK, and Gemzar[®], which is marketed by Eli Lilly. Breast cancer agents include Taxotere[®], marketed by Aventis, Nolvadex[®] and Arimidex[®], marketed by AstraZeneca, and Herceptin[®], marketed by Genentech.

Products that may compete with NBI-5788, our altered peptide ligand for multiple sclerosis, include Betaseron[®] and Avonex[®], similar forms of beta-interferon marketed by Berlex BioSciences and Biogen, respectively, and Rebif[®] marketed by Ares Serono. Copaxone[®], a peptide polymer marketed by Teva, has also been approved for the marketing in the United States and certain other countries for the treatment of multiple sclerosis.

There are a number of competitors to products in our research pipeline. Lupron Depot[®], marketed by Takeda-Abbott Pharmaceuticals, Zoladex[®], marketed by AstraZeneca, and Synarel[®], marketed by Pharmacia, are gonadotropin-releasing hormone peptide agonists that have been approved for the treatment of prostate cancer, endometriosis, infertility, breast cancer and central precocious puberty. These drugs may compete with any small molecule gonadotropin-releasing hormone antagonists we develop for these indications. Anti-obesity therapeutics currently available include Xenical[®] from Roche Laboratories and Meridia[®] from Abbott Laboratories. If one or more of these products or programs are successful, it may reduce or eliminate the market for our products.

Compared to us, many of our competitors and potential competitors have substantially greater:

- capital resources;
- research and development resources, including personnel and technology;
- regulatory experience;
- preclinical study and clinical testing experience;
- manufacturing and marketing experience; and
- production facilities.

Any of these competitive factors could harm our business, prospects, financial condition and results of operations, which could negatively affect our stock price.

Employees

As of October 31, 2001, we had 219 employees, consisting of 207 full-time and 12 part-time employees. Of the full-time employees, approximately 72 hold Ph.D., M.D. or equivalent degrees. None of our employees are represented by a collective bargaining arrangement, and we believe our relationship with our employees is good. We are highly dependent on the principal members of our management and scientific staff. If we were to lose the services of any of these personnel, we might not be able to achieve our development objectives. Furthermore, recruiting and retaining qualified scientific personnel to perform research and development work in the future will also be critical to our success. We face the risk that we may not be able to attract and retain personnel on acceptable terms given the competition among biotechnology, pharmaceutical and health care companies, universities and non-profit research institutions for experienced scientists. In addition, we rely on members of our Scientific Advisory Board and a significant number of consultants to assist us in formulating our research and development strategies.

Insurance

We maintain product liability insurance for our clinical trials. We intend to expand our insurance coverage to include the sale of commercial products if marketing approval is obtained for products in development. However, insurance coverage is becoming increasingly expensive, and no assurance can be given that we will be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. There can also be no assurance that we will be able to obtain commercially reasonable product liability insurance for any products approved for marketing.

Properties

We lease approximately 93,000 square feet of space at our headquarters in San Diego, California, of which approximately 65% is laboratory space dedicated to research and development. This facility was constructed in 1998 and is under lease through August 2013. Our lease payments are \$216,000 per month with annual increases of 4% on September 1st of each year. We have sublet approximately 10,000 square feet of this building to one tenant through February 28, 2002.

We believe that our property and equipment are generally well maintained, in good operating condition and adequate for our current needs.

Legal Proceedings

We are currently not subject to any material legal proceedings.

Our Scientific Advisory Board

We have assembled a Scientific Advisory Board that currently consists of 11 individuals. Members of our Scientific Advisory Board are leaders in the fields of neurobiology, immunology, endocrinology, psychiatry and medicinal chemistry. Our Scientific Advisory Board advises us in the selection, implementation and prioritization of our research programs.

Our Scientific Advisory Board presently consists of the following individuals:

Susan G. Amara, Ph.D., a Senior Scientist and Professor at the Vollum Institute for Advanced Biomedical Research and an Investigator in the Howard Hughes Medical Institute, is an expert on the cellular and molecular biology of neurotransmitter transporters, excitatory amino acid transporter structure and regulation and signaling roles of neurotransmitter transporters.

Michael Brownstein, M.D., Ph.D., is Chief of the Laboratory of Genetics at the National Institute of Mental Health and National Human Research Institute. He is a recognized expert in molecular pharmacology as it applies to the field of neuroendocrinology, where he has defined many of the pharmaceutically important neurotransmitter receptors and transporter systems.

Roger D. Cone, Ph.D., a senior scientist at the Vollum Institute for Advanced Biomedical Research, is an international expert on the neuroendocrine system, with particular expertise on the melanocortin system and the hypothalamic control of energy homeostasis. Dr. Cone has been an editor of the journal *Endocrinology* and completes editorship in December 2001.

S-50

Stephen M. Hedrick, Ph.D., is Professor and Chairman of Cell Biology at the University of California, San Diego. Dr. Hedrick is an expert in T cell immunology and co-discovered the first T cell receptor genes and identified the regions responsible for antigen binding. He is an editor for the *Journal of Immunology*.

Florian Holsboer, M.D., Ph.D., is Director at the Max Planck Institute fur Psychiatrie. Dr. Holsboer is an international expert on the role of glucocorticoids and neuropeptides, particularly CRF, in neuropsychiatric disorders. He coordinates the efforts of several hundred scientists and clinicians at the Max Planck Institute, a major European neuropsychiatric institute.

George F. Koob, Ph.D., is a Professor of the Department of Neuropharmacology at The Scripps Research Institute and an Adjunct Professor in the Departments of Psychology and Psychiatry at the University of California, San Diego. Dr. Koob is an internationally recognized behavioral pharmacology expert on the role of peptides in the central nervous system, the neurochemical basis of addiction and in the development of preclinical behavioral procedures for the screening of anxiolytic and antidepressant drugs and memory enhancers.

Charles B. Nemeroff, M.D., Ph.D., is Chairman and Professor of the Department of Psychiatry and Behavioral Sciences at Emory University School of Medicine. Dr. Nemeroff is an internationally recognized expert on the effects of neuropeptides on behavior and their relevance in clinically important conditions such as depression, anxiety and schizophrenia, and has published over 400 articles on this subject.

Thomas Roth, Ph.D., is the Head of the Division of Sleep Disorder Research at the Henry Ford Hospital Research Institute. Dr. Roth is an internationally recognized expert in the field of sleep research. His areas of specialization are sleep homeostasis and neuropharmacology of sleep.

Lawrence J. Steinman, M.D., is our Chief Scientific Advisor, Neuroimmunology and a member of our Founding Board of Scientific and Medical Advisors and our Board of Directors.

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

Wylie W. Vale, Ph.D., is our Chief Scientific Advisor, Neuroendocrinology and a member of our Founding Board of Scientific and Medical Advisors and our Board of Directors.

Stanley J. Watson, Jr., M.D., Ph.D., is Professor and Associate Chair for Research in the Department of Psychiatry and Co-Director of the Mental Health Research Institute at the University of Michigan. Dr. Watson is a recognized expert in neuropeptides and their receptors and their role in psychiatric diseases and behavior. Dr. Watson is also a member of the Institute of Medicine of the National Academy of Sciences.

Each of the members of our Scientific Advisory Board has signed a consulting agreement that contains confidentiality provisions and restricts him or her from competing with us for the term of the agreement. Each member of our Scientific Advisory Board receives either a per diem consulting fee or a retainer fee. Each member also has received Neurocrine stock or stock options, which vest over time. All members of our Scientific Advisory Board are full-time employees of a university or research institute that has regulations and policies which limit their ability to act as part-time consultants or in other capacities for any commercial enterprise, including us. A change in these regulations or policies could adversely affect our relationship with any of our Scientific Advisory Board members.

S-51

MANAGEMENT

Executive Officers and Directors

Our Executive Officers and Directors are as follows:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Gary A. Lyons	50	President, Chief Executive Officer and Director
Paul W. Hawran	49	Executive Vice President and Chief Financial Officer
Henry Pan, M.D., Ph.D .	54	Executive Vice President, Clinical Development and Chief Medical Officer
D. Bruce Campbell, Ph.D.	58	Senior Vice President, Development
Margaret E. Valeur-Jensen, J.D., Ph.D.	44	Senior Vice President, General Counsel and Corporate Secretary
Joseph A. Mollica, Ph.D.(1)(2)	61	Chairman of the Board of Directors
Richard F. Pops(1)	39	Director
Stephen A. Sherwin, M.D.(2)	53	Director
Lawrence Steinman, M.D.	54	Director
Wylie W. Vale, Ph.D.	60	Director

(1) Member of the Audit Committee

(2) Member of the Compensation Committee

Gary A. Lyons has served as our President, Chief Executive Officer and a Director since joining us in February 1993. Prior to joining us, Mr. Lyons held a number of senior management positions at Genentech including Vice President of Business Development and Vice President of Sales. As Vice President of Business Development, Mr. Lyons was responsible for international licensing, acquisitions and partnering. He was also responsible for Genentech's Corporate Venture Program, which participated in early financing and/or formation of a number of biotechnology companies. In addition, Mr. Lyons had operating responsibility for Genentech's two subsidiaries, Genentech Canada, Inc. and Genentech Limited (Japan). As Vice President of Sales, Mr. Lyons was responsible for building the marketing and sales organization for the commercial introduction of Genentech's first two pharmaceutical products, Protropin (human growth hormone) and Activase (TPA). Mr. Lyons currently serves on the Board of Directors for Intrabiotics Pharmaceuticals, Inc. and Vical, Inc. Mr. Lyons holds a B.S. in Marine Biology from the University of New Hampshire and an M.B.A. from Northwestern University's J.L. Kellogg Graduate School of Management.

Paul W. Hawran became our Executive Vice President and Chief Financial Officer in January 2000 after having served as our Senior Vice President and Chief Financial Officer since February 1996 and our Vice President and Chief Financial Officer from 1993 to 1996. Mr. Hawran directs strategic planning, finance, investor relations, human resources, information technologies and operations. Mr. Hawran was employed by SmithKline Beecham Corporation (now GlaxoSmithKline) from July 1984 to May 1993, most recently as Vice President and Treasurer. Prior to joining SmithKline Beecham in 1984, Mr. Hawran held various financial

positions at Warner Communications (now AOL Time Warner) where he was involved in corporate finance, financial planning and domestic and international budgeting and forecasting. Mr. Hawran received a B.S. in Finance from St. John's University and an M.S. in Taxation from Seton Hall University. He is a Certified Public Accountant and a member of the American Institute of Certified Public Accountants, California, the Pennsylvania Institute of Certified Public Accountants and the Financial Executives Institute.

S-52

Henry Pan, M.D., Ph.D., became our Executive Vice President, Clinical Development and Chief Medical Officer in October 2001. Dr. Pan is responsible for scientific and administrative leadership and management of Neurocrine's clinical research and development investment and initiatives. Dr. Pan joins Neurocrine from VennWorks LLC, an operating company that creates, builds and operates high value companies in different technology areas. At VennWorks, he was a Managing Director of the operating company, CEO of VennWorks RTP, an incubator company that focused in Life Sciences, and board member of Labnetics Inc., a lab-on-a-chip company. Prior to joining VennWorks, Dr. Pan was the President, CEO and Managing Partner of Pharmacologics LLC, and was President and CEO of the Pharmaceutical Services division of MDS Inc., a fully integrated Contract Research Organization. Dr. Pan also served as Executive Vice President, Drug Development and Medical Affairs with DuPont Merck Pharmaceutical Company, now a Bristol-Myers Squibb Company. In addition to his tenure at DuPont Merck, Dr. Pan was Vice President of Clinical Research and Development at Bristol-Myers Squibb. Dr. Pan is a Fellow of the American College of Cardiology, the American College of Clinical Pharmacology, the American Heart Association, the Institute of Biological and Clinical Investigation, and the Academy of Medicine of New Jersey.

D. Bruce Campbell, Ph.D., became our Senior Vice President, Development in January 2000 after having joined us as Vice President, Development in February 1998. Dr. Campbell has been responsible for directing our selection and advancement of drug candidates from research into clinical development and getting five compounds into clinical trials. He joined us after 27 years at Servier United Kingdom, a subsidiary of an international pharmaceutical company based in France, where he served as Research and Development Director from 1972 to 1991 and Director of International Scientific Affairs since 1991. Dr. Campbell is a past Chairman and Board Member of the Drug Information Association and member of the ICH/EFPIA Safety Working Party and is a visiting Professor in Pharmacology at Guys and Kings College London. He is recognized as one of the experts on the regulatory aspects of kinetics and toxicology in new drug development and has written standard texts on the subject. Dr. Campbell is also on the editorial board of international journals and a member of many scientific societies and has published more than 100 papers. He is a Fellow of the Royal Society of Chemistry and received his Ph.D. in Biochemistry from Guys Hospital Medical School, London University.

Margaret Valeur-Jensen, J.D., Ph.D., became our Senior Vice President, General Counsel and Corporate Secretary in January 2000 after having joined us as Vice President, General Counsel and Secretary in October 1998. Dr. Valeur-Jensen has recognized experience in legal transactions for licensing, corporate partnerships and product commercialization as well as in building intellectual property portfolios. She is responsible for all of our corporate and patent law practices and is a member of our senior management committee. From 1995 to 1998, Dr. Valeur-Jensen served as Associate General Counsel, Licensing and Business Law of Amgen. From 1991 to 1995, she served first as Corporate Counsel and later as Senior Counsel, Licensing for Amgen. She earned a J.D. degree with honors from Stanford University, a Ph.D. in Biochemistry and Molecular Biology from Syracuse University, and was Post-Doctoral Fellow at Massachusetts General Hospital and Harvard Medical School.

Joseph A. Mollica, Ph.D., has served as one of our Directors since June 1997 and became Chairman of the Board in April 1998. Since February 1994, Dr. Mollica has served as the Chairman of the Board of Directors, President and Chief Executive Officer of Pharmacopeia, Inc., a biopharmaceutical company focusing on combinatorial chemistry, high throughput discovery, molecular modeling and bioinformatics. From 1987 to December 1993, Dr. Mollica was employed by the DuPont Company and then by the DuPont Merck Pharmaceutical Company where, from 1991 to 1993, he served as President and Chief Executive Officer and previously as Vice President, Medical Products for DuPont. At Ciba-Geigy (now Novartis), where he was

S-53

employed from 1966 to 1986, he served in a variety of positions of increasing responsibility rising to Senior Vice President of Ciba-Geigy's Pharmaceutical Division. Dr. Mollica is currently on the Boards of Pharmacopeia, Inc., Genencor International, Inc., Impath, Inc. and Nexell Therapeutics, Inc. He received his B.S. from the University of Rhode Island and his M.S. and Ph.D. from the University of Wisconsin and Sc.D, h.c. from the University of Rhode Island.

Richard F. Pops became one of our Directors in April 1998. Since 1991, he has served as Chief Executive Officer of Alkermes, Inc., a publicly traded company involved in the development of pharmaceutical products based on advanced drug delivery systems. Mr. Pops has been Chief Executive Officer of Alkermes, Inc., since February 1991. Mr. Pops currently serves on the Board of Directors of Alkermes, Inc., Genomics Collaborative, Inc., Expressive Constructs, Inc., CombinatoRx, Inc., the Biotechnology Industry Organization (BIO), the Massachusetts Biotechnology Council (MBC), Harvard Medical School Board of

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

Fellows and The Fessenden School Board of Trustees. He also serves as Chair for the Harvard Medical School Advisory Council for Biological Chemistry & Molecular Pharmacology (BCMP) and is an Advisory Board Member of The Cloud Foundation and Polaris Venture Partners. Mr. Pops received a B.A. in Economics from Stanford University.

Stephen A. Sherwin, M.D., was elected to our Board of Directors in April 1999. Since March 1990, Dr. Sherwin has served as Chief Executive Officer and Director of Cell Genesys, Inc. In March 1994, he was elected as Chairman of the Board of Cell Genesys. From 1983 to 1990, Dr. Sherwin held various positions at Genentech, Inc., most recently as Vice President of Clinical Research. Prior to 1983, Dr. Sherwin held various positions on the staff of the National Cancer Institute. He also serves as a Director of Abgenix, Inc., Calyx Therapeutics, Inc. and Rigel Pharmaceuticals, Inc. Dr. Sherwin holds a B.A. from Yale and an M.D. from Harvard Medical School.

Lawrence Steinman, M.D., was elected to our Board of Directors in January 2001. Dr. Steinman, a co-founder of Neurocrine, is our Chief Scientific Advisor, Neuroimmunology and a member of our Founding Board of Scientific and Medical Advisors and our Executive Committee. He is Professor of Neurological Sciences, Neurology and Pediatrics at Stanford University. Dr. Steinman has held a Senator Jacob Javits Award from the NIH and the U.S. Congress since 1988.

Wylie W. Vale, Ph.D., is a Founder and Chairman of our Board of Scientific and Medical Advisors. Dr. Vale was elected a Director in September 1992. He is a Professor and former Chairman of the Faculty at The Salk Institute for Biological Studies and is the Senior Investigator and Head of The Clayton Foundation Laboratories for Peptide Biology at The Salk Institute, where he has been employed for 31 years. He is also an Adjunct Professor of Medicine at the University of California at San Diego and was recently elected to the Institute of Medicine. He has received numerous awards and is a member of the National Academy of Arts and Sciences and the National Academy of Sciences. He is a past President of the American Endocrine Society and is the current President of the International Society of Endocrinology. Dr. Vale received a B.A. in Biology from Rice University and a Ph.D. in Physiology and Biochemistry from the Baylor College of Medicine.

S-54

DESCRIPTION OF CAPITAL STOCK

General

The following description of our capital stock is intended as a summary only and is qualified in its entirety by reference to our certificate of incorporation and our bylaws. For information on obtaining a copy of our certificate of incorporation and bylaws, see the section of the prospectus supplement or the accompanying prospectus captioned "Where You Can Find More Information."

Under our certificate of incorporation, the total number of shares of all classes of stock that we have authority to issue is 55,000,000, consisting of 5,000,000 shares of preferred stock, par value \$0.001 per share, and 50,000,000 shares of common stock, par value \$0.001 per share.

Common Stock

As of November 16, 2001, 26,226,218 shares of our common stock were outstanding and held by approximately 123 stockholders of record.

The holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, and do not have cumulative voting rights. Subject to preferences that may be applicable to any of our outstanding preferred stock, the holders of common stock are entitled to receive ratably the dividends, if any, that may be declared from time to time by our board of directors out of funds legally available for such dividends. In the event of a liquidation, dissolution or winding up of Neurocrine, the holders of our common stock would be entitled to share ratably in all assets remaining after payment of liabilities and the satisfaction of any liquidation preferences granted to the holders of any outstanding shares of preferred stock. Holders of our common stock have no preemptive rights and no conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to our common stock. All the outstanding shares of common stock are, and the shares offered by this prospectus supplement, when issued and paid for, will be validly issued, fully paid and nonassessable. The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of any shares of our outstanding preferred stock.

Preferred Stock

We currently have no outstanding shares of preferred stock. Under our certificate of incorporation, our board of directors is authorized to issue shares of our preferred stock from time to time, in one or more series, without stockholder approval. Prior to the issuance of shares of each series, the board of directors is required by the General Corporation Law of the State of Delaware, known as the DGCL, and our certificate of incorporation to adopt resolutions and file a certificate of designation with the Secretary

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

of State of the State of Delaware. The certificate of designation fixes for each series the designations, powers, preferences, rights, qualifications, limitations and restrictions, including the following:

- the number of shares constituting each series;
- voting rights;
- rights and terms of redemption, including sinking fund provisions;
- dividend rights and rates;
- terms concerning the distribution of assets;

S-55

- conversion or exchange terms;
- redemption prices; and
- liquidation preferences.

Our board of directors could authorize the issuance of shares of preferred stock with terms and conditions that could have the effect of discouraging a takeover or other transaction that might involve a premium price for holders of the shares or that holders might believe to be in their best interests.

Anti-Takeover Provisions

As a corporation organized under the laws of the State of Delaware, we are subject to Section 203 of the DGCL, which restricts our ability to enter into business combinations with an interested stockholder or a stockholder owning 15% or more of our outstanding voting stock, or that stockholder's affiliates or associates, for a period of three years. These restrictions do not apply if:

prior to becoming an interested stockholder, our board of directors approves either the business combination or the transaction in which the stockholder becomes an interested stockholder;

upon consummation of the transaction in which the stockholder becomes an interested stockholder, the interested stockholder owns at least 85% of our voting stock outstanding at the time the transaction commenced, subject to exceptions; or

on or after the date a stockholder becomes an interested stockholder, the business combination is both approved by our board of directors and authorized at an annual or special meeting of our stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock not owned by the interested stockholder.

Some provisions of Neurocrine's certificate of incorporation and bylaws could also have anti-takeover effects. These provisions:

provide for a board comprised of three classes of directors with each class serving a staggered three-year term;

authorize the issuance of preferred stock in one or more series; and

require the approval of at least two-thirds of the outstanding voting stock to amend certain provisions of our certificate of incorporation and bylaws.

These provisions are intended to enhance the likelihood of continuity and stability in the composition of the policies formulated by the board of directors. The provisions are also intended to discourage some tactics that may be used in proxy fights.

Stockholder Rights Plan

On April 10, 1997, our board of directors adopted a stockholder rights plan, which was amended and restated on July 19, 1999. Under the rights plan, a dividend of one preferred share purchase right was declared for each outstanding share of our common stock. The common stock currently trades with a right to purchase Series A Participating Preferred Stock. A preferred share purchase right will be attached to each share of common stock issued during the term of the rights plan. Each right entitles

the holder to buy one one-thousandth of a share of our Series A preferred stock at an exercise price of \$51.75, subject to anti-dilution

S-56

adjustments, upon the triggering event of a person acquiring, or making a tender or exchange offer for, 15% or more of our outstanding common stock. Each right entitles its holder, other than the person acquiring 15% or more of the outstanding common stock, to purchase shares of our common stock with a market value of twice the right's exercise price. In addition, if a company acquires us in a merger or other business combination, or if we sell more than 50% of our consolidated assets or earning power, these rights will entitle our stockholders, other than the acquirer, to purchase, for the exercise price, shares of the common stock of the acquiring company having a market value of two times the exercise price. At any time prior to these events, the board of directors may redeem the rights at one cent per right.

The rights plan is intended to protect stockholders in the event of an unsolicited attempt to acquire us. The right is transferred automatically with the transfer of the common stock until separate rights certificates are distributed upon the occurrence of certain events. The rights plan could have the effect of delaying, deferring or preventing a person from acquiring us or accomplishing a change in control of the board of directors. This description of the rights plan is intended as a summary only and is qualified in its entirety by reference to the amended and restated rights agreement dated as of July 19, 1999 between Neurocrine and American Stock Transfer & Trust Company. To obtain a copy of the amended and restated rights agreement see the section of this prospectus supplement entitled "Where You Can Find More Information."

Classified Board of Directors

The certificate of incorporation provides for the board of directors to be divided into three classes of directors, with each class as nearly equal in number as possible, serving staggered three-year terms. As a result, approximately one-third of the board of directors will be elected each year. The classified board provision will help to assure the continuity and stability of the board of directors and our business strategies and policies, as determined by the board of directors. The classified board provision could have the effect of discouraging a third party from making a tender offer or attempting to obtain control of us. In addition, the classified board provision could delay stockholders who do not agree with the policies of the board of directors from removing a majority of the board of directors for two years.

Special Meetings

The bylaws also provide that special meetings of stockholders may be called only by the board of directors, its chairman, the president or by one or more stockholders holding 10% of the votes at that meeting.

Number of Directors; Removal

The bylaws provide that the board of directors will consist of seven members. The bylaws provide that directors may be removed with or without cause by the affirmative vote of holders of a majority of the total voting power of all outstanding securities.

Transfer Agent and Registrar

The Transfer Agent and Registrar for our common stock is American Stock Transfer & Trust Corporation.

S-57

UNDERWRITING

Subject to the terms and conditions of the underwriting agreement, the underwriters named below, through their representatives Deutsche Bank Securities Inc., Credit Suisse First Boston Corporation, CIBC World Markets Corp., Lehman Brothers Inc. and UBS Warburg LLC have severally agreed to purchase from us the following respective number of shares of common stock at a public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus supplement:

Underwriters	Number of Shares
Deutsche Bank Securities Inc.	
Credit Suisse First Boston Corporation	

CIBC World Markets Corp.	
Lehman Brothers Inc.	
UBS Warburg LLC	
Total	3,250,000

The underwriting agreement provides that the obligations of the several underwriters to purchase the shares of common stock offered hereby are subject to certain conditions precedent and that the underwriters will purchase all of the shares of common stock offered by this prospectus supplement and the accompanying prospectus, other than those covered by the over-allotment option described below, if any of these shares are purchased.

We have been advised by the representatives of the underwriters that the underwriters propose to offer the shares of common stock to the public at the public offering price set forth on the cover of this prospectus supplement and to dealers at a price that represents a concession not in excess of \$ _____ per share under the public offering price. The underwriters may allow, and these dealers may re-allow, a concession of not more than \$ _____ per share to other dealers. After the public offering, the representatives of the underwriters may change the offering price and other selling terms.

We have granted to the underwriters an option, exercisable not later than 30 days after the date of this prospectus supplement, to purchase up to 487,500 additional shares of common stock at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus supplement. The underwriters may exercise this option only to cover over-allotments made in connection with the sale of the common stock offered by this prospectus supplement and the accompanying prospectus. To the extent that the underwriters exercise this option, each of the underwriters will become obligated, subject to conditions, to purchase approximately the same percentage of these additional shares of common stock as the number of shares of common stock to be purchased by it in the above table bears to the total number of shares of common stock offered by this prospectus supplement and the accompanying prospectus. We will be obligated, pursuant to the option, to sell these additional shares of common stock to the underwriters to the extent the option is exercised. If any additional shares of common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriting discounts and commissions per share are equal to the public offering price per share of common stock less the amount paid by the underwriters to us per share of common stock. The underwriting discounts and commissions are expected to be 6% of the

S-58

public offering price. We have agreed to pay the underwriters the following discounts and commissions, assuming either no exercise or full exercise by the underwriters of the underwriters' over-allotment option:

	Total Fees	
	Without Exercise of Over-Allotment Option	With Full Exercise of Over-Allotment Option
Fee per Share		
Discounts and commissions paid by Neurocrine	\$	\$

In addition, we estimate that our expenses for this offering, excluding underwriting discounts and commissions, will be approximately \$200,000.

We have agreed to indemnify the underwriters against some specified types of liabilities, including liabilities under the Securities Act of 1933, as amended, and to contribute to payments the underwriters may be required to make in respect of any of these liabilities.

Each of our officers and directors have agreed not to offer, sell, contract to sell or otherwise dispose of, or enter into any transaction that is designed to, or could be expected to, result in the disposition of any shares of our common stock or other securities convertible into or exchangeable or exercisable for shares of our common stock or derivatives of our common stock

owned by these persons prior to this offering or common stock issuable upon exercise of options or warrants held by these persons for a period of 90 days after the date of this prospectus supplement without the prior written consent of Deutsche Bank Securities Inc. and Credit Suisse First Boston Corporation. This consent may be given at any time without public notice. We have entered into a similar agreement with the representatives of the underwriters except that without such consent we may grant options and sell shares pursuant to our stock option plans and our employee stock purchase plan. There are no agreements between the representatives and any of our stockholders or affiliates releasing them from these lock-up agreements prior to the expiration of the 90-day period.

In order to facilitate the offering of our common stock, the underwriters may engage in transactions that stabilize, maintain, or otherwise affect the market price of our common stock. Specifically, the underwriters may over-allot shares of our common stock in connection with this offering, thus creating a short sales position in our common stock for their own account. A short sales position results when an underwriter sells more shares of common stock than that underwriter is committed to purchase. A short sales position may involve either covered short sales or naked short sales. Covered short sales are sales made for an amount not greater than the underwriters' over-allotment option to purchase additional shares in the offering described above. The underwriters may close out any covered short position by either exercising their over-allotment option or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. Naked short sales are sales in excess of the over-allotment option. The underwriters will have to 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 shares in the open market after pricing that could adversely affect investors who purchase in the offering.

S-59

Accordingly, to cover these short sales positions or to stabilize the market price of our common stock, the underwriters may bid for, and purchase, shares of our common stock in the open market. These transactions may be effected on the Nasdaq National Market or otherwise. Additionally, the representatives, on behalf of the underwriters, may also reclaim selling concessions allowed to an underwriter or dealer if the underwriting syndicate repurchases shares distributed by that underwriter or dealer. Similar to other purchase transactions, the underwriters' purchases to cover the syndicate short sales or to stabilize the market price of our common stock may have the effect of raising or maintaining the market price of our common stock or preventing or mitigating a decline in the market price of our common stock. As a result, the price of the shares of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters are not required to engage in these activities and, if commenced, may end any of these activities at any time.

Some of the underwriters or their affiliates have provided investment services to us in the past and may do so in the future. They receive customary fees and commissions for these services.

S-60

NOTICE TO CANADIAN RESIDENTS

Resale Restrictions

The distribution of the common stock in Canada is being made only on a private placement basis exempt from the requirement that we prepare and file a prospectus with the securities regulatory authorities in each province where trades of common stock are made. Any resale of the common stock in Canada must be made under applicable securities laws which will vary depending on the relevant jurisdiction, and which may require resales to be made under available statutory exemptions or under a discretionary exemption granted by the applicable Canadian securities regulatory authority. Purchasers are advised to seek legal advice prior to any resale of the common stock.

Representatives of Purchasers

By purchasing common stock in Canada and accepting a purchase confirmation a purchaser is representing to us and the dealer from whom the purchase confirmation is received that:

the purchaser is entitled under applicable provincial securities laws to purchase the common stock without the benefit of a prospectus qualified under those securities laws;

where required by law, that the purchaser is purchasing as principal and not as agent; and

the purchaser has never reviewed the text above under Resale Restrictions.

Enforcement of Legal Rights

All of the issuer's directors and officers as well as the experts named herein may be located outside of Canada and, as a result, it may not be possible for Canadian purchasers to effect service of process within Canada upon the issuer or such persons. All or a substantial portion of the assets of the issuer and such persons may be located outside of Canada and, as a result, it may not be possible to satisfy a judgement against the issuer or such person in Canada or to enforce a judgement obtained in Canadian courts against such issuer or persons outside of Canada.

Taxation and Eligibility for Investment

Canadian purchasers of common stock should consult their own legal and tax advisors with respect to the tax consequences of an investment in the common stock in their particular circumstances and about the eligibility of the common stock for investment by the purchaser under relevant Canadian legislation.

LEGAL MATTERS

Latham & Watkins in San Diego, California will pass upon the validity of the securities offered under this prospectus supplement and certain other legal matters. Certain legal matters will be passed upon for the underwriters by Wilson, Sonsini, Goodrich & Rosati, Professional Corporation.

S-61

EXPERTS

Ernst & Young LLP, independent auditors, have audited Neurocrine's consolidated financial statements included in its Annual Report on Form 10-K for the year ended December 31, 2000, as set forth in their report, which is incorporated by reference in this prospectus supplement and the accompanying prospectus. Neurocrine's financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

S-62

WHERE YOU CAN FIND MORE INFORMATION

Neurocrine is subject to the informational requirements of the Securities Exchange Act of 1934, as amended, and files annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any reports, proxy statements and other information we file at the SEC's public reference room at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. You may also access filed documents at the SEC's web site at www.sec.gov.

We are incorporating by reference some information about us that we file with the SEC. We are disclosing important information to you by referencing those filed documents. Any information that we reference this way is considered part of this prospectus supplement. The information in this prospectus supplement supersedes information incorporated by reference that we have filed with the SEC prior to the date of this prospectus supplement, while information that we file with the SEC after the date of this prospectus supplement that is incorporated by reference will automatically update and supersede this information.

We incorporate by reference the following documents we have filed, or may file, with the SEC:

- Neurocrine's Annual Report on Form 10-K for its fiscal year ended December 31, 2000;
- Neurocrine's Quarterly Report on Form 10-Q for its quarterly period ended March 31, 2001;
- Neurocrine's Quarterly Report on Form 10-Q for its quarterly period ended June 30, 2001;
- Neurocrine's Quarterly Report on Form 10-Q for its quarterly period ended September 30, 2001;
- Neurocrine's Current Report on Form 8-K filed November 16, 2001;

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

Neurocrine's definitive proxy statement dated April 12, 2001 filed in connection with its May 24, 2001 Annual Meeting of Stockholders;

the description of Neurocrine's common stock contained in the Registration Statement on Form 8-A filed on June 16, 1997; and

all documents filed by Neurocrine with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus supplement and before termination of this offering.

You may request a free copy of any of the documents incorporated by reference in this prospectus by writing or telephoning us at the following address:

Neurocrine Biosciences, Inc.
10555 Science Center Drive
San Diego, California 92121
(858) 658-7600

S-63

PROSPECTUS

\$200,000,000

Neurocrine Biosciences, Inc.

Debt Securities

Preferred Stock

Common Stock

We may offer and sell from time to time in one or more classes or series and in amounts, at prices and on the terms that we will determine at the time of offering, with an aggregate initial offering price of up to \$200,000,000:

debt securities, which may consist of debentures, notes or other types of debt;

shares of preferred stock; and

shares of common stock.

We will provide the specific terms of these securities in supplements to this prospectus. You should read this prospectus and any supplement carefully before you invest.

Our common stock is quoted and traded on the Nasdaq National Market under the symbol NBIX.

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.

We will sell these securities directly to our stockholders or to purchasers or through agents on our behalf or through underwriters or dealers as designated from time to time. If any agents or underwriters are involved in the sale of any of these securities, the applicable prospectus supplement will provide the names of the agents or underwriters and any applicable fees,

commissions or discounts.

The date of this prospectus is November 20, 2001

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate as of the date on the front cover of this prospectus only. Our business, financial condition, results of operations and prospects may have subsequently changed.

TABLE OF CONTENTS

	<u>Page</u>
<u>About this Prospectus</u>	3
<u>Where You Can Find More Information</u>	3
<u>Forward-Looking Statements</u>	4
<u>Neurocrine</u>	4
<u>Ratio of Earnings to Fixed Charges</u>	5
<u>Use of Proceeds</u>	6
<u>Description of Debt Securities</u>	6
<u>Description of Capital Stock</u>	15
<u>Plan of Distribution</u>	19
<u>Legal Matters</u>	20
<u>Experts</u>	20

Whenever we refer to Neurocrine, we, our or us in this prospectus, we mean Neurocrine Biosciences, Inc. and its consolidated subsidiaries, unless the context suggests otherwise. When we refer to you or yours, we mean the holders of the applicable series of securities.

2

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission using a shelf registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings up to a total dollar amount of \$200,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer to sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. To the extent that any statement that we make in a prospectus supplement is inconsistent with statements made in this prospectus, the statements made in this prospectus will be deemed modified or superseded by those made in a prospectus supplement. You should read both this prospectus and any prospectus supplement together with the additional information described under the next heading, Where You Can Find More Information.

WHERE YOU CAN FIND MORE INFORMATION

Neurocrine is subject to the informational requirements of the Securities Exchange Act of 1934, as amended, and files annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any reports, proxy statements and other information we file at the SEC's public reference room at 450 Fifth Street, N.W., Washington, D.C.

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. You may also access filed documents at the SEC's web site at www.sec.gov.

We are incorporating by reference some information about us that we file with the SEC. We are disclosing important information to you by referencing those filed documents. Any information that we reference this way is considered part of this prospectus. The information in this prospectus supercedes information incorporated by reference that we have filed with the SEC prior to the date of this prospectus, while information that we file with the SEC after the date of this prospectus that is incorporated by reference will automatically update and supersede this information.

We incorporate by reference the following documents we have filed, or may file, with the SEC:

Neurocrine's Annual Report on Form 10-K for its fiscal year ended December 31, 2000;

Neurocrine's Quarterly Report on Form 10-Q for its quarterly period ended March 31, 2001;

Neurocrine's Quarterly Report on Form 10-Q for its quarterly period ended June 30, 2001;

Neurocrine's Quarterly Report on Form 10-Q for its quarterly period ended September 30, 2001;

Neurocrine's definitive proxy statement dated April 12, 2001 filed in connection with its May 24, 2001 Annual Meeting of Stockholders;

the description of Neurocrine's common stock contained in the Registration Statement on Form 8-A filed on June 16, 1997;

all documents filed by Neurocrine with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and before termination of this offering.

You may request a free copy of any of the documents incorporated by reference in this prospectus by writing or telephoning us at the following address:

Neurocrine Biosciences, Inc.
10555 Science Center Drive
San Diego, California 92121
(858) 658-7600

3

FORWARD-LOOKING STATEMENTS

This prospectus contains and incorporates by reference forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Exchange Act. You can identify these forward-looking statements by forward-looking words such as believe, may, could, will, estimate, continue, anticipate, intend, seek, plan, expect, and similar expressions in this prospectus. These forward-looking statements are subject to a number of risks, uncertainties and assumptions about Neurocrine, including, among other things:

our success in developing product candidates that result in commercially successful drugs;

our ability to compete effectively;

our ability to maintain our current strategic alliances and enter into new strategic alliances to develop and commercialize our compounds;

our ability to raise sufficient additional funding to complete development of our product candidates;

our ability to receive regulatory approvals for our product candidates;

our involvement in patent and other intellectual property litigation; and

our ability to retain and recruit qualified scientists.

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

The factors identified above are believed to be some, but not all, of the important factors that could cause actual events and results to be significantly different from those that may be expressed or implied in any forward-looking statements. Any forward-looking statements should also be considered in light of the risk factors detailed in our Annual Report on Form 10-K. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

NEUROCRINE

Neurocrine Biosciences, Inc. is a product-based biopharmaceutical company focused on neurologic and endocrine diseases and disorders. Our product candidates address some of the largest pharmaceutical markets in the world including insomnia, anxiety, depression, cancer and diabetes. We currently have 14 programs in various stages of research and development. Of these 14 programs, six programs are in clinical development and one program is in advanced preclinical development. We believe the projects we have in research will help supply clinical development candidates in the future.

Our lead independent program is our GABA receptor subtype antagonist for insomnia which currently is in Phase III clinical trials. We will seek a collaborative development partner and/or marketing partner for this program prior to commercialization. We are currently engaged in collaborative research and development of three of our drug candidates. These include a collaboration with GlaxoSmithKline for our corticotropin releasing factor antagonist research and development program for anxiety/depression and irritable bowel syndrome, a collaboration with Taisho Pharmaceuticals for our altered peptide ligand development program for Type I diabetes and a collaboration with Wyeth-Ayerst, a division of American Home Products, for our excitatory amino acid research program for neurodegenerative diseases. We have completed collaborative programs with Eli Lilly in obesity and Janssen Pharmaceutica in anxiety/depression.

4

Our principal executive offices are located at 10555 Science Center Drive, San Diego, California 92121, and our telephone number is (858) 658-7600.

RATIO OF EARNINGS TO FIXED CHARGES

Our ratios of earnings to fixed charges are as follows for the periods indicated:

	Nine Months Ended September 30,		Year Ended December 31,				
	2001	2000	2000	1999	1998	1997	1996
Ratio of Earnings to Fixed Charges						10.4	11.3

For the years ended December 31, 1996, 1997, 1998, 1999 and 2000 and the nine-month period ended September 30, 2000 and 2001, our earnings were insufficient to cover fixed charges by \$597,000, \$688,000, \$746,000, \$914,000, \$847,000 and \$688,000, and \$551,000, respectively. Fixed charges consist of interest expense, including capitalized interest, amortized premiums, discounts and capitalized expenses related to indebtedness and estimated interest included in rental expense.

For the periods indicated above, we had no outstanding shares of preferred stock with required dividend payments. Therefore, the ratios of earnings to fixed charges and preferred stock dividends are identical to the ratios presented in the table above.

5

USE OF PROCEEDS

Unless otherwise indicated in the prospectus supplement, we intend to use the net proceeds from the sale of the securities under this prospectus for general corporate purposes, including continued development and clinical trials of our NBI-34060 product candidate addressing insomnia and various other product candidates, research and development expenses, general and administrative expenses, manufacturing expenses, and potential acquisitions of companies and technologies that complement our business. When a particular series of securities is offered, the prospectus supplement relating thereto will set forth our intended use for the net proceeds we receive from the sale of the securities. Pending the application of the net proceeds, we expect to invest the

proceeds in short-term, interest-bearing instruments or other investment-grade securities.

DESCRIPTION OF DEBT SECURITIES

This prospectus describes the general terms and provisions of our debt securities. When we offer to sell a particular series of debt securities, we will provide the specific terms of the series in a prospectus supplement. Accordingly, for a description of the terms of any series of debt securities, you must refer to both the prospectus supplement relating to that series and the description of the debt securities in this prospectus. To the extent the information contained in the prospectus supplement differs from this summary description, you should rely on the information in the prospectus supplement.

The debt securities offered by this prospectus will be issued under an indenture between us and the trustee for one or more series of debt securities designated in the applicable prospectus supplement. The indenture is subject to, and governed by, the Trust Indenture Act of 1939, as amended, or the TIA. We incorporate by reference the form of indenture as an exhibit to the registration statement of which this prospectus forms a part and you should read the indenture carefully for the provisions that may be important to you. We have summarized selected portions of the indenture below. The summary is not complete. Terms used in the summary and not defined in this prospectus have the meanings specified in the indenture.

General

The debt securities will be our direct obligations, which may be secured or unsecured, and which may be senior or subordinated indebtedness. We may issue an unlimited amount of debt securities, in one or more series, under the indenture. The terms of each series of debt securities will be established by our board of directors or in a supplemental indenture. We do not have to issue all debt securities of one series at the same time and, unless described differently in a prospectus supplement, we may reopen a series, without the consent of the holders of the debt securities of that series, for issuances of additional debt securities of that series.

There may be more than one trustee under the indenture, each relating to one or more series of debt securities. Any trustee may resign or be removed by us, at which time we will appoint a successor trustee. Each trustee will be a trustee of a trust under the indenture separate and apart from the trust administered by any other trustee under the indenture. Except as indicated elsewhere in this prospectus, any action taken by the trustee may be taken by the trustee only relating to the series of debt securities for which it is the trustee.

6

We will provide in a prospectus supplement the following terms of the debt securities being offered:

the title of the debt securities;

the aggregate principal amount and any limit on the aggregate principal amount of the debt securities;

whether we will issue the debt securities at a discount, the portion of the principal amount of the debt securities payable upon acceleration of the maturity of the debt securities or upon redemption, if other than the principal amount, and the rate at which the original issue discount will accrue;

the date on which we will pay the principal on the debt securities;

the rate, which may be fixed or variable, or the method used to determine the rate at which the debt securities will bear interest;

the date from which interest will accrue, the date on which interest will be payable and any regular record date for the interest payable on any interest payment date;

the place where we will pay, or the method of payment of, principal, premium and interest on the debt securities and where holders may surrender the debt securities for conversion, registration of transfer or exchange;

any obligation we have to redeem or purchase the debt securities under any sinking fund or similar provisions or at the option of a holder of debt securities;

any option we have to redeem the debt securities and the date, price and terms and conditions upon which we may redeem the debt securities;

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

the denominations in which we will issue the debt securities, if other than denominations of \$1,000 and any multiples of \$1,000;

provisions, if any, for the defeasance or discharge of our obligations relating to the debt securities;

whether we will issue the debt securities in registered or bearer form;

the currency in which we will pay principal, premium and interest on the debt securities;

if we will pay principal, premium or interest on the debt securities in one or more currencies other than those in which the debt securities are denominated, the manner in which we will determine the exchange rate on the payments;

the manner in which we will determine the principal, premium or interest on the debt securities if these amounts may be determined by reference to an index based on a currency other than that in which the debt securities are denominated or designated or by reference to a commodity, commodity index, stock exchange index or financial index;

any addition to, or change or deletion of, events of default or covenants in the indenture;

a discussion of any material or special United States federal income tax considerations applicable to the debt securities;

any depositaries, trustees, interest rate calculation agents, exchange rate calculation agents or other agents relating to the debt securities other than those originally appointed;

7

whether we will issue the debt securities in the form of global securities and whether we will issue the global securities in temporary or permanent global form;

any rights of the holders of the debt securities to convert the debt securities into other securities or property and the terms and conditions of the conversion, including the conversion price or manner of calculation and conversion period;

any subordination provisions relating to the debt securities;

any listing of the debt securities on a securities exchange;

any provisions relating to any security provided for the debt securities; and

any other terms of the debt securities that will not be inconsistent with the indenture.

We may issue debt securities at a discount below their stated principal amount. Even if we issue the debt securities at or above their stated principal amount, for United States federal income tax purposes, the debt securities may be deemed to be issued at a discount based on their interest payment characteristics. We will describe in a prospectus supplement the United States federal income tax considerations applicable to debt securities issued at a discount or deemed to be issued at a discount. We will also describe in a prospectus supplement the special United States federal income tax considerations or other restrictions or terms applicable to debt securities issuable in bearer form, offered exclusively to foreigners or denominated in a foreign currency.

Denominations, Registration, Transfer and Exchange

Unless we specify otherwise in the prospectus supplement, the debt securities of any series will be issuable only in denominations of \$1,000 and multiples of \$1,000, and will be payable only in U.S. dollars.

We may issue the debt securities in whole or in part in the form of one or more global securities that will be deposited with, or on behalf of, a depositary identified in the applicable prospectus supplement. We may issue the global securities in either registered or bearer form and in either temporary or permanent form. We will describe the specific terms of the depositary arrangement relating to a series of debt securities in the prospectus supplement.

You may transfer or exchange certificated debt securities at any office we maintain for this purpose in accordance with the terms of the indenture. We will not charge a service fee for any transfer or exchange of certificated debt securities, but we may require payment of a sum sufficient to cover any tax or other governmental charge we are required to pay in connection with a transfer or exchange.

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

You may effect the transfer of certificated debt securities and the right to receive the principal, premium and interest on certificated debt securities only by surrendering the certificate representing those certificated debt securities and either reissuance by us or the trustee of that certificate or the issuance by us or the trustee of a new certificate to the new holder.

We are not required to:

register, transfer or exchange any series of debt securities selected for redemption during the period beginning 15 business days prior to, and ending at the close of business on, the date of transmittal of the notice of redemption; or

register, transfer or exchange any debt security selected for redemption in whole or in part, except the unredeemed portion of any debt security being redeemed in part.

8

Covenants

We will describe in the prospectus supplement any restrictive covenants applicable to an issue of debt securities.

Consolidation, Merger or Sale of Assets

We may not consolidate or merge with or into, or sell, assign, convey or transfer our properties and assets substantially in their entirety to another corporation, person or entity unless:

in the case of a consolidation or merger, (1) we are the surviving corporation or (2) the successor corporation is an entity organized and validly existing under the laws of the United States, any state of the United States or the District of Columbia and expressly assumes our obligations under the debt securities and the indenture; and

immediately after giving effect to the transaction, no event of default exists.

Notwithstanding the foregoing, any of our subsidiaries may consolidate with, merge into or transfer all or part of its properties and assets to us.

Events of Default

Each of the following is an event of default relating to a series of debt securities:

default in the payment of any interest upon any debt security of that series when it becomes due and payable, which default continues uncured for a period of 30 days;

default in the payment of principal or premium on any debt security of that series when due and payable;

default in the deposit of any sinking fund payment, when and as due, relating to any debt security of that series;

default in the performance or breach by us of any other covenant or warranty in the indenture, other than a covenant or warranty that has been included in the indenture solely for the benefit of a series of debt securities other than that series, which default continues uncured for a period of 60 days after we receive written notice from the trustee or we and the trustee receive written notice from the holders of at least 25% in principal amount of the outstanding debt securities of that series as provided in the indenture;

events of bankruptcy, insolvency or reorganization; and

any other event of default provided relating to debt securities of that series that is described in the applicable prospectus supplement accompanying this prospectus.

If an event of default relating to outstanding debt securities of any series occurs and continues uncured, then the trustee or the holders of at least 25% in principal amount of outstanding debt securities of that series may declare in a written notice the principal amount, or specified amount, plus accrued and unpaid premium and interest, if payable on all debt securities of that series, to be immediately due and payable. At any time after making a declaration of acceleration relating to debt securities of any series, the holders of a majority in principal amount of the outstanding debt securities of that series may rescind and cancel the acceleration if:

the holders act before the trustee has obtained a judgment or decree for payment of the money due;

we have paid or deposited with the trustee a sum sufficient to pay overdue interest and overdue principal, other than the accelerated interest and principal; and

we have cured or the holders have waived all events of default, other than the non-payment of accelerated principal and interest relating to debt securities of that series, as provided in the indenture.

We refer you to the prospectus supplement relating to any series of debt securities that are issued at a discount for the particular provisions relating to acceleration of a portion of the principal amount of those debt securities upon the occurrence of an event of default.

The trustee has no obligation to exercise any of its rights or powers under the indenture at the request of any holder of outstanding debt securities, unless the trustee receives indemnity satisfactory to it against any loss, liability or expense. Subject to rights of the trustee, the holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee relating to the debt securities of that series.

No holder of any debt security of any series will have any right to institute any judicial or other proceeding relating to the indenture or for the appointment of a receiver or trustee, or for any remedy under the indenture, unless:

that holder has previously given the trustee written notice of an uncured event of default relating to debt securities of that series; and

the holders of at least 25% in principal amount of outstanding debt securities of that series have made a written request, and offered reasonable indemnity, to the trustee to institute the proceeding as trustee, and the trustee has not received from the holders of a majority in principal amount of the outstanding debt securities of that series a direction inconsistent with that request and has failed to institute the proceeding within 60 days.

The holder of any debt security will have an absolute and unconditional right to receive payment of the principal, premium and any interest on that debt security on or after the due dates expressed in that debt security and to institute suit for the enforcement of payment.

Within 120 days after the end of our fiscal year we will furnish to the trustee a statement as to compliance with the indenture. The trustee may withhold notice to the holders of the debt securities of any series of any default or event of default, except in payment on any debt securities of that series, relating to debt securities of that series if it in good faith determines that withholding notice is in the interest of the holders of those debt securities.

Modification and Waiver

We may modify the indenture, without prior notice to or consent of any holders, for any of the following purposes:

to evidence the succession of another corporation to our rights and the assumption by the successor of our covenants and obligations in the indenture and the debt securities;

to add to the covenants for the benefit of the holders of the debt securities or to surrender any right or power conferred upon us in the indenture;

to add any events of default;

to add or change any provision of the indenture to permit or facilitate the issuance of debt securities of any series in bearer form, to permit bearer securities to be issued in exchange for registered securities, to permit bearer securities to be issued in exchange for bearer securities of other denominations or to permit the issuance of debt securities of any series in uncertificated form, provided that the action will not adversely affect the interests of the holders of the debt securities or coupons in any material respect;

to change or eliminate any provision of the indenture, provided that the change or elimination will become effective only when there is no outstanding debt security issued under the indenture or coupon of any series created prior to the modification which is entitled to the benefit of the provision and as to which the modification would apply;

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

to secure the debt securities or to provide that any of our obligations under the debt securities or the indenture will be guaranteed and the terms and conditions for the release or substitution of the security or guarantee;

to supplement any provisions of the indenture to permit or facilitate the defeasance and discharge of any series of debt securities, provided that the action will not adversely affect the interests of the holders of the debt securities or coupons in any material respect;

to establish the form or terms of debt securities and coupons as permitted by the indenture;

to evidence and provide for a successor or other trustee relating to one or more series of debt securities and to add or change any provision of the indenture to provide for or facilitate the administration of the trusts by more than one trustee; or

to cure any ambiguity, to correct or supplement any provision of the indenture that may be defective or inconsistent with any other provision of the indenture, to eliminate any conflict between the terms of the indenture and the debt securities and the TIA or to make any other modifications which are consistent with the provisions of the indenture; provided, however, that these other provisions will not adversely affect the interest of the holders of outstanding debt securities or coupons in any material respect.

We may modify and amend the indenture with the written consent of at least a majority in principal amount of the outstanding debt securities of each series affected by the modifications or amendments. However, the consent of the holder of each outstanding debt security of each series affected is required for modifications that:

change the stated maturity of any debt security or coupon;

reduce the principal amount of any payment to be made on any debt security or coupon;

reduce the rate of interest or extend the time for payment of premium or interest payable upon redemption of any debt security;

change the coin or currency in which any debt security or any premium or interest is payable;

reduce the amount of the principal due and payable upon acceleration of the maturity of a debt security issued at a discount;

impair the right to institute suit for the enforcement of any payment on or after its due date;

11

alter any redemption provisions in a manner adverse to the holders of the debt securities;

reduce the percentage in principal amount of the outstanding debt securities;

adversely affect the right of any holder to convert any debt security;

change any of the waiver provisions, except to increase any required percentage or to provide that other provisions of the indenture cannot be modified or waived without the consent of the holder of each affected outstanding debt security; or

change any provision described in the applicable prospectus supplement that requires the consent of each affected holder of debt securities.

A modification that changes or eliminates any covenant or other provision of the indenture relating to one or more particular series of debt securities and coupons, or that modifies the rights of the holder of debt securities and coupons of that series, will be deemed not to affect the rights of the holders of the debt securities and coupons of any other series.

The holders of at least a majority in principal amount of the outstanding debt securities of any series, by notice to the trustee, may on behalf of the holders of all debt securities of that series waive any default and its consequences under the indenture, except:

a continuing default in the payment of principal, premium or interest on any debt security held by a non-consenting holder; or

a default of a covenant or provision that cannot be modified or amended without the consent of the holder of each outstanding debt security of each series affected.

Defeasance of Debt Securities and Covenants in Circumstances

Legal Defeasance. We may be discharged from any and all obligations relating to the debt securities of any series except for obligations:

to pay additional amounts, if any, upon the occurrence of specified tax, assessment or government charge events relating to payments on the debt securities;

to register the transfer or exchange of debt securities;

to replace stolen, lost or mutilated debt securities;

to maintain paying agencies; and

to hold money in payment for trust.

We will be discharged upon our deposit with the trustee, in trust, of money or government obligations that will provide money in an amount sufficient, in the opinion of a nationally recognized firm of independent public accountants, to pay and discharge each installment of principal, premium and interest on and any mandatory sinking fund payments relating to the debt securities of that series on the stated maturity of those payments.

We may be discharged only if we have delivered to the trustee an opinion of counsel stating that we have received from, or there has been published by, the Internal Revenue Service a ruling or, since the date of execution of the indenture, there has been a change in the applicable United States federal income tax law, in either case to the effect that the holders of the debt securities of that series will not recognize income, gain or loss for United States federal income tax purposes as a result of the deposit, defeasance and discharge.

12

Defeasance of Covenants. Upon compliance with specified conditions, we will not be required to comply with some restrictive covenants contained in the indenture and any omission to comply with the obligations will not constitute a default or event of default relating to the debt securities. These conditions include:

depositing with the trustee money or government obligations that, through the payment of interest and principal in accordance with their terms, will provide money in an amount sufficient in the opinion of a nationally recognized firm of independent public accountants to pay principal, premium and interest on and any mandatory sinking fund payments relating to the debt securities of that series on the date those payments are due; and

delivering to the trustee an Internal Revenue Service ruling or an opinion of counsel to the effect that the holders of the debt securities of the series will not recognize income, gain or loss for United States federal income tax purposes as a result of the deposit and related covenant defeasance.

Limited Liability of Some Persons

No past, present or future stockholder, incorporator, employee, officer or director of Neurocrine or any successor corporation or any of our affiliates will have any personal liability for our obligations under the indenture or the debt securities because of his, her or its status as a stockholder, incorporator, employee, officer or director.

Conversion Rights

We will describe in the applicable prospectus supplement the terms and conditions, if any, upon which the debt securities are convertible into common stock or preferred stock. Those terms will include:

whether the debt securities are convertible into common stock or preferred stock;

the conversion price, or manner of calculation;

the conversion period;

provisions regarding whether conversion will be at our option or at the option of the holders;

the events requiring an adjustment of the conversion price; and

provisions affecting conversion in the event of the redemption of the debt securities.

Payment and Paying Agents

The indenture will require us to duly and punctually pay the principal, premium and interest on the debt securities as provided in the debt securities and the indenture.

If debt securities of a series are issuable only as registered securities, we will maintain in each place of payment for that series an office or agency where:

holders may present or surrender for payment debt securities of that series;

holders may surrender debt securities of that series for registration of transfer or exchange; and

we may be served with notices and demands regarding the debt securities of that series.

13

If debt securities of a series are issuable as bearer securities, we will maintain or cause to be maintained:

in the Borough of Manhattan, the City and State of New York, an office or agency where (1) holders may (A) present or surrender for payment any registered securities of that series, (B) surrender for registration of transfer any registered securities of that series, (C) surrender for exchange or redemption debt securities of that series and (D) present or surrender for payment bearer securities of that series and related coupons in the circumstances described in the following paragraph and not otherwise, and (2) we may be served with notices and demands regarding the debt securities of that series;

subject to any applicable laws or registration, in a place of payment for debt securities of that series located outside the United States, an office or agency where holders may present and surrender for payment debt securities of that series and related coupons; provided that if the debt securities of that series are listed on The Stock Exchange of the United Kingdom and the Republic of Ireland, the Luxembourg Stock Exchange or any other stock exchange located outside the United States, and the stock exchange so requires, we will maintain a paying agent for the debt securities of that series in London, Luxembourg or any other required city located outside the United States, as the case may be, so long as the debt securities of that series are listed on that exchange; and

subject to any applicable laws or regulations, in a place of payment for debt securities of that series located outside the United States, an office or agency where (1) holders may (A) surrender for registration of transfer any registered securities of that series or (B) surrender for exchange or redemption debt securities of that series and (2) we may receive notices and demands regarding the debt securities of that series.

We will give prompt written notice to the applicable trustee of the locations, and any change in the locations, of offices or agencies. If at any time we fail to maintain any required office or agency or fail to furnish the applicable trustee with the address, holders may make or serve the presentations, surrenders, notices and demands at the corporate trust office of the applicable trustee, except that holders may present and surrender bearer securities of that series and the related coupons for payment at the offices specified in the applicable debt security. We will appoint the applicable trustee as our agent to receive the foregoing presentations, surrenders, notices and demands. However, in the case of bearer securities, we may appoint another agent as may be specified in the applicable prospectus supplement.

We will make no payment of principal, premium or interest on bearer securities at any of our offices or agencies in the United States or by check mailed to any address in the United States or by transfer to an account maintained with a bank located in the United States. However, if the debt securities of a series are denominated and payable in U.S. dollars, we will pay principal and any premium and interest on the debt securities of that series, if specified in the applicable prospectus supplement, at the office of our

paying agent in the Borough of Manhattan, the City and State of New York, only if payment in U.S. dollars of the full amount of the principal, premium, interest or additional amounts, as the case may be, at all offices or agencies outside the United States maintained for the purpose by us in accordance with the indenture is illegal or effectively precluded by exchange controls or other similar restrictions.

Governing Law

The indenture and the related debt securities will be governed by and construed in accordance with the laws of the State of New York.

DESCRIPTION OF CAPITAL STOCK

General

This prospectus describes the general terms of our capital stock. For a more detailed description of these securities, you should read the applicable provisions of Delaware law and our certificate of incorporation and bylaws. When we offer to sell a particular series of these securities, we will describe the specific terms of the series in a supplement to this prospectus. Accordingly, for a description of the terms of any series of securities, you must refer to both the prospectus supplement relating to that series and the description of the securities described in this prospectus. To the extent the information contained in the prospectus supplement differs from this summary description, you should rely on the information in the prospectus supplement.

Under our certificate of incorporation, the total number of shares of all classes of stock that we have authority to issue is 55,000,000, consisting of 5,000,000 shares of preferred stock, par value \$0.001 per share, and 50,000,000 shares of common stock, par value \$0.001 per share.

Common Stock

As of September 30, 2001, we had 26,187,852 shares of our common stock outstanding held of record by approximately 123 stockholders.

The holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, and do not have cumulative voting rights. Subject to preferences that may be applicable to any of our outstanding preferred stock, the holders of common stock are entitled to receive ratably the dividends, if any, that may be declared from time to time by our board of directors out of funds legally available for such dividends. In the event of a liquidation, dissolution or winding up of Neurocrine, the holders of our common stock would be entitled to share ratably in all assets remaining after payment of liabilities and the satisfaction of any liquidation preferences granted to the holders of any outstanding shares of preferred stock. Holders of our common stock have no preemptive rights and no conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to our common stock. All the outstanding shares of common stock are, and the shares offered by this prospectus, when issued and paid for, will be validly issued, fully paid and nonassessable. The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of any shares of our outstanding preferred stock.

Preferred Stock

We currently have no outstanding shares of preferred stock. Under our certificate of incorporation, our board of directors is authorized to issue shares of our preferred stock from time to time, in one or more classes or series, without stockholder approval. Prior to the issuance of shares of each series, the board of directors is required by the General Corporation Law of the State of Delaware, known as the DGCL, and our certificate of incorporation to adopt resolutions and file a certificate of designation with the Secretary of State of the State of Delaware. The certificate of designation fixes for each class or series the designations, powers, preferences, rights, qualifications, limitations and restrictions, including the following:

- the number of shares constituting each class or series;
- voting rights;
- rights and terms of redemption, including sinking fund provisions;

dividend rights and rates;

terms concerning the distribution of assets;

conversion or exchange terms;

redemption prices; and

liquidation preferences.

All shares of preferred stock offered by this prospectus will, when issued, be validly issued, fully paid and nonassessable and will not have any preemptive or similar rights. Our board of directors could authorize the issuance of shares of preferred stock with terms and conditions that could have the effect of discouraging a takeover or other transaction that might involve a premium price for holders of the shares or that holders might believe to be in their best interests.

We will describe in a prospectus supplement relating to the class or series of preferred stock being offered the following terms:

the title and stated value of the preferred stock;

the number of shares of the preferred stock offered, the liquidation preference per share and the offering price of the preferred stock;

the dividend rate(s), period(s) or payment date(s) or method(s) of calculation applicable to the preferred stock;

whether dividends are cumulative or non-cumulative and, if cumulative, the date from which dividends on the preferred stock will accumulate;

the procedures for any auction and remarketing, if any, for the preferred stock;

the provisions for a sinking fund, if any, for the preferred stock;

the provision for redemption, if applicable, of the preferred stock;

any listing of the preferred stock on any securities exchange;

the terms and conditions, if applicable, upon which the preferred stock will be convertible into common stock, including the conversion price or manner of calculation and conversion period;

voting rights, if any, of the preferred stock;

a discussion of any material or special United States federal income tax considerations applicable to the preferred stock;

the relative ranking and preferences of the preferred stock as to dividend rights and rights upon the liquidation, dissolution or winding up of our affairs;

any limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the class or series of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of our affairs; and

any other specific terms, preferences, rights, limitations or restrictions of the preferred stock.

Unless we specify otherwise in the applicable prospectus supplement, the preferred stock will rank, relating to dividends and upon our liquidation, dissolution or winding up:

senior to all classes or series of our common stock and to all of our equity securities ranking junior to the preferred stock;

on a parity with all of our equity securities the terms of which specifically provide that the equity securities rank on a parity with the preferred stock; and

junior to all of our equity securities the terms of which specifically provide that the equity securities rank senior to the preferred stock.

The term equity securities does not include convertible debt securities.

Anti-Takeover Provisions

As a corporation organized under the laws of the State of Delaware, we are subject to Section 203 of the DGCL, which restricts our ability to enter into business combinations with an interested stockholder or a stockholder owning 15% or more of our outstanding voting stock, or that stockholder's affiliates or associates, for a period of three years. These restrictions do not apply if:

prior to becoming an interested stockholder, our board of directors approves either the business combination or the transaction in which the stockholder becomes an interested stockholder;

upon consummation of the transaction in which the stockholder becomes an interested stockholder, the interested stockholder owns at least 85% of our voting stock outstanding at the time the transaction commenced, subject to exceptions; or

on or after the date a stockholder becomes an interested stockholder, the business combination is both approved by our board of directors and authorized at an annual or special meeting of our stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock not owned by the interested stockholder.

Some provisions of Neurocrine's certificate of incorporation and bylaws could also have anti-takeover effects. These provisions:

permit the board of directors to increase its own size and fill the resulting vacancies;

provide for a board comprised of three classes of directors with each class serving a staggered three-year term;

authorize the issuance of preferred stock in one or more series; and

require the approval of at least two-thirds of the outstanding voting stock to amend certain provisions of our certificate of incorporation.

These provisions are intended to enhance the likelihood of continuity and stability in the composition or the policies formulated by the board of directors. In addition, these provisions are intended to ensure that the board of directors will have sufficient time to act in what it believes to be in the best interests of Neurocrine and its stockholders. These provisions also are designed to reduce our vulnerability to an unsolicited proposal for a takeover of Neurocrine that does not contemplate the acquisition of all of our outstanding shares or an unsolicited proposal for the restructuring or sale of all or part of Neurocrine. The provisions are also intended to discourage some tactics that may be used in proxy fights.

Stockholder Rights Plan

On April 10, 1997, our board of directors adopted a stockholder rights plan. Under the rights plan, a dividend of one preferred share purchase right was declared for each outstanding share of our common stock. The common stock currently trades with a right to purchase Series A

Participating preferred stock. A preferred share purchase right will be attached to each share of common stock issued during the term of the rights plan. Each right entitles stockholders to buy one one-thousandth of a share of our Series A preferred stock at an exercise price of \$51.75, subject to anti-dilution adjustments, upon the triggering event of a person acquiring, or making a tender or exchange offer for, 15% or more of our outstanding common stock. Each right entitles its holder, other than the person acquiring 15% or more of the outstanding common stock, to purchase shares of our common stock with a market value of twice the right's exercise price. In addition, if a company acquires us in a merger or other business combination, or if we sell more than 50% of our consolidated assets or earning power, these rights will entitle our stockholders, other than the acquirer, to purchase, for the exercise price, shares of the common stock of the acquiring company having a market value of two times the exercise price. At any time prior to these events, the board of directors may redeem the rights at one cent per right.

Edgar Filing: NEUROCRINE BIOSCIENCES INC - Form 424B5

The rights plan is intended to protect stockholders in the event of an unsolicited attempt to acquire us. The right is transferred automatically with the transfer of the common stock until separate rights certificates are distributed upon the occurrence of certain events. The rights plan could have the effect of delaying, deferring or preventing a person from acquiring us or accomplishing a change in control of the board of directors. This description of the rights plan is intended as a summary only and is qualified in its entirety by reference to the amended and restated rights agreement dated as of July 19, 1999 between Neurocrine and American Stock Transfer & Trust Company. To obtain a copy of the rights agreement, as amended, see the section of this prospectus entitled "Where You Can Find More Information."

Classified Board of Directors

The certificate of incorporation provides for the board of directors to be divided into three classes of directors, with each class as nearly equal in number as possible, serving staggered three-year terms. As a result, approximately one-third of the board of directors will be elected each year. The classified board provision will help to assure the continuity and stability of the board of directors and the business strategies and policies of Neurocrine as determined by the board of directors. The classified board provision could have the effect of discouraging a third party from making a tender offer or attempting to obtain control of Neurocrine. In addition, the classified board provision could delay stockholders who do not agree with the policies of the board of directors from removing a majority of the board of directors for two years.

Special Meetings

The bylaws also provide that special meetings of stockholders may be called only by the board of directors, its chairman, the president or one or more stockholders holding fifty percent (50%) of the votes at that meeting.

Number of Directors; Removal; Filling Vacancies

The bylaws provide that the board of directors will consist of six members. Further, the bylaws authorize the board of directors to fill newly created directorships. Accordingly, this provision could prevent a stockholder from obtaining majority representation on the board of directors by permitting the board of directors to enlarge the size of the board and fill the new directorships with its own nominees. A director so elected by the board of directors holds office until the next election of the class for which the director has been chosen and until his or her successor is elected and qualified. The bylaws also provide that directors may be removed only for cause and only by the affirmative vote of holders of a majority of the total voting power of

18

all outstanding securities. The effect of these provisions is to preclude a stockholder from removing incumbent directors without cause and simultaneously gaining control of the board of directors by filling the vacancies created by the removal with its own nominees.

Transfer Agent and Registrar

The Transfer Agent and Registrar for our common stock is American Stock Transfer & Trust Corporation.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities (1) through underwriters or dealers, (2) through agents and/or (3) directly to one or more purchasers. We may distribute the securities from time to time in one or more transactions at:

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

We may solicit directly offers to purchase the securities being offered by this prospectus. We may also designate agents to solicit offers to purchase the securities from time to time. We will name in a prospectus supplement any agent involved in the offer or sale of our securities.

If we utilize a dealer in the sale of the securities being offered by this prospectus, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of

resale.

If we utilize an underwriter in the sale of the securities being offered by this prospectus, we will execute an underwriting agreement with the underwriter at the time of sale and we will provide the name of any underwriter in the prospectus supplement that the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we, or the purchasers of securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and the underwriter may compensate those dealers in the form of discounts, concessions or commissions.

We will provide in the applicable prospectus supplement any compensation we pay to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof.

19

The securities may or may not be listed on a national securities exchange. To facilitate the offering of securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involves the sale by persons participating in the offering of more securities than we sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for Neurocrine by Latham & Watkins, San Diego, California.

EXPERTS

Ernst & Young LLP, independent auditors, have audited Neurocrine's consolidated financial statements included in its Annual Report on Form 10-K for the year ended December 31, 2000, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Neurocrine's financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

20

You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus that is also part of this document. We have not authorized anyone to provide information different from that contained or incorporated in this prospectus supplement and the accompanying prospectus. 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 or incorporated in this prospectus supplement and the accompanying prospectus is accurate only as of the date of such information, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or of any sale of our common stock.

TABLE OF CONTENTS

	<u>Page</u>
Prospectus Supplement	
<u>About this Prospectus Supplement</u>	S-1

<u>Summary</u>	S-2
<u>Risk Factors</u>	S-7
<u>Forward-Looking Statements</u>	S-17
<u>Use of Proceeds</u>	S-18
<u>Price Range of Common Stock</u>	S-18
<u>Dividend Policy</u>	S-18
<u>Capitalization</u>	S-19
<u>Dilution</u>	S-20
<u>Selected Consolidated Financial Data</u>	S-21
<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	S-22
<u>Business</u>	S-27
<u>Management</u>	S-52
<u>Description of Capital Stock</u>	S-55
<u>Underwriting</u>	S-58
<u>Notice to Canadian Residents</u>	S-61
<u>Legal Matters</u>	S-61
<u>Experts</u>	S-62
<u>Where You Can Find More Information</u>	S-63
Prospectus	
<u>About this Prospectus</u>	3
<u>Where You Can Find More Information</u>	3
<u>Forward-Looking Statements</u>	4
<u>Neurocrine</u>	4
<u>Ratio of Earnings to Fixed Charges</u>	5
<u>Use of Proceeds</u>	6
<u>Description of Debt Securities</u>	6
<u>Description of Capital Stock</u>	15
<u>Plan of Distribution</u>	19
<u>Legal Matters</u>	20
<u>Experts</u>	20

3,250,000 Shares

Common Stock

Deutsche Banc Alex. Brown

Credit Suisse First Boston

CIBC World Markets

Lehman Brothers

UBS Warburg

Prospectus

, 2001