NEOTHERAPEUTICS INC Form S-3/A July 25, 2001

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AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON JULY 25, 2001 REGISTRATION NO. 333-64444

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SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

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AMENDMENT NO. 1

TO

FORM S-3

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

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NEOTHERAPEUTICS, INC. (Exact Name of Registrant as Specified in Its Charter)

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DELAWARE
(State or Other Jurisdiction of
Incorporation or Organization)

93-079187 (I.R.S. Employer Identification No.)

157 TECHNOLOGY DRIVE

IRVINE, CALIFORNIA 92618 (949) 788-6700

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

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ALVIN J. GLASKY, PH.D. CHIEF EXECUTIVE OFFICER 157 TECHNOLOGY DRIVE IRVINE, CALIFORNIA 92618 (949) 788-6700

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

Copies to:

Alan W. Pettis, Esq.
Latham & Watkins
650 Town Center Drive, Twentieth Floor

Costa Mesa, California 92626 (714) 540-1235

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APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: From time to time after the effective date of this Registration Statement as determined by market conditions.

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If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. [ ]

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.[X]

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

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

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. [ ]

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### CALCULATION OF REGISTRATION FEE

PROPOSED MAXIMUM

AGGREGATE

AMOUNT TO BE OFFERING AMOUNT OF

TITLE OF SECURITIES TO BE REGISTERED REGISTERED (1) PRICE (2) REGISTRATION FEE

Common Stock, \$.001 par value per share (2) \$8,400,000 \$8,400,000 \$2,100 (3)

- (1) Subject to footnote (2), there are being registered hereunder shares of Common Stock as may be sold, from time to time, by NeoTherapeutics, Inc through an underwriter.
- (2) In no event will the aggregate maximum offering price of all securities registered under this Registration Statement exceed \$8,400,000.
- (3) Calculated pursuant to Rule 457(o) of the rules and regulations under the Securities Act of 1933, as amended. Previously Paid.

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THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8 (a) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8 (a), MAY DETERMINE.

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#### SUBJECT TO COMPLETION, DATED JULY 25, 2001

INFORMATION CONTAINED IN THIS PROSPECTUS IS SUBJECT TO COMPLETION OR AMENDMENT. A REGISTRATION STATEMENT RELATING TO THESE SECURITIES HAS BEEN FILED WITH THE SECURITIES AND EXCHANGE COMMISSION. THESE SECURITIES MAY NOT BE SOLD NOR MAY OFFERS TO BUY BE ACCEPTED PRIOR TO THE TIME THE REGISTRATION STATEMENT BECOMES EFFECTIVE. THIS PROSPECTUS SHALL NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY NOR SHALL THERE BE ANY SALE OF THESE SECURITIES IN ANY STATE IN WHICH SUCH OFFER, SOLICITATION OR SALE WOULD BE UNLAWFUL PRIOR TO REGISTRATION OR QUALIFICATION UNDER THE SECURITIES LAWS OF ANY SUCH STATE.

PROSPECTUS

\$8,400,000

OF
NEOTHERAPEUTICS, INC.
Common Stock

We may from time to time offer shares of our common stock having a maximum aggregate public offering price of \$8,400,000. The securities will be offered through Cantor Fitzgerald & Co. as underwriter as part of a Controlled Equity Offering, or CEO(sm). Upon agreement between us and Cantor Fitzgerald to sell securities on certain terms, Cantor Fitzgerald will use its commercially reasonable efforts to sell the securities up to the amount agreed upon, but will not be required to sell any specific number or dollar amount of securities. The net proceeds from the sale will be the aggregate sales price at which the securities were sold after deduction for Cantor Fitzgerald's 4% commission/discount on the aggregate sales price of the securities. Additional information on the CEO(sm) arrangement is set forth in the prospectus.

Our common stock is traded on the Nasdaq National Market under the symbol "NEOT."

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INVESTING IN OUR COMMON STOCK INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE 3.

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

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CANTOR FITZGERALD & CO.

THE DATE OF THIS PROSPECTUS IS JULY \_\_\_\_, 2001.

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NO DEALER, SALESPERSON OR OTHER INDIVIDUAL HAS BEEN AUTHORIZED TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATIONS OTHER THAN CONTAINED OR INCORPORATED BY REFERENCE IN THIS PROSPECTUS, AND IF GIVEN OR MADE, SUCH INFORMATION OR REPRESENTATIONS MUST NOT BE RELIED UPON AS HAVING BEEN AUTHORIZED BY NEOTHERAPEUTICS, INC. OR ANY UNDERWRITER. THIS PROSPECTUS DOES NOT CONSTITUTE AN OFFER OR SOLICITATION BY ANYONE IN ANY JURISDICTION IN WHICH SUCH OFFER OR SOLICITATION IS NOT AUTHORIZED OR IN WHICH THE PERSON MAKING SUCH OFFER IS NOT QUALIFIED TO DO SO OR TO ANYONE TO WHOM IT IS UNLAWFUL TO MAKE SUCH OFFER OR SOLICITATION. NEITHER THE DELIVERY OF THIS PROSPECTUS NOR ANY SALE MADE HEREUNDER SHALL, UNDER ANY CIRCUMSTANCE, CREATE ANY IMPLICATION THAT THERE HAS NOT BEEN ANY CHANGE IN THE AFFAIRS OF NEOTHERAPEUTICS SINCE THE DATE HEREOF.

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This prospectus and the documents incorporated by reference into this prospectus contain forward-looking statements that are based on current expectations, estimates and projections about our industry, management's beliefs, and assumptions made by management. Words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates," and variations of such words and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict; therefore, actual results may differ materially from those expressed or forecasted in any forward-looking statements. The risks and uncertainties include those noted in "Risk Factors" above and in the documents incorporated by reference.

We undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent that we are required to do so by law. We also may make additional disclosures in our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K that we may file from time to time with the Securities and Exchange Commission, or SEC. Please also note that we provide a cautionary discussion of risks and uncertainties under the section entitled "Risk Factors" in our Annual Report on Form 10-K. These are factors that we think could cause our actual results to differ materially from expected results. Other factors besides those listed here could also adversely affect us. This discussion is provided as permitted by the Private Securities Litigation Reform Act of 1995.

#### WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document 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. Our SEC filings are also available to the public at the SEC's web site at http://www.sec.gov.

The SEC allows us to "incorporate by reference" the information we file with them which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings made with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934 until the selling stockholders sell all the shares:

- Our annual report on Form 10-K for the fiscal year ended December 31, 2000, as amended by Form 10-K/A filed on April 25, 2001;
- Our quarterly report on Form 10-Q for the quarter ended March 31, 2001, filed on May 14, 2001;
- Our current reports on Form 8-K filed on February 16, 2001, March 14, 2001 and May 21, 2001;
- Our definitive proxy statement filed on April 30, 2001, pursuant to Section 14 of the Exchange Act in connection with our 2001 Annual Meeting of Stockholders; and

- The description of our common stock contained in the Registration of Securities of Certain Successor Issuers filed pursuant to Section 12(g) of the Exchange Act on Form 8-B on June 27, 1997, including any amendment or reports filed for the purpose of updating such description.

You can request a copy of these filings, at no cost, by writing or telephoning us at the following address:

NeoTherapeutics, Inc. Attn: Investor Relations 157 Technology Drive Irvine, California 92618 (949) 788-6700

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You should rely only on the information contained in this prospectus or any supplement and in the documents incorporated by reference. We have not authorized anyone else to provide you with different information. The selling stockholders will not make an offer of these shares in any state where the offer is not permitted. You should not assume that the information in this prospectus or any supplement or in the documents incorporated by reference is accurate on any date other than the date on the front of those documents.

This prospectus is part of a registration statement we filed with the SEC (Registration No. 333-64444). That registration statement and the exhibits filed along with the registration statement contain more information about the shares sold by the selling stockholders. Because information about contracts referred to in this prospectus is not always complete, you should read the full contracts which are filed as exhibits to the registration statement. You may read and copy the full registration statement and its exhibits at the SEC's public reference rooms or their web site.

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### ABOUT NEOTHERAPEUTICS

NeoTherapeutics, Inc. is a development stage biopharmaceutical company engaged in the discovery and development of novel therapeutic drugs intended to treat neurological diseases and conditions, such as memory deficits associated with Alzheimer's disease and aging, spinal cord injuries, Parkinson's disease, other degenerative diseases that affect the nervous system and psychiatric diseases. We have also recently become engaged in research involving functional genomics, or the study of how genes function in the body, and the development of drugs for the treatment of cancer. Our lead product candidate, Neotrofin(TM) (also known as AIT-082 or leteprinim potassium), and other compounds under development, are based on our patented technology. This technology uses small synthetic molecules to create non-toxic compounds, intended to be administered orally or by injection, that are capable of passing through the blood-brain barrier, which is a layer of cells which prevents some molecules that may be

harmful from entering the brain, to rapidly act upon specific target cells in specific locations in the central nervous system, including the brain. Animal and laboratory tests have shown that Neotrofin(TM) appears to selectively increase the production of certain neurotrophic factors, a type of large protein involved in nerve cell proliferation, differential and survival, in selected areas of the brain and in the spinal cord. These neurotrophic factors regulate nerve cell growth and function. Our technology has been developed to capitalize on the beneficial effects of these proteins, which have been widely acknowledged to be closely involved in the early formation and differentiation of the central nervous system. We believe that Neotrofin(TM) could have therapeutic and regenerative effects. We have observed no serious negative side effects in patients receiving Neotrofin(TM) in our clinical trials, however, patients have reported experiencing fatigue, headache, nausea, confusion and depression at rates consistent with those normally seen in the elderly Alzheimer's disease test population. NeoGene Technologies, Inc., a subsidiary of NeoTherapeutics, Inc., is engaged in functional genomics research. On November 16, 2000, we formed another subsidiary, NeoOncoRx, Inc., for the purpose of in-licensing anti-cancer compounds which are in the clinical trial stages of development.

We currently have no marketable products, and do not expect to have any products commercially available for at least two years, if at all. We have incurred substantial losses since our inception, and expect our losses to continue for at least the next several years. The pharmaceutical marketplace in which we operate is highly competitive, and includes many large, well-established companies pursuing treatments for Alzheimer's disease and some of the other applications we are pursuing. See "Risk Factors" below.

We were incorporated in Colorado in December 1987 and reincorporated in Delaware in June 1997. Our executive offices are located at 157 Technology Drive, Irvine, California 92618. Our telephone number is (949) 788-6700. Our web site address is www.neotherapeutics.com. Information contained in our web site does not constitute part of this prospectus.

### RISK FACTORS

Your investment in our common stock involves a high degree of risk. You should consider the risks described below and the other information contained in this prospectus carefully before deciding to invest in our common stock. If any of the following risks actually occur, our business, financial condition and operating results would be harmed. As a result, the trading price of our common stock could decline, and you could lose a part or all of your investment.

OUR LOSSES WILL CONTINUE TO INCREASE AS WE EXPAND OUR DEVELOPMENT EFFORTS, AND OUR EFFORTS MAY NEVER RESULT IN PROFITABILITY.

Our cumulative losses during the period from our inception in 1987 through March 31, 2001 were approximately \$101.7 million, almost all of which consisted of research and development and general and administrative expenses. We lost approximately \$11.6 million in 1998, \$26.0 million in 1999, approximately \$46.4 million in 2000 and approximately \$5.5 million in the three months ended March 31, 2001. We expect our losses to decrease in the year 2001 as compared to the year 2000 due to anticipated savings of approximately \$10.0 million from our transition to managing our clinical trials ourselves rather than contracting with third parties for this function. However, we expect our losses to increase in the future as we expand our clinical trials and increase our research and development activities. Moreover, we may not realize the anticipated savings from the changes in our clinical trial program. We currently do not sell any products and we may never achieve significant revenues or become profitable. Even if we eventually generate revenues from sales, we nevertheless expect to incur significant operating losses over the next several years.

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OUR POTENTIAL DRUG PRODUCTS ARE IN AN EARLY STAGE OF CLINICAL AND PRECLINICAL DEVELOPMENT AND MAY NOT PROVE SAFE OR EFFECTIVE ENOUGH TO OBTAIN REGULATORY APPROVAL TO SELL ANY OF THEM.

We currently are testing our first potential drug product, Neotrofin(TM), in human clinical trials. We are currently conducting three trials of Neotrofin(TM) for Alzheimer's disease, spinal cord injury and Parkinson's disease, and we expect to complete these trials before the end of the first quarter of 2002. We expect that we will need to complete additional trials before we will be able to apply for regulatory approval to sell Neotrofin(TM). Our other proposed products are in preclinical development. We cannot be certain that any of our potential or proposed products will prove to be safe or effective in treating disorders of the central nervous system or any other diseases. All of our potential drugs will require additional research and development, testing and regulatory clearance before we can sell them. We cannot be certain that we will receive regulatory approval to sell any of our potential drugs. We do not expect to have any products commercially available for at least two years, if at all.

IF WE ARE UNABLE TO OBTAIN SUBSTANTIAL ADDITIONAL FUNDING ON ACCEPTABLE TERMS, WE MAY HAVE TO DELAY OR ELIMINATE ONE OR MORE OF OUR DEVELOPMENT PROGRAMS.

We currently are spending cash at a rate in excess of approximately \$2.3 million per month, and we expect this rate of spending to continue for at least the following 12 months. On April 17, 2001, we entered into an agreement with two investors which provided for a sale of common stock by us to the investors for proceeds of \$6.0 million, obligated the investors to buy from us convertible debentures, or debt obligations convertible into shares of our common stock, in two blocks, one of \$10 million in May 2001 and a second one of \$8 million in November 2001. The agreement provided for a penalty payment by us of up to \$1 million if we declined to sell the convertible debentures (see Note 15 to the audited financial statements in our Amendment No. 1 on Form 10-K/A our Annual Report on Form 10-K filed on April 25, 2001). In May 2001 we declined to sell the first \$10 million block of convertible debentures, and instead agreed to sell common stock and warrants to the investors for proceeds of \$5.95 million and to reduce the penalty payment to \$405,000, which has been paid. We believe that, together with periodic sales of common stock such as the four sales totaling approximately \$20.5 million in February through May 2001, and assuming that the holders of our Class B Warrants continue to exercise our Class B Warrants in response to our call notices, our cash and capital resources will satisfy our current funding requirements for at least the next twelve months. If the market price of our common stock is less than \$2.00 per share, we may not be able to use our Class B Warrants as a financing source. As of June 21, 2001, Class B Warrants have been exercised for 586,400 shares and gross proceeds of approximately \$5.1 million. We have not issued any call notices under our Class B Warrants since November 2000. Should we not be able to continue periodic sales of our common stock or utilize our Class B Warrants, we may have to seek additional funding. We may not be able to obtain additional funds on acceptable terms or at all. If adequate funds are not available, we will have to delay or eliminate one or more of our development programs.

We expect that we will need substantial additional funds to complete development and clinical trials of Neotrofin(TM), our lead drug candidate, before we will be able to submit it to the FDA for approval for commercial sale,

and to support the continued development of our other potential products. Since we currently have no products available for commercial sale and essentially no revenues, we must use capital to fund our operating expenses. Our operating expenses, and consequently our capital requirements, will depend on many factors, including:

- continued scientific progress in research and development to identify and develop additional product candidates beyond our lead compound Neotrofin(TM);
- the costs and progress of preclinical and clinical testing of Neotrofin (TM) and additional drug candidates;
- the cost involved in filing, prosecuting and enforcing patent claims;
   and
- the time and cost involved in obtaining regulatory approvals for our potential products.

In addition, if we are successful in obtaining regulatory approval of one or more of our potential products, we will require additional capital to cover costs associated with commercializing our products.

We expect to seek additional funding through public or private financings or collaborative or other arrangements with third parties. We may not obtain additional funds on acceptable terms, if at all. If adequate funds are not available, we will have to delay or eliminate one or more of our development programs.

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COMPETITION FOR PATIENTS IN CONDUCTING CLINICAL TRIALS AND EXTENSIVE REGULATIONS GOVERNING THE CONDUCT OF CLINICAL TRIALS MAY PREVENT OR DELAY APPROVAL OF A DRUG CANDIDATE AND STRAIN OUR LIMITED FINANCIAL RESOURCES.

Many pharmaceutical companies are conducting clinical trials in patients with Alzheimer's disease. As a result, we must compete with them for clinical sites, physicians and the limited number of patients with Alzheimer's disease who fulfill the stringent requirements for participation in clinical trials. Due to a lack of available information about the condition of Alzheimer's disease sufferers in the United States, we cannot be certain how many of the over 4 million patients with Alzheimer's disease in the United States would meet the requirements for participating in our clinical trials. In addition, due to the confidential nature of clinical trials, we cannot be certain how many of these patients may be enrolled in competing studies and consequently not available to us. This competition may increase costs of our clinical trials and delay the introduction of our potential products.

ANY FAILURE TO COMPLY WITH EXTENSIVE GOVERNMENTAL REGULATION COULD PREVENT OR DELAY PRODUCT APPROVAL OR CAUSE GOVERNMENTAL AUTHORITIES TO DISALLOW OUR PRODUCTS AFTER APPROVAL AND SUBJECT US TO CRIMINAL OR CIVIL LIABILITIES.

The U.S. Food and Drug Administration, or FDA, and comparable agencies in foreign countries impose many requirements on the introduction of new drugs through lengthy and detailed clinical testing procedures, and other costly and time consuming compliance procedures. These requirements apply to every stage of the clinical trial process and make it difficult to estimate when Neotrofin(TM) or any other potential product will be available commercially, if at all.

Our proprietary compounds will require substantial clinical trials and

FDA review as new drugs. Even if we successfully enroll patients in our clinical trials, patients may not respond to our potential drug products. We think it is prudent to expect setbacks. While we believe that we are currently in compliance with applicable FDA regulations, if we fail to comply with the regulations applicable to our clinical testing, the FDA may delay, suspend or cancel our clinical trials, or the FDA might not accept the test results. The FDA, or any comparable regulatory agency in another country, may suspend clinical trials at any time if it concludes that the trials expose subjects participating in such trials to unacceptable health risks. Further, human clinical testing may not show any current or future product candidate to be safe and effective to the satisfaction of the FDA or comparable regulatory agencies or the data derived therefrom may be unsuitable for submission to the FDA or other regulatory agencies.

We cannot predict with certainty when we might submit any of our proposed products currently under development for the regulatory approval required in order to commercially sell the products. Once we submit a proposed product for commercial sale approval, the FDA or other regulatory agencies may not issue their approvals on a timely basis, if at all. If we are delayed or fail to obtain these approvals, our business may be damaged. If we fail to comply with regulatory requirements, either prior to seeking approval or in marketing our products after approval, we could be subject to regulatory or judicial enforcement actions. These actions could result in:

- product recalls or seizures;
- injunctions;
- civil penalties;
- criminal prosecution;
- refusals to approve new products and withdrawal of existing approvals;
   and
- enhanced exposure to product liabilities.

THE LOSS OF KEY RESEARCHERS OR MANAGERS COULD HINDER OUR DRUG DEVELOPMENT PROCESS SIGNIFICANTLY AND MIGHT CAUSE OUR BUSINESS TO FAIL.

Our success depends upon the contributions of our key management and scientific personnel, especially Dr. Alvin Glasky, our Chief Executive Officer and Chief Scientific Officer. Dr. Glasky has led our research and business developments since founding our business in 1987 and is the inventor on several of our patents. Our loss of the services of Dr. Glasky or any other key personnel could delay or preclude us from achieving our business

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objectives. Although we currently have key-man life insurance on Dr. Glasky in the face amount of \$2 million, we believe that the loss of Dr. Glasky's services would damage our research and development efforts substantially. Dr. Glasky is party to an employment agreement with us which provides for a three year term expiring December 31, 2003, with automatic renewals thereafter unless we or Dr. Glasky gives notice of intent not to renew at lease 90 days in advance of the renewal date.

In addition to Dr. Glasky, the loss of Dr. Luigi Lenaz, our Vice President, Oncology Division and President of our subsidiary NeoOncoRx, Inc.,

would damage the development of our anti-cancer business substantially, and the loss of the services of Dr. Olivier Civelli, consultant to our subsidiary NeoGene, Inc., would harm the development of our functional genomics business substantially. We also will need substantial additional expertise in finance and marketing and other areas in order to achieve our business objectives. Competition for qualified personnel among pharmaceutical companies is intense, and the loss of key personnel, or the inability to attract and retain the additional skilled personnel required for the expansion of our business, could damage our business.

IF WE CANNOT PROTECT OR ENFORCE OUR INTELLECTUAL PROPERTY RIGHTS ADEQUATELY, THE VALUE OF OUR RESEARCH COULD DECLINE AS OUR COMPETITORS APPROPRIATE PORTIONS OF OUR RESEARCH.

We actively pursue patent protection for our proprietary products and technologies. We hold rights to four U.S. patents and currently have sixteen U.S. patent applications pending, including three which have been allowed. Our issued patents expire between 2009 and 2014. In addition, we have numerous foreign patents issued and patent applications pending corresponding to our U.S. patents. However, our patents may not protect us against our competitors. We may have to file suit to protect our patents or to defend our use of our patents against infringement claims brought by others. Because we have limited cash resources, we may not be able to afford to pursue or defend against litigation in order to protect our patent rights.

We also rely on trade secret protection for our unpatented proprietary technology. However, trade secrets are difficult to protect. While we enter into proprietary information agreements with our employees and consultants, these agreements may not successfully protect our trade secrets or other proprietary information.

WE ARE A SMALL COMPANY RELATIVE TO OUR PRINCIPAL COMPETITORS AND OUR LIMITED FINANCIAL AND RESEARCH RESOURCES MAY LIMIT OUR ABILITY TO DEVELOP AND MARKET NEW PRODUCTS.

Many companies, both public and private, including well-known pharmaceutical companies such as Amgen, Inc. Bayer AG, Eli Lilly and Co., Novartis, Bristol-Meyers Squibb Company, Pfizer, Inc., and Janssen and Shire, are developing products to treat Alzheimer's disease and certain of the other applications we are pursuing. Most of these companies have substantially greater financial, research and development, manufacturing and marketing experience and resources than we do. As a result, our competitors may be more successful than us in developing their products and obtaining regulatory approvals. While we believe, based on recent industry publications, that Neotrofin(TM) is more advanced in the drug development process than most other drugs seeking to use neurotrophic factors to treat Alzheimer's disease, we cannot be certain that Neotrofin(TM) will be the first of these drugs to receive FDA approval, if it receives approval at all. In addition, there are four drugs currently approved for the treatment of Alzheimer's disease in the United States, all of which use a different approach to the disease than Neotrofin(TM). If these treatments are successful, or if other drugs using the neurotrophic factor approach are approved before Neotrofin(TM), the market for our products could be reduced or eliminated.

OUR LACK OF EXPERIENCE AT CONDUCTING CLINICAL TRIALS OURSELVES MAY DELAY THE TRIALS AND INCREASE OUR COSTS.

We have begun to conduct, and intend to conduct in the future, some clinical trials ourselves rather than hiring outside contractors. We believe this conversion may reduce the costs associated with the trials and give us more

control over the trials. However, while some of our management has had experience at conducting clinical trials, we have never done so as a company. While we have not experienced significant delays or increased costs to date due to this conversion, as we move forward with our first self-conducted clinical trials, our lack of experience may delay the trials and increase our costs. We think it is prudent to expect setbacks as we make this transition.

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HOLDERS OF OUR CONVERTIBLE PREFERRED STOCK, DEBENTURES AND WARRANTS COULD ENGAGE IN SHORT SELLING TO INCREASE THE NUMBER OF SHARES OF COMMON STOCK ISSUABLE UPON CONVERSION OR EXERCISE OF THE SECURITIES AND DECREASE THE EXERCISE PRICE OF THE WARRANTS. IF THIS OCCURS, THE MARKET PRICE OF OUR COMMON STOCK MAY DECLINE.

Short selling is a practice in which an investor borrows shares from a stockholder to sell in the trading market, with an obligation to deliver the same number of shares back to the lending stockholder at a future date. Short sellers make a profit if the price of our common stock declines, allowing the short sellers to sell the borrowed shares at a higher price than they have to pay for shares delivered to the lending stockholder. Short selling increases the number of shares of our common stock available for sale in the trading market, putting downward pressure on the market price of our common stock.

We have issued a number of securities that may be converted into or exercised for shares of our common stock based on a floating conversion or exercise price related to the market price of our common stock. The holders of these securities may benefit from the downward price pressures caused by short selling due to the increased number of shares of common stock issuable upon conversion of convertible securities at a lower conversion price, or the reduced exercise price that must be paid to obtain shares of common stock upon exercise.

The holders of our Series C Preferred Stock have the right to convert those shares into shares of our common stock at a rate that varies with the market price of our common stock. The shares of our Series C Preferred Stock are convertible into common stock at a conversion price equal to 100% of the average of the lowest seven closing bid prices of our common stock in the previous 30 trading days, subject to a cap of \$5.97. The holders of shares of Series A Preferred Stock issued by our subsidiary, NeoGene Technologies, Inc., have rights to exchange those shares for shares of our convertible preferred stock. If we hold less than \$5 million in cash and cash equivalents at the time of the exchanges, these holders also have the right to exchange those shares into our convertible debentures. If those exchange rights are exercised, the resulting shares of our convertible preferred stock or debentures will generally be convertible into common stock at a conversion price equal to 101% of the average of the lowest ten closing bid prices of our common stock in the previous 30 trading days, subject to a cap of 120% of the market price of our common stock at the time of the exchange. In addition, on April 17, 2001, we entered into an agreement with the holders of NeoGene's Series A Preferred Stock that commit these investors to purchase convertible debentures of NeoTherapeutics. If issued, the convertible debentures will generally be convertible into common stock at a conversion price equal to an initial conversion price of 120% of the average per share market value of our common stock over the five trading days preceding the date of issuance or, after 90 days from the date of issuance, the lesser of the initial conversion price or 101% of the average of the ten lowest

closing bids of our common stock in the previous 30 trading days from the date of conversion.

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As a result of the terms of these securities, the number of shares of common stock issuable upon conversion of the convertible preferred stock or debentures will vary with the market price of our stock. The number of shares of our common stock that are issuable upon conversion of any of these securities increases as the price of our common stock decreases. Increased sales volume of our common stock could put downward pressure on the market price of the shares. This fact could encourage holders of the securities to sell short our common stock prior to conversion of the securities, thereby potentially causing the market price to decline and a greater number of shares to become issuable upon conversion of the preferred stock or debentures. The holders of the securities could then convert their securities and use the shares of common stock received upon conversion to replace the shares sold short. The holders of the securities could thereby profit by the decline in the market price of the common stock caused by their short selling.

Similarly, the exercise price of our outstanding Class B Warrants, if we deliver a redemption notice, is equal to the lesser of \$33.75 per share (subject to adjustment for stock splits, reverse splits and combinations) and 97% (or 95% if the market price of our common stock is less than \$5.00 per share) of the closing bid price of our common stock on the trading day after the redemption notice is delivered. This fact could give the holders of our Class B Warrants incentive to sell short our common stock after receipt of a redemption notice, which could cause the market price to decline. The holders of the Class B Warrants could then exercise their Class B Warrants and use the shares of common stock received upon exercise to replace the shares sold short and thereby profit by the decline in the market price of the common stock caused by their short selling. There are currently outstanding Class B Warrants exercisable for 3,413,600 shares of common stock.

Montrose Investments Ltd. and Strong River Investments, Inc. each hold Class B Warrants to purchase 1,706,800 shares of our common stock and \$2.5 million worth of NeoGene Series A Preferred Stock. Societe Generale holds \$2.0 million worth of our Series C Preferred Stock. No other investors hold NeoGene Preferred Stock, NeoTherapeutics Preferred Stock or Class B Warrants. In addition, Montrose Investments Ltd. and Strong River Investments, Inc. are the investors under our April 17, 2001 agreement for the purchase of convertible debentures. These facts give these three investors greater influence over the market price of our stock, however, each of these investors make independent investment decisions, and each has agreed to vote any and all shares of our common stock that they own as recommended by our board of directors in any meeting of our stockholders.

THE TRADING PRICE OF OUR COMMON STOCK AND THE TERMS OF OUR CONVERTIBLE SECURITIES AND WARRANTS MUST COMPLY WITH THE LISTING REQUIREMENTS OF THE NASDAQ NATIONAL MARKET OR WE COULD BE DELISTED AND THE LIQUIDITY OF OUR COMMON STOCK WOULD DECLINE.

Our common stock is listed on the Nasdaq National Market. To remain listed on this market, we must meet Nasdaq's listing maintenance standards and abide by Nasdaq's rules governing listed companies. If the price of our common stock falls below \$1.00 per share for an extended period, or if we fail to meet other Nasdaq standards, including minimum market capitalization and minimum total assets, or violate Nasdaq rules, our common stock could be delisted from

the Nasdaq National Market.

Nasdaq has established rules regarding the issuance of "future priced securities" or securities convertible into common stock based on a floating conversion price, so that the number of shares of common stock issuable upon conversion of the securities is not known when the securities are sold. These rules may apply to our Series C Preferred Stock, the preferred stock or debentures we may issue in exchange for NeoGene preferred stock or the convertible debentures we may issue pursuant to the April 17, 2001 agreement, because the number of shares of our common stock issuable upon conversion of these securities is based upon a future price of our common stock. Nasdaq's concerns regarding these securities include the potential dilution to our existing stockholders if the price of our common stock goes down causing a large number of shares to be issued upon conversion of the securities, and the corresponding potential for excessive return on investment for the purchaser of the convertible securities. In addition, since the holders of future priced securities may benefit from a decrease in the market price of our common stock, those holders may have greater incentive to engage in manipulative practices. In light of these concerns, Nasdaq has indicated that the following rules may be implicated by future priced securities:

Stockholders must approve significant issuances of listed securities at a discount to market or book value. Nasdaq rules prohibit an issuer of listed securities from issuing 20% or more of its outstanding capital stock at less than the greater of book value or the then current market value without obtaining prior stockholder consent. We did not obtain stockholder consent prior to issuing the NeoGene preferred stock and granting the exchange right to the

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holders of the NeoGene preferred stock or prior to signing the April 17, 2001 agreement. Prior to obtaining stockholder approval, the securities issued in these transactions by their terms could not be converted into 20% or more of the number of shares of our common stock outstanding at the time the securities are issued. We obtained this approval at our Annual Meeting of Stockholders to be held on June 11, 2001.

Public interest concerns. Nasdaq may terminate the listing of a security if necessary to prevent fraudulent and manipulative acts and practices or to protect investors and the public interest. With respect to future priced securities, Nasdaq has indicated that it may delist a security if the returns with respect to the future priced security become excessive compared to the returns being earned by public investors in the issuer's securities.

Furthermore, some requirements for continued listing, such as the \$1.00 minimum bid price requirement, are outside of our control. Accordingly, there is a risk that Nasdaq may delist our common stock.

If our common stock is delisted, we likely would seek to list our common stock on the Nasdaq SmallCap Market or for quotation on the American Stock Exchange or a regional stock exchange. However, listing or quotation on such market or exchange could reduce the market liquidity for our common stock. If our common stock were not listed or quoted on another market or exchange, trading of our common stock would be conducted in the over-the-counter market on an electronic bulletin board established for unlisted securities or in what are commonly referred to as the "pink sheets." As a result, an investor would find it more difficult to dispose of, or to obtain accurate quotations for the price of, our common stock. In addition, delisting from the Nasdaq National Market and failure to obtain listing or quotation on such other market or exchange would

subject our common stock to so-called "penny stock" rules. These rules impose additional sales practice and market-making requirements on broker-dealers who sell and/or make a market in such securities. Consequently, if our common stock is delisted from the Nasdaq National Market and we fail to obtain listing or quotation on another market or exchange, broker-dealers may be less willing or able to sell and/or make a market in our common stock and purchasers of our common stock may have more difficulty selling such common stock in the secondary market. In either case, the market liquidity of our common stock would decline.

THERE ARE A SUBSTANTIAL NUMBER OF SHARES OF OUR COMMON STOCK ELIGIBLE FOR FUTURE SALE IN THE PUBLIC MARKET. THE SALE OF THESE SHARES COULD CAUSE THE MARKET PRICE OF OUR COMMON STOCK TO FALL. ANY FUTURE EQUITY ISSUANCES BY US MAY HAVE DILUTIVE AND OTHER EFFECTS ON OUR EXISTING STOCKHOLDERS.

There were 20,777,181 shares of our common stock outstanding as of June 22, 2001. In addition, security holders held options and warrants as of June 22, 2001 which, if exercised, would obligate us to issue up to an additional 11,662,018 shares of common stock as of June 22, of which 5,165,385 shares are subject to options or warrants which are currently exercisable at the sole election of the holder. Many of these shares, if issued, would likely be issued at a discount to the prevailing market price. A substantial number of those shares, when we issue them upon exercise, will be available for immediate resale in the public market. In addition, we have the ability to sell up to approximately \$27 million of our common stock pursuant to a shelf registration that will be eligible for immediate resale in the market. Furthermore, these numbers do not include the number of shares of common stock that may become issuable upon conversion of our Series C Preferred Stock or the securities that we may be required to issue in exchange for shares of NeoGene preferred stock. While this number of shares cannot be accurately determined at this time, assuming an average conversion price of \$5.00 per share and payment of all dividends in shares, up to 1,790,000 shares could be issuable and available for resale upon conversion of these securities. The market price of our common stock could fall as a result of such resales, due to the increased number of shares available for sale in the market. If all 13,452,018 shares were issued without any increase in our market capitalization, the market price per share of our common stock may be reduced by approximately 40%.

We have financed our operations, and we expect to continue to finance our operations, by issuing and selling equity securities. Any issuances by us of equity securities may be at or below the prevailing market price of our common stock and may have a dilutive impact on our other stockholders. These issuances would also cause our net income or loss per share to decrease in future periods. As a result, the market price of our common stock could drop.

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WE MAY BE SUBJECT TO PRODUCT LIABILITY CLAIMS, AND MAY NOT HAVE SUFFICIENT PRODUCT LIABILITY INSURANCE TO COVER ANY CLAIMS, WHICH MAY EXPOSE US TO SUBSTANTIAL LIABILITIES.

We may be exposed to product liability claims from patients who participate in our clinical trials, or, if we are able to obtain FDA approval for one or more of our potential products, from consumers of our products. Although we currently carry product liability insurance in the amount of \$5 million per occurrence, it is possible that the amounts of this coverage will be insufficient to protect us from future claims. Further, we cannot be certain that we will be able to obtain or maintain additional insurance on acceptable terms for our clinical and commercial activities or that such additional insurance would be sufficient to cover any potential product liability claim or

recall. Failure to maintain sufficient insurance coverage could have a material adverse effect on our business and results of operations if claims are made that exceed our coverage.

THE USE OF HAZARDOUS MATERIALS IN OUR RESEARCH AND DEVELOPMENT EFFORTS IMPOSES CERTAIN COMPLIANCE COSTS ON US AND MAY SUBJECT US TO LIABILITY FOR CLAIMS ARISING FROM THE USE OR MISUSE OF THESE MATERIALS.

Our research and development efforts involve the use of hazardous materials, including biological materials, chemicals and radioactive materials. We are subject to federal, state and local laws and regulations governing the storage, use and disposal of these materials and some waste products. We believe that our safety procedures for handling and disposing of these materials comply with the standards prescribed by federal, state and local regulations. However, we cannot completely eliminate the risk of accidental contamination or injury from these materials. If there was an accident, we could be held liable for any damages that result, which could exceed our resources. We currently maintain insurance coverage of up to \$1,000,000 per occurrence for injuries resulting from the hazardous materials we use, and up to \$25,000 per occurrence for pollution clean up and removal, however, future claims may exceed these amounts. Currently the costs of complying with federal, state and local regulations are not significant, and consist primarily of waste disposal expenses. We may incur substantially increased costs to comply with regulations, particularly environmental regulations if we develop our own commercial manufacturing facility.

THE MARKET PRICE AND VOLUME OF OUR COMMON STOCK FLUCTUATE SIGNIFICANTLY AND COULD RESULT IN SUBSTANTIAL LOSSES FOR INDIVIDUAL INVESTORS.

The stock market from time to time experiences significant price and volume fluctuations that are unrelated to the operating performance of particular companies. These broad market fluctuations may cause the market price of our common stock to drop. In addition, the market price of our common stock is highly volatile. Factors that may cause the market price of our common stock to drop include fluctuations in our results of operations, timing and announcements of our technological innovations or new products or those of our competitors, FDA and foreign regulatory actions, developments with respect to patents and proprietary rights, public concern as to the safety of products developed by us or others, changes in health care policy in the United States and in foreign countries, changes in stock market analyst recommendations regarding our common stock, the pharmaceutical industry generally and general market conditions. In addition, the market price of our common stock may drop if our results of operations fail to meet the expectations of stock market analysts and investors. During the last year, the price of our common stock has ranged between \$13.50 and \$2.22, and the daily trading volume has been as high as 2,006,000 shares and as low as 10,600 shares, with a recent average of approximately 112,000 shares.

OUR DIRECTORS AND EXECUTIVE OFFICERS OWN A SUBSTANTIAL PERCENTAGE OF OUR COMMON STOCK. THEIR OWNERSHIP COULD ALLOW THEM TO EXERCISE SIGNIFICANT CONTROL OVER CORPORATE DECISIONS AND TO IMPLEMENT CORPORATE ACTS THAT ARE NOT IN THE BEST INTERESTS OF OUR STOCKHOLDERS AS A GROUP.

Our directors and executive officers beneficially own approximately 11.6% of our outstanding common stock as of June 21, 2001. In addition, several of our stockholders, including Montrose Investments Ltd. and Strong River Investments, Inc. and Societe Generale have agreed that they will vote any and all shares of our common stock that they own as recommended by our board of directors in any meeting of our stockholders. As of June 21, 2001, these stockholders collectively held 1,649,157 shares of our common stock, or

approximately 8.0% of the number of shares outstanding, and held warrants and convertible securities which could result in the issuance of up to 6,823,146 additional shares, for a total of 8,092,303 shares or 29.8% of the total number outstanding if all of those securities were converted or exercised, assuming a conversion price of \$4.00 per share for all floating price securities. Of the additional shares, only 1,780,000, or approximately 7.9%, could be issued at the option of the holder within 60 days of June 21, 2001. As a result of these holdings, our directors and executive officers, if they acted together, could exert substantial influence over matters requiring approval by our stockholders. These matters would include the election of directors and the approval of mergers or other business combination transactions. This concentration of ownership and voting power may discourage or prevent someone from acquiring our business.

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CERTAIN CHARTER AND BYLAWS PROVISIONS AND STOCKHOLDER RIGHTS PLAN MAY MAKE IT MORE DIFFICULT FOR SOMEONE TO ACQUIRE CONTROL OF US OR REPLACE CURRENT MANAGEMENT.

Certain provisions of our Certificate of Incorporation and Bylaws may make it more difficult for someone to acquire control of us or replace our current management. These provisions may make it more difficult for stockholders to take certain corporate actions and could delay or discourage prevent someone from acquiring our business or replacing our current management, even if doing so would benefit our stockholders. These provisions could limit the price that certain investors might be willing to pay for shares of our common stock.

On December 13, 2000, we adopted a Stockholder Rights Plan pursuant to which we have distributed rights to purchase units of our capital Series B Junior Participating Preferred Stock. The rights become exercisable upon the earlier of ten days after a person or group of affiliated or associated persons has acquired 20% or more of the outstanding shares of our common stock or ten days after a tender offer has commenced that would result in a person or group beneficially owning 20% or more of our outstanding common stock. These rights could delay or discourage someone from acquiring our business, even if doing so would benefit our stockholders.

### USE OF PROCEEDS

Unless otherwise indicated in a supplement to this prospectus, we anticipate that any net proceeds from the sale of the securities will be used for general corporate purposes which may include but are not limited to working capital, capital expenditures, research and development and general and administrative expenses. Net proceeds from the sale of the offered securities initially may be temporarily invested in short-term interest-bearing securities.

#### PLAN OF DISTRIBUTION

On June 12, 2001, we entered into a Sales Agreement (the "Sales Agreement") with Cantor Fitzgerald & Co. ("Cantor") to act as underwriter for an offering from time to time of up to \$8.4 million worth of our common stock in one or more placements. As part of this offering, Cantor may make sales "at the market" or directly into the Nasdaq National Market, the existing trading market for our common stock, including sales made to or through a market maker or through an electronic communications network, at the prevailing market price at the time of sale or at prices related to those prevailing market prices or at negotiated prices. The transactions in the shares may be effected during or after regular trading hours by one or more of the following methods: ordinary

brokerage transactions and transactions in which the broker solicits purchasers; block trades in which the broker or dealer will attempt to sell the shares as agent but may position and attempt to resell a portion of the block as principal in order to facilitate the transaction; purchases by a broker or dealer as principal; privately negotiated transactions; and any other method permitted by law. The brokers or dealers may receive compensation in the form of discounts, concessions or commissions. We will provide a prospectus supplement to describe any transaction to the extent required by the federal securities laws.

Pursuant to the Sales Agreement, we may, but we are under no obligation to, elect to notify Cantor that we want to sell shares of common stock and the proposed terms under which we would make the sale. Cantor may, but is under no obligation to, accept the offer from us. If we agree with Cantor on the terms of a proposed placement, including the number of shares of common stock to be offered in the placement and any minimum price below which sales may not be made, Cantor has agreed to use its commercially reasonable efforts, consistent with its normal trading and sales practices, to try to sell such shares in accordance with such terms. In the event that sales are made, Cantor will provide written notice to us and we will deliver such shares on the third business day following the date of such sale, unless otherwise specified by the parties. The Sales Agreement is terminable by either Cantor or us after one year, provided that Cantor may terminate the Sales Agreement earlier upon the occurrence of certain events.

Cantor, and any broker or dealer that participates in the distribution (collectively, "Distribution Participants"), is an underwriter within the meaning of Section 2 (a) (11) of the Securities Act, and any commissions received by these brokers or dealers and any profit realized on the resale of the securities sold by them while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As underwriters they would be required to comply with the requirements of the Securities Act and the Securities Exchange Act of 1934, as amended, or the Exchange Act, including, without limitation, Rule 415 (a) (4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares of common stock by "Distribution Participants". Under these rules and regulations, Distribution Participants:

 may not engage in any stabilization activity in connection with our securities; and

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may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until such Distribution Participant has completed its participation in the distribution.

Cantor has informed us that if permitted under the federal securities laws it may purchase and sell shares of our common stock for its own account, as market makes or otherwise, at the same time as it is making sales of shares of our common stock under the Sales Agreement.

We have agreed that, without the written consent of Cantor, we will not, directly or indirectly, offer to sell, sell, contract to sell, grant any option to sell or otherwise dispose of any shares of our common stock, securities convertible into or exchangeable for our common stock, warrants or any rights to acquire our common stock during the period beginning on the fifth trading day preceding the date on which we and Cantor agree to the terms of a placement under the Sales Agreement and ending on the fifth trading day after the settlement of the final sale made as part of that placement.

In connection with any sales made pursuant to the Sales Agreement, Cantor is to receive compensation of 4% of the gross proceeds and warrants to purchase shares of common stock in an amount equal to 10% of the number of shares sold by Cantor at an exercise price equal to 130% of the volume weighted average sales price of the shares of common stock sold by Cantor. The warrants are exercisable for five years and contain a cashless exercise provision commencing one year after issuance. We have also granted Cantor limited demand and piggyback registration rights with respect to the common stock underlying the warrants, which registration rights also commence one year after the issuance of the warrants.

Simultaneous with entering into the Sales Agreement, we entered into another agreement with Cantor on a similar basis (the "Other Agreement") for up to \$25 million worth of our common stock that is currently registered under our Registration Statement on Form S-3, registration number 333-53108. As with the Sales Agreement, any sales under the Other Agreement shall be subject to our agreeing with Cantor, in each instance, as to the terms and conditions of such sale. However, unlike the Sales Agreement, Cantor may not make sales pursuant to the Other Agreement directly into the Nasdaq National Market or otherwise in a manner that may be deemed to be an "at the market" offering as defined in Rule 415 under the Securities Act. In connection with any sales under the Other Agreement, Cantor is to receive compensation of 4.00% on the first \$10 million gross proceeds, 3.50% on the next \$10 million gross proceeds and 3.00% on the next \$5 million. In addition, whenever Cantor receives cash compensation pursuant to the Other Agreement in connection with sales actually effected by Cantor thereunder or pursuant to Alternative Sales (as defined below), we will issue warrants to Cantor upon the same terms and conditions upon which warrants are issued to Cantor pursuant to the Sales Agreement.

Until Cantor receives aggregate cash compensation of \$336,000 (or 4% of \$8.4 million gross proceeds) for sales made under the Sales Agreement and the Other Agreement, Cantor, subject to certain exceptions, is to receive 2% of the gross proceeds in any transaction in which we sell or issue our common stock for cash to or through a party or parties other than Cantor or its affiliates ("Alternative Sales").

We have also agreed to reimburse Cantor for its out-of-pocket expenses incurred in connection with the sales agreements and the agreement referred to below, including up to an aggregate of \$100,000 incurred in connection with entering into the sales agreements, and we are required to advance Cantor \$40,000 with respect to certain expenses that may be incurred under the Other Agreement, all or part of which may be refundable.

In addition, we have entered into an agreement with Cantor, pursuant to which Cantor has been engaged to provide investment banking and other financial services. The agreement is terminable at the will of either party. The agreement provides that Cantor is to receive an annual retainer of \$75,000 and reimbursement of its out-of-pocket expenses incurred in connection with services rendered thereunder. Upon execution of the agreement, we paid Cantor a \$75,000 annual retainer and \$50,000 as a non-refundable deposit against our reimbursement obligation.

We have agreed to indemnify Cantor against certain liabilities, including liabilities under the Securities Act, or to contribute to payments Cantor may be required to make in respect thereof.

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Latham & Watkins, Costa Mesa, California, will pass on the validity of the issuance of the common stock offered by this prospectus.

#### EXPERTS

The financial statements incorporated by reference in this registration statement, to the extent and for the periods indicated in their report, have been audited by Arthur Andersen LLP, independent public accountants, and are included herein in reliance upon the authority of said firm as experts in giving said report. Reference is made to said report which states that the Company is in the development stage, as described in Note 1 to the consolidated financial statements.

LIMITATION ON LIABILITY AND DISCLOSURE OF SEC POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our bylaws provide for indemnification of our directors and officers to the fullest extent permitted by law. Insofar as indemnification for liabilities under the Securities Act may be permitted to directors, officers or controlling persons of the Company pursuant to the Company's Certificate of Incorporation, as amended, bylaws and the Delaware General Corporation Law, the Company has been informed that in the opinion of the SEC such indemnification is against public policy as expressed in such Act and is therefore unenforceable.

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SHARES OF COMMON STOCK

NEOTHERAPEUTICS, INC.

PROSPECTUS

JULY \_\_\_, 2001

NO DEALER, SALESPERSON OR OTHER INDIVIDUAL HAS BEEN AUTHORIZED TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATIONS OTHER THAN CONTAINED OR INCORPORATED BY REFERENCE IN THIS PROSPECTUS, AND IF GIVEN OR MADE, SUCH INFORMATION OR REPRESENTATIONS MUST NOT BE RELIED UPON AS HAVING BEEN AUTHORIZED BY THE COMPANY OR ANY UNDERWRITER. THIS PROSPECTUS DOES NOT CONSTITUTE AN OFFER OR SOLICITATION BY ANYONE IN ANY JURISDICTION IN WHICH SUCH OFFER OR SOLICITATION IS NOT AUTHORIZED OR IN WHICH THE PERSON MAKING SUCH OFFER IS NOT QUALIFIED TO DO SO OR TO ANYONE TO WHOM IT IS UNLAWFUL TO MAKE SUCH OFFER OR SOLICITATION. NEITHER THE DELIVERY OF THIS PROSPECTUS NOR ANY SALE MADE HEREUNDER SHALL, UNDER ANY CIRCUMSTANCE, CREATE ANY IMPLICATION THAT THERE HAS NOT BEEN ANY CHANGE IN THE AFFAIRS OF THE COMPANY SINCE THE DATE HEREOF.

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#### PART II

### INFORMATION NOT REQUIRED IN THE PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following sets forth the costs and expenses, all of which shall be borne by the Registrant, in connection with the offering of the securities pursuant to this Registration Statement:

Registration Fee	\$	2,100.00
Accounting Fees and Expenses	\$	6,000.00*
Legal Fees and Expenses	\$	20,000.00*
Miscellaneous	\$	5,000.00*
Total	\$	33,100.00*
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### \* Estimated

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

The bylaws of the Registrant provide for indemnification of the Registrant's directors and officers to the fullest extent permitted by law. Insofar as indemnification for liabilities under the Securities Act may be permitted to directors, officers or controlling persons of the Registrant pursuant to the Registrant's Certificate of Incorporation, bylaws and the

Delaware General Corporation Law (the "DGCL"), the Registrant has been informed that in the opinion of the SEC such indemnification is against public policy as expressed in such Act and is therefore unenforceable.

Section 102(b)(7) of the DGCL provides that a certificate of incorporation may include a provision which eliminates or limits the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the company or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, relating to prohibited dividends or distributions or the repurchase or redemption of stock or (iv) for any transaction from which the director derives an improper personal benefit. The Registrant's Certificate of Incorporation includes such a provision. As a result of this provision, the Registrant and its stockholders may be unable to obtain monetary damages from a director for breach of his or her duty of care.

#### ITEM 16. EXHIBITS

- 1.1 Sales Agreement, dated as of June 12, 2001, by and between the Company and Cantor Fitzgerald & Co.\*
- 1.2 Sales Agreement, dated as of June 12, 2001, by and between the Company and Cantor Fitzgerald & Co.\*
- 4.1 Advisory Agreement, dated as of April 11, 2001, by and between the Company and Cantor Fitzgerald & Co.\*
- 4.2 Amendment to Advisory Agreement, dated as of June 12, 2001, by and between the Company and Cantor Fitzgerald & Co.\*
- 5.1 Opinion of Latham & Watkins regarding the validity of the common stock being registered.\*
- 23.1 Consent of Arthur Andersen LLP.
- 23.2 Consent of Latham & Watkins (included in Exhibit 5.1).
- 24.1 Power of Attorney (included on the signature page to this registration statement).

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### ITEM 17. UNDERTAKINGS.

- (a) The undersigned registrant hereby undertakes:
- (1) To file, during any period in which it offers or sells securities, a

<sup>\*</sup> Previously filed.

post-effective amendment to this registration statement:

- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.
- (2) That, for the purpose of determining any liability under the Securities Act, each post-effective amendment shall be treated as a new registration statement of the securities offered, and the offering of the securities at that time to be deemed the initial bona fide offering.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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#### SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Irvine, State of California, on July 25, 2001.

NEOTHERAPEUTICS, INC.

By: /s/ Samuel Gulko

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Samuel Gulko

Senior Vice President, Finance, Chief

Financial Officer, Secretary and Treasurer

#### POWER OF ATTORNEY

We, the undersigned directors and officers of NeoTherapeutics, Inc., do hereby constitute and appoint Alvin J. Glasky, Ph.D. and Samuel Gulko, or either of them, our true and lawful attorneys-in-fact and agents, each with full power to sign for us or any of us in our names and in any and all capacities, any and all amendments (including post-effective amendments) to this Registration Statement, or any related registration statement that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto and other documents required in connection therewith, and each of them with full power to do any and all acts and things in our names and in any and all capacities, which such attorneys-in-fact and agents, or either of them, may deem necessary or advisable to enable NeoTherapeutics, Inc. to comply with the Securities Act of 1933, as amended, and any rules, regulations, and requirements of the Securities and Exchange Commission, in connection with this Registration Statement; and we hereby do ratify and confirm all that the such attorneys-in-fact and agents, or either of them, shall do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
* Alvin J. Glasky, Ph.D.	Chief Executive Officer and Director (principal executive officer)	July 25, 2001
*  Rajesh C. Shrotriya, M.D.	President, Chief Operating Officer and Director	July 25, 2001
/s/ Samuel Gulko	Senior Vice President, Finance, Chief Financial Officer, Secretary, Treasurer and Director (principal financial and accounting officer)	July 25, 2001
*	Director	July 25, 2001
Mark J. Glasky  *Ann C. Kessler, Ph.D.	Director	July 25, 2001
* Armin M. Kessler	Director	July 25, 2001

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*	Director	July 25, 2001
Eric L. Nelson, Ph.D.		
*	Director	July 25, 2001
Carol O'Cleiracain, Ph.D.		
*	Director	July 25, 2001
Paul H. Silverman, Ph.D., D.Sc.		
*By: /s/ SAMUEL GULKO		
Samuel Gulko		

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Attorney-in-fact

#### EXHIBIT INDEX

### Exhibit

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- 1.2 Sales Agreement, dated as of June 12, 2001, by and between the Company and Cantor Fitzgerald & Co.\*
- 4.1 Advisory Agreement, dated as of April 11, 2001, by and between the Company and Cantor Fitzgerald & Co.\*
- 4.2 Amendment to Advisory Agreement, dated as of June 12, 2001, by and between the Company and Cantor Fitzgerald & Co.\*
- 5.1 Opinion of Latham & Watkins regarding the validity of the common stock being registered.\*
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Statement).

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<sup>\*</sup> Previously filed.