LYNX THERAPEUTICS INC
Form S-3
April 06, 2004

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As filed with the Securities and Exchange Commission on April 6, 2004

Registration No. 333-_____

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

LYNX THERAPEUTICS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**94-3161073**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

25861 Industrial Boulevard
Hayward, CA 94545
(510) 670-9300
(Address, Including Zip Code, and Telephone Number,
Including Area Code, of Registrant s Principal Executive Offices)

Kevin P. Corcoran
Chief Executive Officer
Lynx Therapeutics, Inc.
25861 Industrial Blvd.
Hayward, California 94545
(510) 670-9300
(Name, Address, Including Zip Code, and Telephone Number,
Including Area Code, of Agent For Service)

Copies to:

James C. Kitch, Esq.
Cooley Godward LLP
Five Palo Alto Square
3000 El Camino Real
Palo Alto, CA 94036-2155
(650) 843-5000

Approximate date of commencement of proposed sale to the public:

As soon as practicable after this registration statement becomes effective.

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

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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 for the same offering. o

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. o

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

CALCULATION OF REGISTRATION FEE

Title of Each Class Of Securities To Be Registered Shares to be Registered	Amount To Be Registered(1)	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price(2)	Amount Of Registration Fee
Common Stock, $0.01 par value	540,058	$ 4.39	$2,370,854.62	$300.39

(1) Also includes additional shares of common stock that may be issued as a result of stock splits, stock dividends or similar transactions.

(2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457 under the Securities Act. The price per share and aggregate offering price are based on the average of the high and low prices of the registrant s common stock on March 31, 2004, as reported on the Nasdaq SmallCap Market.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON THE 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 A DATE THAT THE COMMISSION, ACTING PURSUANT TO SECTION 8(a), MAY DETERMINE.

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THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THE SELLING STOCKHOLDER MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION, DATED APRIL 6, 2004

540,058 Shares

LYNX THERAPEUTICS, INC.

Common Stock

The selling stockholder listed on page 10 is offering up to 540,058 shares of Lynx Therapeutics, Inc. common stock. We will not receive any proceeds from the sale of the shares of common stock by the selling stockholder.

Our common stock trades on the Nasdaq SmallCap Market under the trading symbol LYNX. On April 5, 2004, the last reported sale price of our common stock was $4.89 per share.

The selling stockholder may sell the shares of common stock described in this prospectus in a number of different ways and at varying prices. See Plan of Distribution beginning on page 11 for more information about how the selling stockholder may sell their shares of common stock. We will not be paying any underwriting discounts or commissions in this offering.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK.

SEE RISK FACTORS BEGINNING ON PAGE 1.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

_____, 2004.

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This prospectus is part of a registration statement we filed with the Securities and Exchange Commission. You should rely only on the information we have provided or incorporated by reference in this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus. The selling stockholder is offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of our common stock.

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LYNX

We believe that Lynx Therapeutics, Inc. (Lynx or the Company) is a leader in the development and application of novel genomics analysis solutions that provide comprehensive and quantitative digital gene expression information important to modern systems biology research in the pharmaceutical, biotechnology and agricultural industries. These solutions are based on Megaclone and Massively Parallel Signature Sequencing, or MPSS , Lynx s unique and proprietary cloning and sequencing technologies. Gene expression refers to the number of genes and the extent a cell or tissue expresses those genes, and represents a way to move beyond DNA sequence data to understand the function of genes, the proteins that they encode and the role they play in health and disease. Systems biology is an approach in which researchers seek to gain a complete molecular understanding of biological systems in health and disease.

RISK FACTORS

You should carefully consider the following risk factors, in addition to other information included or incorporated by reference in this prospectus, before making an investment decision. Additional risks that we do not yet know of or that we currently think are immaterial may also impair our business operations. If any of the events or circumstances described in the following risks actually occurs, our business may suffer, the trading price of our common stock could decline and you may lose all or part of your investment.

We have a history of net losses. We expect to continue to incur net losses, and we may not achieve or maintain profitability.

We have incurred net losses each year since our inception in 1992, including net losses of approximately $8.8 million for the year ended December 31, 2003, $15.5 million in 2002 and $16.7 million in 2001. As of December 31, 2003, we had an accumulated deficit of approximately $107.7 million. Net losses may continue for at least the next several years as we proceed with the commercialization and additional development of our technologies. The presence and size of these potential net losses will depend, in part, on the rate of growth, if any, in our revenues and on the level of our expenses. Our research and development expenditures and general and administrative costs have exceeded our revenues to date. Research and development expenses may increase due to spending for ongoing technology development and implementation, as well as new applications. We will need to generate significant additional revenues to achieve profitability. Even if we do increase our revenues and achieve profitability, we may not be able to sustain profitability.

Our ability to generate revenues and achieve profitability depends on many factors, including:

- our ability to continue existing customer relationships and enter into additional corporate collaborations and agreements;
- our ability to expand the scope of our products and services into new areas of pharmaceutical, biotechnology and agricultural research;
- our customers and collaborators abilities to develop diagnostic, therapeutic and other commercial products from the application of our technologies; and
- the successful clinical testing, regulatory approval and commercialization of such products by our customers and collaborators.

The time required to reach profitability is highly uncertain. We may not achieve profitability on a sustained basis, if at all.

We will need additional funds in the future, which may not be available to us.

We have invested significant capital in our scientific and business development activities. Our future capital requirements will be substantial as we conduct our operations, and will depend on many factors including:

the progress and scope of our research and development projects;

payments received under our customer, license and collaborative agreements;

our ability to establish and maintain customer, license and collaborative arrangements;

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the progress of the development and commercialization efforts under our customer, license and collaborative agreements;

the costs associated with obtaining access to biological samples and related information; and

the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims and other intellectual property rights.

We have experienced losses since our inception, including a net loss of $8.8 million for the year ended December 31, 2003. Net losses may continue for at least the next several years as we proceed with the commercialization and additional development of our technologies. The presence and size of these potential net losses will depend, in part, on the rate of growth, if any, in our revenues and on the level of our expenses. Our cash and cash equivalents have decreased from $11.7 million as of December 31, 2002. As of December 31, 2003, our cash and cash equivalents were $5.6 million, which includes restricted cash of $0.7 million. In March 2004, the Company raised $4 million from a private placement of its common stock, and reduced its headcount by 15% to 76 employees. We believe that with the funds raised in March 2004, our current cash, cash equivalents and restricted cash, along with cashflows to be generated from customers, collaborators and licensees will be sufficient to enable us to meet our projected operating and capital requirements through at least December 31, 2004. We may seek additional financing, as needed, through arrangements with customers, collaborators and licensees and equity or debt offerings. If we raise additional capital by issuing equity or convertible debt securities, our existing stockholders may experience substantial dilution. There can be no assurance that additional financing will be available on satisfactory terms, or at all. If we are unable to secure additional financing on reasonable terms, or are unable to generate sufficient new sources of revenue through arrangements with customers, collaborators and licensees, we will be forced to take substantial restructuring actions, which may include significantly reducing our anticipated level of expenditures, the sale of some or all of our assets, or obtaining funds by entering into financing or collaborative agreements on unattractive terms, or we will not be able to fund operations.

Our technologies are new and unproven and may not allow our customers, collaborators or us to identify genes, proteins or targets for drug discovery.

You must evaluate us in light of the uncertainties and complexities affecting an early stage genomics company. Our technologies are new and unproven. The application of these technologies is in too early a stage to determine whether it can be successfully implemented. These technologies assume that information about gene expression and gene sequences may enable scientists to better understand complex biological processes and, therefore, provide us with increased commercial opportunities for our products. Our technologies also depend on the successful integration of independent technologies, each of which has its own development risks. Relatively few therapeutic products based on gene discoveries have been successfully developed and commercialized. Our technologies may not enable our customers, collaborators or us to identify genes, proteins or targets for drug discovery. To date, neither our customers nor we have identified any targets for drug discovery based on our technologies.

We are dependent on our customers and collaborators and will need to find additional customers and collaborators in the future to develop and commercialize diagnostic or therapeutic products.

Our strategy for the development and commercialization of our technologies and potential products includes entering into collaborations, customer agreements or licensing arrangements with pharmaceutical, biotechnology and agricultural companies and research institutes. We do not have the resources to develop or commercialize diagnostic or therapeutic products on our own. If we cannot negotiate additional collaborative arrangements or contracts on acceptable terms, or at all, or if such collaborations or relationships are not successful, we may never become profitable.

We have derived substantially all of our revenues from corporate collaborations, customer agreements and licensing arrangements. Revenues from such agreements depend upon continuation of the related relationships, our performance of genomics discovery services, the achievement of milestones and royalties derived from future products developed from our research and technologies. To date, we have received, and expect to continue to receive in the future, a significant portion of our revenues from a small number of collaborators, customers and licensees, as shown on the following table:

	Year Ended December 31,		
	2003	**2002**	**2001**
Takara Bio Inc.	39%	16%	12%
E.I. DuPont de Nemours and Company	28%	32%	37%
BASF AG	14%	11%	24%

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	Year Ended December 31,		
	2003	2002	2001
Bayer CropScience	4%	14%	4%
Geron Corporation		15%	
Institute of Molecular and Cell Biology			12%

If we fail to perform genomics discovery services or successfully achieve milestones or our collaborators fail to develop successful products, we will not earn the revenues contemplated under such agreements. If our collaborators, customers or licensees do not renew existing agreements, we lose one of these collaborators, customers or licensees, we do not attract new collaborators, customers or licensees or we are unable to enter into new collaborative, customer or license agreements on commercially acceptable terms, our revenues may decrease, and our activities may fail to lead to commercialized products.

Our dependence on collaborations, agreements or licenses with third parties subjects us to a number of risks. We have limited or no control over the resources that such third parties may choose to devote to our joint efforts. Our collaborators, customers or licensees may breach or terminate their agreements with us or fail to perform their obligations thereunder. Further, our collaborators, customers or licensees may elect not to develop products arising out of our agreements or may fail to devote sufficient resources to the development, manufacture, marketing or sale of such products. While we do not currently compete directly with any of our customers and collaborators, some of our customers and collaborators could become our competitors in the future if they internally develop DNA analysis technologies or if they acquire other genomics companies and move into the genomics industry. We will not earn the revenues contemplated under our customer and collaborative arrangements, if our customers and collaborators:

- do not develop commercially successful products using our technologies;
- develop competing products;
- preclude us from entering into collaborations with their competitors;
- fail to obtain necessary regulatory approvals; or
- terminate their agreements with us.

We depend on a single supplier to manufacture flow cells used in our MPSS technology.

Flow cells are glass plates that are micromachined, or fabricated to very precise, small dimensions, to create a grooved chamber for immobilizing micro-beads in a planar microarray, which is a two-dimensional, dense ordered array of DNA samples. We use flow cells in our MPSS technology. We currently purchase the flow cells used in our MPSS technology from a single supplier, although the flow cells are potentially available from multiple suppliers. While we believe that alternative suppliers for flow cells exist, identifying and qualifying new suppliers could be an expensive and time-consuming process. Our reliance on outside vendors involves several risks, including:

- the inability to obtain an adequate supply of required components due to manufacturing capacity constraints, a discontinuance of a product by a third-party manufacturer or other supply constraints;
- reduced control over quality and pricing of components; and
- delays and long lead times in receiving materials from vendors.

We operate in an intensely competitive industry with rapidly evolving technologies, and our competitors may develop products and technologies that make ours obsolete.

The biotechnology industry is highly fragmented and is characterized by rapid technological change. In particular, the area of genomics research is a rapidly evolving field. Competition among entities attempting to identify genes and proteins associated with specific diseases and to develop products based on such discoveries is intense. Many of our competitors have substantially greater research and product development capabilities and financial, scientific and marketing resources than we do.

We face, and will continue to face, competition from pharmaceutical, biotechnology and agricultural companies, as well as academic research institutions, clinical reference laboratories and government agencies. Some of our competitors, such as Affymetrix, Inc., Celera Genomics Group, Gene Logic, Inc., and Genome Therapeutics Corporation may be:

attempting to identify and patent randomly sequenced genes and gene fragments and proteins;

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pursuing a gene identification, characterization and product development strategy based on positional cloning, which uses disease inheritance patterns to isolate the genes that are linked to the transmission of disease from one generation to the next; and

using a variety of different gene and protein expression analysis methodologies, including the use of chip-based systems, to attempt to identify disease-related genes and proteins.

In addition, numerous pharmaceutical, biotechnology and agricultural companies are developing genomics research programs, either alone or in partnership with our competitors. Our future success will depend on our ability to maintain a competitive position with respect to technological advances. Rapid technological development by others may make our technologies and future products obsolete.

Any products developed through our technologies will compete in highly competitive markets. Our competitors may be more effective at using their technologies to develop commercial products. Further, our competitors may obtain intellectual property rights that would limit the use of our technologies or the commercialization of diagnostic or therapeutic products using our technologies. As a result, our competitors products or technologies may render our technologies and products, and those of our collaborators, obsolete or noncompetitive.

If we fail to adequately protect our proprietary technologies, third parties may be able to use our technologies, which could prevent us from competing in the market.

Our success depends in part on our ability to obtain patents and maintain adequate protection of the intellectual property related to our technologies and products. The patent positions of biotechnology companies, including our patent position, are generally uncertain and involve complex legal and factual questions. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies are covered by valid and enforceable patents or are effectively maintained as trade secrets. The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the U.S., and many companies have encountered significant problems in protecting and defending their proprietary rights in foreign jurisdictions. We have applied and will continue to apply for patents covering our technologies, processes and products, as and when we deem appropriate. However, third parties may challenge these applications, or these applications may fail to result in issued patents. Our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products. Furthermore, others may independently develop similar or alternative technologies or design around our patents. In addition, our patents may be challenged or invalidated or fail to provide us with any competitive advantage.

We also rely on trade secret protection for our confidential and proprietary information. However, trade secrets are difficult to protect. We protect our proprietary information and processes, in part, with confidentiality agreements with employees, collaborators and consultants. However, third parties may breach these agreements, we may not have adequate remedies for any such breach or our trade secrets may still otherwise become known by our competitors. In addition, our competitors may independently develop substantially equivalent proprietary information.

Litigation or third-party claims of intellectual property infringement could require us to spend substantial time and money and adversely affect our ability to develop and commercialize our technologies and products.

Our commercial success depends in part on our ability to avoid infringing patents and proprietary rights of third parties and not breaching any licenses that we have entered into with regard to our technologies. Other parties have filed, and in the future are likely to file, patent applications covering genes, gene fragments, proteins, the analysis of gene expression and protein expression and the manufacture and use of DNA chips or microarrays, which are tiny glass or silicon wafers on which tens of thousands of DNA molecules can be arrayed on the surface for subsequent analysis. We intend to continue to apply for patent protection for methods relating to gene expression and protein

expression and for the individual disease genes and proteins and drug discovery targets we discover. If patents covering technologies required by our operations are issued to others, we may have to rely on licenses from third parties, which may not be available on commercially reasonable terms, or at all.

Third parties may accuse us of employing their proprietary technology without authorization. In addition, third parties may obtain patents that relate to our technologies and claim that use of such technologies infringes these patents. Regardless of their merit, such claims could require us to incur substantial costs, including the diversion of management and technical personnel, in defending ourselves against any such claims or enforcing our patents. In the event that a successful claim of infringement is brought against us, we may need to pay damages and obtain one or more licenses from third parties. We may not be able to obtain these licenses at a reasonable cost, or at all. Defense of any lawsuit or failure to

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obtain any of these licenses could adversely affect our ability to develop and commercialize our technologies and products and thus prevent us from achieving profitability.

We have limited experience in sales and marketing and thus may be unable to further commercialize our technologies and products.

Our ability to achieve profitability depends on attracting collaborators and customers for our technologies and products. There are a limited number of pharmaceutical, biotechnology and agricultural companies and research institutes that are potential collaborators and customers for our technologies and products. To market our technologies and products, we must develop a sales and marketing group with the appropriate technical expertise. We may not successfully build such a sales force. If our sales and marketing efforts fail to be successful, our technologies and products may fail to gain market acceptance.

Our sales cycle is lengthy, and we may spend considerable resources on unsuccessful sales efforts or may not be able to enter into agreements on the schedule we anticipate.

Our ability to obtain collaborators and customers for our technologies and products depends in significant part upon the perception that our technologies and products can help accelerate their drug discovery and genomics efforts. Our sales cycle is typically lengthy because we need to educate our potential collaborators and customers and sell the benefits of our products to a variety of constituencies within such companies. In addition, we may be required to negotiate agreements containing terms unique to each collaborator or customer. We may expend substantial funds and management effort without any assurance that we will successfully sell our technologies and products. Actual and proposed consolidations of pharmaceutical companies have negatively affected, and may in the future negatively affect, the timing and progress of our sales efforts.

The loss of key personnel or the inability to attract and retain additional personnel could impair the growth of our business.

We are highly dependent on the principal members of our management and scientific staff. The loss of any of these persons services might adversely impact the achievement of our objectives and the continuation of existing customer, collaborative and license agreements. In addition, recruiting and retaining qualified scientific personnel to perform future research and development work will be critical to our success. There is currently a shortage of skilled executives and employees with technical expertise, and this shortage is likely to continue. As a result, competition for skilled personnel is intense and turnover rates are high. Competition for experienced scientists from numerous companies, academic and other research institutions may limit our ability to attract and retain such personnel. We depend on our President and Chief Executive Officer, Kevin P. Corcoran, the loss of whose services could have a material adverse effect on our business. Although we have an employment agreement with Mr. Corcoran in place, currently we do not maintain key person insurance for him or any other key personnel.

We use hazardous chemicals and radioactive and biological materials in our business. Any claims relating to improper handling, storage or disposal of these materials could be time consuming and costly.

Our research and development processes involve the controlled use of hazardous materials, including chemicals and radioactive and biological materials. Our operations produce hazardous waste products. We cannot eliminate the risk of accidental contamination or discharge and any resultant injury from these materials. We may be sued for any injury or contamination that results from our use or the use by third parties of these materials, and our liability may exceed our insurance coverage and our total assets. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of hazardous materials. Compliance with environmental laws and regulations may be expensive, and current or future environmental regulations may impair our research, development

and production efforts.

Ethical, legal and social issues may limit the public acceptance of, and demand for, our technologies and products.

Our collaborators and customers may seek to develop diagnostic products based on genes or proteins. The prospect of broadly available gene-based diagnostic tests raises ethical, legal and social issues regarding the appropriate use of gene-based diagnostic testing and the resulting confidential information. It is possible that discrimination by third-party payors, based on the results of such testing, could lead to the increase of premiums by such payors to prohibitive levels, outright cancellation of insurance or unwillingness to provide coverage to individuals showing unfavorable gene or protein expression profiles. Similarly, employers could discriminate against employees with gene or protein expression profiles

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indicative of the potential for high disease-related costs and lost employment time. Finally, government authorities could, for social or other purposes, limit or prohibit the use of such tests under certain circumstances. These ethical, legal and social concerns about genetic testing and target identification may delay or prevent market acceptance of our technologies and products.

Although our technology does not depend on genetic engineering, genetic engineering plays a prominent role in our approach to product development. The subject of genetically modified food has received negative publicity, which has aroused public debate. Adverse publicity has resulted in greater regulation internationally and trade restrictions on imports of genetically altered agricultural products. Claims that genetically engineered products are unsafe for consumption or pose a danger to the environment may influence public attitudes and prevent genetically engineered products from gaining public acceptance. The commercial success of our future products may depend, in part, on public acceptance of the use of genetically engineered products, including drugs and plant and animal products.

If we develop products with our collaborators, and if product liability lawsuits are successfully brought against us, we could face substantial liabilities that exceed our resources.

We may be held liable, if any product we develop with our collaborators causes injury or is otherwise found unsuitable during product testing, manufacturing, marketing or sale. Although we have general liability and product liability insurance, this insurance may become prohibitively expensive or may not fully cover our potential liabilities. Inability to obtain sufficient insurance coverage at an acceptable cost or to otherwise protect us against potential product liability claims could prevent or inhibit our ability to commercialize products developed with our collaborators.

Healthcare reform and restrictions on reimbursements may limit our returns on diagnostic or therapeutic products that we may develop with our collaborators.

If we successfully validate targets for drug discovery, products that we develop with our collaborators based on those targets may include diagnostic or therapeutic products. The ability of our collaborators to commercialize such products may depend, in part, on the extent to which reimbursement for the cost of these products will be available from government health administration authorities, private health insurers and other organizations. In the U.S., third-party payors are increasingly challenging the price of medical products and services. The trend towards managed healthcare in the U.S., legislative healthcare reforms and the growth of organizations such as health maintenance organizations that may control or significantly influence the purchase of healthcare products and services, may result in lower prices for any products our collaborators may develop. Significant uncertainty exists as to the reimbursement status of newly approved healthcare products. If adequate third-party coverage is not available in the future, our collaborators may fail to maintain price levels sufficient to realize an appropriate return on their investment in research and product development.

Our facilities are located near known earthquake fault zones, and the occurrence of an earthquake or other catastrophic disaster could cause damage to our facilities and equipment, which could require us to cease or curtail operations.

Our facilities are located near known earthquake fault zones and are vulnerable to damage from earthquakes. We are also vulnerable to damage from other types of disasters, including fire, floods, power loss, communications failures and similar events. If any disaster were to occur, our ability to operate our business at our facilities would be seriously, or potentially completely, impaired. In addition, the unique nature of our research activities could cause significant delays in our programs and make it difficult for us to recover from a disaster. The insurance we maintain may not be adequate to cover our losses resulting from disasters or other business interruptions. Accordingly, an earthquake or other disaster could materially and adversely harm our ability to conduct business.

Our stock price may be extremely volatile.

We believe that the market price of our common stock will remain highly volatile and may fluctuate significantly due to a number of factors. The market prices for securities of many publicly-held, early-stage biotechnology companies have in the past been, and can in the future be expected to be, especially volatile. For example, during the two-year period from January 1, 2002 to December 31, 2003, the closing sales price of our common stock as quoted on the Nasdaq National Market and Nasdaq SmallCap Market fluctuated from a low of $1.61 to a high of $32.89 per share. In addition, the securities markets have from time to time experienced significant price and volume fluctuations that may be unrelated to the operating performance of particular companies. The following factors and events may have a significant and adverse impact on the market price of our common stock:

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fluctuations in our operating results;

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

release of reports by securities analysts;

developments or disputes concerning patent or proprietary rights;

developments in our relationships with current or future collaborators, customers or licensees; and

general market conditions.

Many of these factors are beyond our control. These factors may cause a decrease in the market price of our common stock, regardless of our operating performance.

Our securities have been transferred from the Nasdaq National Market to the Nasdaq SmallCap Market, which has subjected us to various statutory requirements and may have adversely affected the liquidity of our common stock, and a failure by us to meet the listing maintenance standards of the Nasdaq SmallCap Market could result in delisting from the Nasdaq SmallCap Market.

Effective May 22, 2003, a Nasdaq Qualifications Panel terminated our Nasdaq National Market Listing and transferred our securities to the Nasdaq SmallCap Market. In order to maintain the listing of our securities on the Nasdaq SmallCap Market, we must be able to demonstrate compliance with all applicable listing maintenance requirements. In the event we are unable to do so, our securities will be delisted from the Nasdaq Stock Market.

With our securities listed on the Nasdaq SmallCap Market, we face a variety of legal and other consequences that will likely negatively affect our business including, without limitation, the following:

we may have lost our exemption from the provisions of Section 2115 of the California Corporations Code, which imposes aspects of California corporate law on certain non-California corporations operating within California. As a result, (i) our stockholders may be entitled to cumulative voting and (ii) we may be subject to more stringent stockholder approval requirements and more stockholder-favorable dissenters rights in connection with certain strategic transactions;

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

due to the application of different securities law exemptions and provisions, we have been required to amend our stock option plan, suspend our stock purchase plan and must comply with time-consuming and costly administrative procedures;

the coverage of Lynx by securities analysts may decrease or cease entirely; and

we may lose current or potential investors.

In addition, we are required to satisfy various listing maintenance standards for our common stock to be quoted on the Nasdaq SmallCap Market. If we fail to meet such standards, our common stock would likely be delisted from the Nasdaq SmallCap Market and trade on the over-the-counter bulletin board, commonly referred to as the pink sheets. This alternative is generally considered to be a less efficient market and would seriously impair the liquidity of our common stock and limit our potential to raise future capital through the sale of our common stock, which could materially harm our business.

Anti-takeover provisions in our charter documents and under Delaware law may make it more difficult to acquire us or to effect a change in our management, even though an acquisition or management change may be beneficial to our stockholders.

Under our certificate of incorporation, our board of directors has the authority, without further action by the holders of our common stock, to issue 2,000,000 additional shares of preferred stock from time to time in series and with preferences and rights as it may designate. These preferences and rights may be superior to those of the holders of our common stock. For example, the holders of preferred stock may be given a preference in payment upon our liquidation or for the payment or accumulation of dividends before any distributions are made to the holders of common stock.

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Any authorization or issuance of preferred stock, while providing desirable flexibility in connection with financings, possible acquisitions and other corporate purposes, could also have the effect of making it more difficult for a third party to acquire a majority of our outstanding voting stock or making it more difficult to remove directors and effect a change in management. The preferred stock may have other rights, including economic rights senior to those of our common stock, and, as a result, an issuance of additional preferred stock could lower the market value of our common stock. Provisions of Delaware law may also discourage, delay or prevent someone from acquiring or merging with us.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements in this prospectus and the documents incorporated by reference are forward-looking statements. These statements are based on our current expectations, assumptions, estimates and projections about our business and our industry, and involve known and unknown risks, uncertainties and other factors that may cause our industry s results, levels of activity, performance or achievement to be materially different from any future results, performance or achievements expressed or implied in or contemplated by the forward-looking statements. Words such as believe, anticipate, expect, intend, plan, will, may, should, estimate, predict, potential, con such terms or other similar expressions, identify forward-looking statements. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements. Our actual results could differ materially from those anticipated in such forward-looking statements as a result of several factors more fully described under the caption Risk Factors above and in the documents incorporated by reference. The forward-looking statements made in this prospectus relate only to events as of the date on which the statements are made. We do not undertake any obligation to update forward-looking statements. The risks contained in this prospectus, among other things, should be considered in evaluating our prospects and future financial performance.

WHERE YOU CAN FIND MORE INFORMATION ABOUT LYNX AND THIS OFFERING

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

We are a reporting company and we file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a resale registration statement on Form S-3 under the Securities Act to register the shares of common stock offered by this prospectus. However, this prospectus does not contain all of the information contained in the registration statement and the exhibits and schedules to the registration statement. For further information with respect to us and the securities offered under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. You may read and copy the registration statement, as well as our reports, proxy statements and other information, at the SEC s public reference rooms at 450 Fifth Street, N.W., in Washington, DC. You can request copies of these documents by contacting the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for further information about the operation of the public reference rooms. Our SEC filings are also available at the SEC s website at www.sec.gov. In addition, you can read and copy our SEC filings at the office of the National Association of Securities Dealers, Inc. at 1735 K Street, N.W., Washington, D.C. 20006.

The SEC allows us to incorporate by reference the information contained in documents that we file with them, which means that we can disclose important information to you by referring to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below, any filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date we filed the registration statement of which this prospectus is a part and before the effective date of the registration statement and any future filings we will make with the SEC under those sections.

The following documents filed with the SEC are incorporated by reference in this prospectus:

1. Our Current Report on Form 8-K filed on January 2, 2004;

2. Our Current Report on Form 8-K filed on March 12, 2004;

3. Our Annual Report on Form 10-K for the year ended December 31, 2003; and

4. The description of our common stock set forth in our registration statement on Form 10 (No. 0-22570), as amended, filed with the SEC pursuant to the Exchange Act on October 5, 1993.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to Lynx

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Therapeutics, Inc., Attention: Investor Relations, 25861 Industrial Boulevard, Hayward, California 94545, telephone: (510) 670-9300; email: investor_information@lynxgen.com.

USE OF PROCEEDS

The proceeds from the sale of the common stock offered pursuant to this prospectus are solely for the accounts of the selling stockholder. We will not receive any proceeds from the sale of these shares of common stock.

SELLING STOCKHOLDER

We shall issue 540,058 shares of our common stock in a transaction pursuant to an Asset Purchase Agreement dated as of March 22, 2004. We are registering the 540,058 shares covered by this prospectus on behalf of the selling stockholder named in the table below. We agreed to register all of the above referenced shares of common stock for resale in connection with the terms and conditions of the asset purchase transaction. We have registered the shares to permit the selling stockholder and its pledgees, donees, transferees or other successors-in-interest that receive their shares from the selling stockholder as a gift, partnership distribution or other non-sale related transfer after the date of this prospectus to resell the shares.

The following table sets forth the name of the selling stockholder, the number of shares owned by the selling stockholder, the number of shares that may be offered under this prospectus and the number of shares of our common stock owned by the selling stockholder after this offering is completed. Except as otherwise disclosed below, the selling stockholder does not, nor within the past three years has had, any position, office or other material relationship with us. The number of shares in the column Number of Shares Being Offered represents all of the shares that the selling stockholder may offer under this prospectus. The selling stockholder may sell some, all or none of its shares. We do not know how long the selling stockholder will hold the shares before selling them, and we currently have no agreements, arrangements or understandings with the selling stockholder regarding the sale of any of the shares. The shares offered by this prospectus may be offered from time to time by the selling stockholder.

Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the SEC under the Securities Exchange Act of 1934. Unless otherwise noted, none of the share amounts set forth below represents more than 1% of our outstanding stock as of April 5, 2004, adjusted as required by rules promulgated by the SEC. The denominator of the formula used to determine the percentage of shares beneficially owned prior to the offering by the selling stockholder includes 7,527,538 shares of our common stock that will be outstanding as of April 8, 2004 (which includes the sale of the 540,058 shares to the selling stockholder in the asset purchase transaction).

	Shares Beneficially Owned Prior to Offering			Shares Beneficially Owned After Offering(1)	
Name	Number	Percent	Number of Shares Being Offered	Number	Percent
Manteia SA	540,058	7.2%	540,058	0	0%
Total Number of Shares Being Offered			540,058		

(1) Assumes the sale of all shares offered hereby.

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PLAN OF DISTRIBUTION

The selling stockholder may, from time to time, sell any or all of its shares of common stock. The selling stockholder will act independently of us in making decisions regarding the timing, manner and size of each sale. The sales may be made on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholder may use any one or more of the following methods when selling shares:

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;

purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

privately negotiated transactions;

broker-dealers may agree with the selling shareholder to sell a specified number of shares at a stipulated price per share;

a combination of any such methods of sale; and

any other method permitted pursuant to applicable law.

The selling stockholder may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution. If the plan of distribution involves an arrangement with a broker-dealer for the sale of shares through a block trade, special offering, or secondary distribution or a purchase by a broker or dealer, the amendment or supplement will disclose:

the name of the participating broker-dealer(s);

the number of shares involved;

the price at which the shares were sold;

the commissions paid or discounts or concessions allowed to the broker-dealer(s), where applicable;

that a broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus; and

other facts material to the transaction.

Broker-dealers engaged by the selling stockholder may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholder (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The selling stockholder does not expect these commissions and discounts to exceed what is customary in the types of transactions involved.

The selling stockholder and any broker-dealers or agents that are involved in selling the shares may be deemed to be underwriters within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Because the selling stockholder may be deemed to be an underwriter within the meaning of the Securities Act, the selling stockholder will be subject to the prospectus delivery requirements of the Securities Act.

The shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in some states the shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the shares may not simultaneously engage in market making activities with respect to our common stock for a period of two

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business days prior to the commencement of the distribution. In addition, the selling stockholder will be subject to applicable provisions of the Exchange Act and the associated rules and regulations under the Exchange Act, including Regulation M, which provisions may limit the timing of purchases and sales of shares of our common stock by the selling stockholder. We will make copies of this prospectus available to the selling stockholder and have informed the selling stockholder of the need to deliver copies of this prospectus to purchasers at or prior to the time of any sale of the shares.

Lynx is required to pay all fees and expenses incident to the registration of the shares. The selling stockholder will pay all commissions and discounts, if any, attributable to the sales of the shares. The selling stockholder may agree to indemnify any broker-dealer or agent that participates in transactions involving sales of the shares against specific liabilities, including liabilities arising under the Securities Act.

We have agreed to use best efforts to maintain the effectiveness of this registration statement under the Securities Act until the second anniversary of the effective date or such shorter period ending when (i) all of the shares have been sold by the selling stockholder or (ii) all such shares are eligible to be sold pursuant to Rule 144(k) under the Securities Act.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon by Cooley Godward LLP, Palo Alto, California. James C. Kitch, a partner at Cooley Godward LLP, has served as a director of Lynx since 1993, and owns 2,568 shares of our common stock, a warrant to purchase 908 shares of our common stock and options to purchase 4,210 shares of our common stock.

EXPERTS

Ernst & Young LLP, independent auditors, have audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2003, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our consolidated financial statements are incorporated by reference in reliance upon Ernst & Young LLP s report, given on their authority as experts in accounting and auditing.

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WE HAVE NOT AUTHORIZED ANY DEALER, SALESPERSON OR OTHER PERSON TO GIVE ANY INFORMATION OR REPRESENT ANYTHING NOT CONTAINED IN THIS PROSPECTUS. YOU SHOULD RELY ONLY ON THE INFORMATION PROVIDED OR INCORPORATED BY REFERENCE IN THIS PROSPECTUS. YOU SHOULD NOT RELY ON ANY UNAUTHORIZED INFORMATION. THIS PROSPECTUS DOES NOT OFFER TO SELL OR BUY ANY SHARES IN ANY JURISDICTION IN WHICH IT IS UNLAWFUL. THE INFORMATION IN THIS PROSPECTUS IS CURRENT AS OF THE DATE ON THE COVER.

540,058 SHARES

LYNX THERAPEUTICS, INC.

COMMON STOCK

PROSPECTUS

_____, 2004

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PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

We will bear no expenses in connection with any sale or other distribution by the selling stockholder of the shares being registered hereunder other than the expenses of preparation and distribution of this registration statement and the prospectus included in this registration statement. The extent of these expenses is set forth in the following table. All of the amounts shown are estimates, except the SEC registration fee.

SEC registration fee	$ 300.39
Legal fees and expenses	10,000.00
Accounting fees and expenses	8,000.00
Miscellaneous expenses	4,000.00
Total	$22,300.39

Item 15. Indemnification of Directors and Officers

As permitted by Delaware law, our amended and restated certificate of incorporation provides that no director of ours will be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability:

for any breach of duty of loyalty to us or to our stockholders;

for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;

for unlawful payment of dividends or unlawful stock repurchases or redemptions under Section 174 of the Delaware General Corporation Law; or

for any transaction from which the director derived an improper personal benefit.

Our bylaws, as amended, further provides that we must indemnify our directors and executive officers and may indemnify our other officers and employees and agents to the fullest extent permitted by Delaware law. We believe that indemnification under our bylaws, as amended, covers negligence and gross negligence on the part of indemnified parties.

We have entered into indemnification agreements with each of our directors and certain officers. These agreements, among other things, require us to indemnify each director and officer for certain expenses including attorneys fees, judgments, fines and settlement amounts incurred by any such person in any action or proceeding, including any action by or in the right of Lynx Therapeutics, Inc., arising out of the person s services as our director or officer, any subsidiary of ours or any other company or enterprise to which the person provides services at our request.

At present, there is no pending litigation or proceeding involving a director or officer of Lynx as to which indemnification is being sought nor are we aware of any threatened litigation that may result in claims for indemnification by any officer or director.

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Item 16. Exhibits

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation of the Company, incorporated by reference to the indicated exhibit of the Company s Form 10-Q for the period ended June 30, 2000.
3.1.1	Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Company, incorporated by reference to the indicated exhibit of the Company s Form 10-K for the year ended December 31, 2003.
3.2	Bylaws of the Company, as amended, incorporated by reference to the indicated exhibit of the Company s Form 10-Q for the period ended June 30, 2000.
5.1	Opinion of Cooley Godward LLP.
10.46	Asset Purchase Agreement, dated as of March 22, 2004, by and among the Company and the parties listed therein.
23.1	Consent of Ernst & Young LLP, Independent Auditors.
23.2	Consent of Cooley Godward LLP (included in Exhibit 5.1).
24.1	Power of Attorney (included on signature page).

Item 17. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to that information in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment shall be deemed to be a new registration statement relating to the securities therein, and such offering of the securities at that time shall be deemed to be the initial bona fide offering thereof.

(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 15(d) of the Securities Exchange Act (and, where applicable, each filing of an employee benefit plan s annual report pursuant to Section 15(d) of the 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 the 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

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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, as amended, Lynx Therapeutics, Inc. 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 Hayward, county of Alameda, state of California, on April 6, 2004.

LYNX THERAPEUTICS, INC.

By: /s/ Kevin P. Corcoran
Kevin P. Corcoran
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Kevin P. Corcoran and Kathy A. San Roman, and each or any one of them, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments and registration statements filed pursuant to Rule 462 of the Securities Act of 1933, as amended) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

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

Signatures	Title	Date
/s/ Kevin P. Cororan Kevin P. Corcoran	President, Chief Executive Officer and Director (Principal Executive Officer)	April 6, 2004
/s/ Kathy A. San Roman Kathy A. San Roman	Vice President Human Resources & Administration and Acting Chief Financial Officer (Principal Financial and Accounting Officer)	April 6, 2004
/s/ Craig C. Taylor Craig C. Taylor	Director	April 6, 2004
/s/ Marc D. Kozin Marc D. Kozin	Director	April 6, 2004
/s/ Sydney Brenner, M.D., D.Phil.	Director	April 6, 2004

Sydney Brenner, M.B., D. Phil /s/ Leroy Hood, M.D., Ph.D.	Director	April 6, 2004
Leroy Hood, M.D., Ph.D. /s/ James C. Kitch	Director	April 6, 2004
James C. Kitch	Director	April , 2004
David C. U Prichard, Ph.D.		

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Signatures	Title	Date
/s/ Richard P. Woychik, Ph.D.	Director	April 6 , 2004
Richard P. Woychik, Ph.D.	Director	April , 2004
James V. Mitchell		

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